

SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

RANKING AND ORDERING

1. In a row of children, Neeta is fifteenth from the left end of the row. If she is shifted towards the right end of the row by four places, she becomes eighth from the right end. How many children are there in the row?

- (a) 27 (b) 26 (c) 28 (d) 24
- 2. In a class of 40 children, Sunetra's rank is eighth from the top. Sujit is five ranks below Sunetra. What is Sujit's rank from the bottom? (a) 27 (b) 26 (c) 28 (d) 24
- 3. Sam ranked ninth from the top and thirty-eighth from the bottom in a class. How many students are there in the class? (a) 45 (b) 46 (c) 47 (d) 48
- 4. A class of boys stands in a single line. One boy is nineteenth in order from both the ends. How many boys are there in the class? (a) 27 (b) 37 (c) 38 (d) 39
- 5. In a row of boys, Jeevan is seventh from the start and eleventh from the end. In another row of boys, Vikas is tenth from the start and twelfth from the end. How many boys are there in both the rows together?
 - (a) 36 (b) 37 (c) 38 (d) None
- 6. In a class of 60, where girls are twice that of boys, Kamal ranked seventeenth from the top. If there are 9 girls ahead of Kamal, how many boys are after him in rank? (a) 17 (b) 11 (c) 12 (d) 24
- 7. In a row boys, A is 13th from the left and D is 17th from the right. If in this row A is 11th from the right then what is position of D from the left? (a) 6 (b) 7 (c) 10 (d) 12
- 8. In a row of boys, A is 15th from the left and B is 4th from the right. There are three boys between A & B. C is just left of A What is C's position from the right? (a) 9 (b) 10 (c) 12(d) 13
- 9. Rohit is 17th from the left end of a row of 29 boys and Karan is 17th from the right end in the same row. How many boys are there between them in the row?(a) 3 (b) 5 (c) 6(d) None
- 10. In a row of 40 children, P is 13 from the left end and Q is 9th from the right end. How many children are there between Q & R if R is 4th to the left of Q? (a) 12 (b) 13 (c) 14(d) 15
- 11. Ina class of 35 students, Kunal is placed 7th from the bottom whereas Sonali is placed 9th from the top, Pulkit is placed exactly in between the two. What is Kunal's position from Pulkit? (a) 9 (b) 10 (c) 11(d) 13
- 12. Richard is 15th from the front in a column of boys. There were thrice as many behind him as there were in front. How many boys are there between Richard and the Seventh boy from the end of the column?
 - (a) 33 (b) 34 (c) 35(d) 36
- 13. 40 boys are standing in a row facing the North. Amit is eleventh from the left and Deepak is thirty first from the right end of the row. How far will Shreya, who is third to the right of Amit in the row, be from Deepak?
 - (a) 2 (b) 3 (c) 4(d) 5
- 14. In a class, among the passed students, Amisha is twenty second from the top and Sajal, who is five ranks below Amisha, is thirty fourth from the bottom. All the students from the class have appeared for the exam. If the ratio of the students who passed in the exam to those who failed is 4:1 in that class, how many students are there in the class? (a) 60 (b) 75 (c) 90(d) None
- 15. In a queue, A eighteenth from the front while B is sixteenth from the back. If C is twenty fifth from the front and is exactly in the middle of A and B, then how many persons are there in the queue? (a) 45 (b) 46 (c) 47(d) 48



- 16. N ranks fifth in a class. S is eighth from the last. If T is sixth after N and just in the middle of N and S, Then how many students are there in the class? (a) 23 (b) 24 (c) 26(d) 25
- 17. In a row of girls, there are 16 girls between Priya and Natasha. Priya is thirty second from the left end of the row. If Priya is nearer than Natasha to the right end of the row, then how far away is Natasha from the left end of the row? (a) 14 (b) 15 (c) 16(d) None
- 18. In a queue, Shikhar is ninth from the back. Arun's place is eighth from the front. Nikhil is standing between the two. What could be the minimum. Number of boys standing in the queue? (a) 8 (b) 10 (c) 12(d) 14
- 19. In a row of girls facing North, Reena is 10th to the left of Pallavi who is 21st from the right end. If Malini, who is 17th from the left end, is fourth to the right of Reena, how many girls are there in the row?
 - (a) 37 (b) 43 (c) 44 (d) None
- 20. Saisree is fifth from the left and Saikiran is twelfth from the right in a row of children. If Saikiran shifts by three places towards Saisree, he becomes tenth from the left end. How many children are there in the row?
 - (a) 21 (b)22 (c) 23(d) 24
- 21. A,B,C,D and E are five students of different heights. A is taller than only C, B is shorter than only E. Who is the tallest person of this group? (a) A (b) B (c) E (d) None

ANSWERS

RULES

1. If in a row Amit's position is m^{th} from left end & n^{th} from right end then total no. of people in the row = m+n-1



- 2. In a row of m people if Sumit's position is nth from one end of the row, his position from other end of the row = m-n+1
- 3. In a row Abhishek and Kundan are m^{th} from left and n^{th} from right end respectively having P people in between them, then total number of people in the row = m+n+p or m+n-(p+2)
- 4. In a row Avinash is m^{th} from left end and if he shift towards right by b positions and becomes n^{th} from right end then total people in the row = $\underline{m+n+b}$
- 5. In a row Raman and Hari are m^{th} from left end and n^{th} from right end respectively when they interchanged their positions Raman's new position is k^{th} from left end then total number of people in the row = n+k-1
- 6. A is smaller than B = A < B. It means **A** is neither greater than nor equal to **B**
- 7. A is greater than B = A > B. It means **A** is neither smaller than nor equal to **B**
- 8. A is equal to B, A=B. It means A is neither greater than nor smaller than B
- 9. A is greater than or equal to B. A \geq B. It means **A** is not smaller than **B**
- 10. A is smaller than or equal to B. A ≤ B. It means **A is not greater than B**
- 11. A is as tall as B means **A = B**
- 12. Saisree is shorter than **only** Saikiran, mean **Saikiran is the tallest person**.(Only is a Keyword)
- 13. Nehra is taller than only Suraj means suraj is shortest (except Suraj there is no other person shorter than Nehra)
- 1. b, 15+4+8-1=26
- 2. c, Snetra's rank = 8th, Sujit's rank =8+5=13, Sujith's rank from bottom =(40-13+1)=28
- 3. b, Clearly number students in the class = (8+1+37)=46
- 4. b, Number of boys in the class = (18+1+18) = 37
- 5. d, Number of boys in Jeevan's row+ No. of boys in vikas row,=(6+1+10)+(9+1+11)=38
- 6. c, Let the No. of boys be x. Then, No. girls =2x, x+2x=60, 3x=60, x=20.
- So, No of boys =20 and No of girls =40, No of students behind Kamal in rank (60-17)=43

No of girls ahead of Kamal in rank = 9, No of girls behind Kamal in rank = (40-9) = 31.

No of boys behind Kamal in rank = (43-31) =12.

- 7. b, A is 13^{th} from the left and 11^{th} from the right end of the row. So No. of boys in the row =(12+1+10)=23. Now D is 17^{th} from the right. No. of boys to the left of D =(23-17)=6, Hence D is 7^{th} from the left end of the row.
- 8. 1, No. of boys in the row =(15+4+3)=22. C is just left of A. So, C is 14^{th} , from the left end. No. of boys to the right of C =(22-14)=8. So, C is 9^{th} from the right end of the row.
- 9. a, Karan is 17th from the right end. No. of boys to the left of Karan =(29-17)=12. So, Karan is 13th from left end. Also, Rohit is 17th from the left end. Clearly, there are 3 boys between Karan and Rohit.
- 10. c, Q is 9th from the right end and R is fourth to the left of Q. So, R is 13th from the right end. No. of children to the left of R =(40-13)=27. Thus, R is 12th from the left end. Also, P is 13th from the left end. Clearly, there are 14 persons between P and Q.
- 11.b, No of students between Kunal and Sonali =35-(7+9)=19. Clearly, there are 9 students between Kunal and Pulkit, as well as Pulkit and Sonali. So, Kunal is 10th from Pulkit.
- 12. c, No. of boys in front of Richard =14. No. of boys behind Richard =(14x3)=42. Total No. of boys in the column =(14+1+42)=57. In a column of 57 boys, the seventh boy from the end is clearly 51st from the start. Thus, we have to find the number of boys between the 15th and the 51st boy. Which is clearly 35.
- 13. c, No. of boys to the left of Deepak =(40-31)=9. So, Deepak is 10th from the left end. Clearly, shreya is fourth to the right of Deepak.



14. b, Amisha is 22^{nd} from the top and sajal is 5 ranks below Amisha. So Sajal is 27^{th} from the top. Also, Sajal is 34^{th} from the bottom. No. of students passed =(26+1+33)=60. Let No. of students passed and the No. failed be 4x and x respectively. Then, 4x=60, x=15.

Hence, No. of students in the class =(60+15)=75.

15. c, A is 18th from front C is 25th. No of persons between A and C=6.

Since C is exactly in middle of A and B, So No. of persons between C and B=6.

No. persons in he queue =(17+1+6+1=6+1+15)=47.

16. b, No. of students in the class =(4+1+5+1+5+1+7)=24.

17. c, Clearly, Natasha is 15th From the left end of the row.

18. b, Hence, required No. of students=10.

19. b, No. of girls in the row =(26+1+16)=43.

20. d, No. of the children in the row =(14+1+9)=24.

21. c, B is shorter than only E indicates he is taller than all other people. So E is the tallest.

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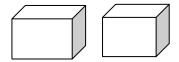
DICES

Dices are two types. They are

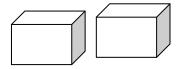
- 1. Standard Dices
- 2. General Dices



1. <u>Standard Dices:</u> There are 6 sides of a cube ie, front side, back side, upper side, lower side, left side and right side. We can see only three sides at the time. The sum of opposite sides of the standard dices always will be 7. We can't see the opposite sides at the same time. So sum of the given sides never comes to seven. Eg. Opposite side of 1 will be 6, 2 will be 5, 3 will be 4.

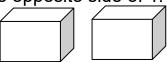


General Dices: If the sum of the opposite sides does not come to 7. It means it will be a general dice.

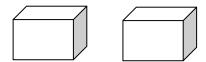


When only one number is common in General Dices:- We have to take any two dices of the given picture and right the numbers from clock wise from the common number of the first figure and the same from the second figure below it.

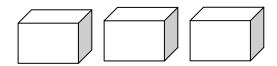
1. Find the opposite side of 1.



2. Find the opposite number of 2 Here **two numbers are common** ie,1 and 5. Uncommon numbers 2 & 4 are opposite sides.

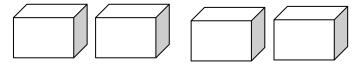


3. Find the opposite number of 4.

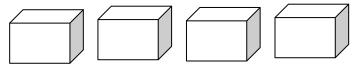




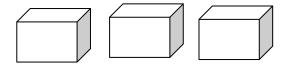
4. Find the opposite number of 6. It is standard dice. So 7-6=1



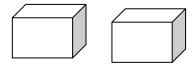
5. Find the opposite number to 2.



6. Find the opposite number to 2. It is general dice



7. Find the number opposite to 1.



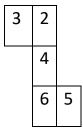
8. Find the number of opposite to 4.

9. Fire post er to 3. In this figure alternative numbers are opposite sid

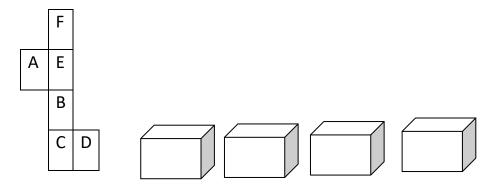


10. Find the opposite number to 5. It is 3. Opposite of I is 4 and 2 is 6.





11. Find the opposite number to 5.



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ANALOGY

Analogy means correspondence. In questions based on analogy, a particular relationship is given and another similar relationship has to identify from the alternatives provided. Analogy tests are, therefore, meant to test a candidate's overall knowledge, power of reasoning and ability to think concisely and accurately.

COUNTRY AND CAPITAL



- 1. AFGHANISTHAN: KABUL, AUSTRALIA:? (CANBERRA, VIENNA, DHAKA, THIMPU, BAGHDAD)
 - AUSTRALIA: CANBERRA, AUSTRIA: VIENNA, BANGLADESH: DHAKA, BHUTAN: THIMPU, IRAQ; BAGHDAD
- 2. DENMARK : COPENHAGEN, INDONESIA : ? (LISBON, JAKARTA, COLOMBO, WASHINGTON)
 - INDONESIA: JAKARTA, PORTUGAL: LISBON, SRILANKA: COLOMBO, USA: WASHINGTON
- 3. CANADA: OTTAWA, SPAIN: ? (ATHENS, MADRID, BEIJING, TEHERAN, KATHMANDU)

 SPAIN: MADRID, GREECE: ATHENS, CHINA: BEIJING, IRAN: TEHERAN, NEPAL:
 KATHMANDU
- 4. KENYA: NAIROBI, PAKISTAN : ? (ISLAMABAD, MOSCOW, TOKYO, ROME, CAIRO)

 PAKISTAN: ISLAMABAD, RUSSIA: MOSCOW, JAPAN: TOKYO, ITALY: ROME, EGYPT:
 CAIRO
- 5. FRANCE: PARIS, CUBA: ? (DELHI, HAVANA, OSLO, BANKOK, LONDON)

 CUBA: HAVANA, NORWAY: OSLO, THAILAND: BANGKOK, UK: LONDON

 STATE AND CAPITAL
- 6. MAHARASHTRA: MUMBAI, KARNATAKA:? (BANGALORE, BHUBANESHWAR, AHMEDABAD, SHIMLA, CHENNAI)
 - KARNATAKA: BANGALORE, ORISSA: BHUBANESHWAR, GUJARAT: GANDHI NAGAR, HIMACHAL PRADESH: SHIMLA, TAMILNADU: CHENNAI
- 7. ASSAM: DISPUR, RAJASTAN:? (JAIPUR, LUCKNOW, SHILLONG, HYDERABAD, BIHAR)
 RAJASTHAN: JAIPUR, UP: LUCKNOW, MEGHALAYA: SHILLONG, ANDHRA PRADESH:
 HYDERABAD, BIHAR: PATNA
- 8. SIKKIM: GANGTOK, NAGALAND: ? (MIZORAM, TRIVANDRUM, KOKOTA)

 NAGALAND: MIZORAM, KERALA: TRIVANDRUM, WEST BENGAL: KOLKATA
 - **COUNTRY AND CURRENCY**
- INDIA: RUPEE, ARGENTINA:? (PESO, YUAN, DINAR, BAHT)
 ARGENTINA: PESO, CHINA: YUAN, IRAQ: DINAR, THAILAND: BAHT
- 10. BANGLADESH: TAKA, GREECE:? (DRACHMA, YEN, POUND, DIRHAM)



GREECE: DRACHMA, JAPAN: YEN, UK: POUND, UAE: DIRHAM

11. BURMA: KYAT, IRAN: ? (RIAL, WON, DOLLAR, LIRA)

IRAN: RIAL, KOREA: WON, USA: DOLLAR, TURKEY: LIRA

12. SPAIN: PESETA, NETHERLANDS: ? (GUILDER, ROUBLE, KRONA, MARK)

NETHERLANDS: GUILDER, RUSSIA: ROUBLE, SWEDEN: KRONA, GERMANY: MARK

INSTRUMENT AND MEASUREMENT

13. BAROMETER: PRESSURE, THERMOMETER: ? (TEMPERATURE, HUMIDITY, CURRENT, EARTHQUAKES, THICKNESS)

THERMOMETER: TEMPERATURE, HYGROMETER: HUMIDITY, AMMETER: CURRENT, SEISMOGRAPH: EARTHQUAKES, SCREW GAUGE: THICKNESS

14. ANEMOMETER: WIND, TASEOMETER: ? (MASS, STRAINS, BLOOD PRESSURE, SPEED, LENGTH)

BALANCE: MASS, TASEOMETER: STRAINS, SPHYGMOMANOMETER: BLOOD PRESSURE, ODOMETER: SPEED, SCALE: LENGTH

QUANTITY AND UNIT

- 15. LENGTH: METRE, ENERGY: ? (KILOGRAM, JOULE, RADIANS, HECTARE, CANDELA)

 MASS: KILOGRAM, ENERGY & WORK: JOULE, ANGLE: RADIANS, AREA: HECTARE,
 LUMINOSITY: CANDELA
- 16. TIME: SECONDS, RESISTANCE: ? (AMPERE, OHM, WATT, DEGREES, OERSTED)

 RESISTANCE: OHM, POWER: WATT, CURRENT: AMPERE, TEMPERATURE: DEGREES,
 MAGNETIC FIELD: OERSTED
- 17. FORCE: NEWTON, PRESSURE: ? (LITRE, VOLT, PASCAL, MHO)

 VOLUME: LITRE, POTENTIAL: VOLT, PRESSURE: PASCAL, CONDUCTIVITY: MHO

 INDIVIDUAL AND GROUP
- 18. SAILORS: CREW, GRAPES: ? (HERD, SWARM, BUNCH, ARMY TEAM)
 CATTLE: HERD, BEES: SWARM, GRAPES: BUNCH, SOLDIERS: ARMY, PLAYERS: TEAM
- 19. MINISTERS: COUNCIL, PILGRIMS: ? (CARAVAN, COLONY, FLOCK, CAVALCADO, CHORUS)



PILGRIMS: CARAVAN, TERMITES: COLONY, SHEEP: FLOCK, RIDERS: CAVALCADO, SINGER: CHORUS

- 20. FISH: SHOAL, GOODS: ? (MOB, BAND, GAGGGLE, STOCK, BOUQUET)

 RIOTERS: MOB, MUSICIANS: BAND, GEESE: GAGGLE, GOODS: STOCK, FLOWERS: BOUQUEST
- 21. MAN: CROWD, PUPILS: ? (TROUPE, HOARDE, GANG, CLASS, BROOD, CHEST)

 ARTIST: TROUPE, NOMADS: HOARDE, ROBBERS: GANG, PUPILS: CLASS, CHICKEN: BROOD, DRAWERS: CHEST

ANIMAL AND YOUNG ONE

- 22. COW: CALF, DUCK: ? (CUB, FOAL, DUCKLING, CATERPILLAR, PUPPY)

 BEAR: CUB, HORSE: COLT/FILLY/FOAL, DUCK: DUCKLING, BUTTERFLY: CATERPILLAR, DOG: PUPPY
- 23. COCKROACH: NYMPH, HEN: ? (CHICK, CUB, LAMB, FAWN)
 HEN: CHICK, LION/TIGER: CUB, SHEEP: LAMB, STAG: FAWN, DEER: FAWN
- 24. CAT: KITTEN, ISECT: ? (CHILD, LARVA, TADPOLE, CYGNET)

 MAN: CHILD, INSECT: LARVA, FROG: TADPOLE, SWAN: CYGNET

MALE AND FEMALE

- 25. HORSE: MARE, DOG: ? (BITCH, BEE, FILLY, VIXEN, NIECE)

 DOG: BITCH, DRONE: BEE, COLT: FILLY, FOX: VIXEN, NEPHEW: NIECE
- 26. BROTHER: SISTER, BULL: ? (COW, DOE, HEIFER, DUCK, WITCH)
 BULL: COW, STAG: DOE, BULLOCK: HEIFER, DRAKE, DUCK, WIZARD: WITCH
- 27. TUTOT: GOVERNESS, COCK: ? (HEN, LIONESS, GOOSE, SPINSTER, NUN, COUNTESS)

 COCK: HEN, LION: LIONESS, GANDER: GOOSE, BACHELOR: SPINSTER, MONK: NUN,
 EARL: COUNTESS

ANIMAL AND MOVEMENT

- 28. DUCK: WADDLE, OWL: ? (FLY, FLIT, AMBLE, PROWL, LEAP)
 BIRD: FLY, OWL: FLIT, ELEPHANT: AMBLE, LION: PROWL, RABBIT: LEAP
- 29. COCK: STRUT, BEAR: ? (GALLOP, LUMBER, SCAMPER, SWOOP, TROT, FRISK)
 BEAR: GALLOP, MOUSE: SCAMPER, EAGLE: SWOOP, DONKEY: TROT, LAMB: FRISK)



ANIMAL/THING AND SOUND

- 30. LION: ROAR, CAMEL: ? (BRAY, NEIGH, SQUEAK, GRUNT, CROW)

 DONKEY: BRAY, HORSE: NEIGH, MICE: SQUEAK, CAMEL: GRUNT, COCK: CROW
- 31. CROW: CAW, BELLS: ? (CHIME, ROAR, CROAK, HISS, MEW)
 BELLS: CHIME, THUNDER: ROAR, FROG: CROAK, SNAKE: HISS, CAT: MEW
- 32. ELEPHANT: TRUMPET, OWL: ? (HOOT, QUACK, BEAT, RUSTLE, BLEAT)

 OWL: HOOT, DUCK: QUACK, DRUM: BEAT, LEAVES: RUSTLE, GOAT: BLEAT
- 33. JACKAL: HOWL, CATTLE: ? (CHIRP, LOW, GIBBER, CACKLE, JINGLE, PATTER)

 CATTLE: LOW, MONKEY: GIBBER, SPARROW CHIRP, HEN: CACKLE, COINS: JINGLE, RAIN: PATTER

INDIVIDUAL/THING AND CLASS

34. LIZARD: REPTILE, OSTRICH: ? (BIRD, AMPHIBIAN, INSECT, REPTILE, MAMMAL)

OSTRICH: BIRD, FROG: AMPHIBIAN, BUTTERFLY: INSECT, SNAKE: REPTILE, WHALE: MAMMAL

RAT: RODENT, CURTAIN: DRAPERY, SHIRT: GARMENT

INDIVIDUAL AND DWELLING PLACE

- 35. DOG: KENNEL, BEE: ? (HIVE, EYRIE, DEN, STY, IGLOO)

 BEE: HIVE, EAGLE: EYRIE, LION: DEN, PIG: STY, ESKIMO: IGLOO
- 36. KNIGHT: MANSION, NUN: ? (CONVENT, COTTAGE, ASYLUM, CARAVAN, MONASTERY)

 NUN: CONVENT, PEASANT: COTTAGE, LUNATIC: ASYLUM, GYPSY: CARAVAN, MONK:

 MONASTERY
- 37. BIRD: NEST, HARE: ? (BURROW, HOLE, WEB, BYRE, STABLE)

 HARE: BURROW, MOUSE: HOLE, SPIDER: WEB, COW: BYRE/PEN, HORSE: STABLE, OWL:

 BARN, CONVICT: PRISON, KING: PALACE, SOLDIER: BARRACKS

ANIMALS/THINGS AND KEEPING PLACE

38. CAR: GARAGE, AEROPLANE: ? (GANGAR, ZOO, GRANARY, DISPENSARY, APIARY)

AEROPLANE: HANGAR, ANIMALS: ZOO, GRAINS: GRANARY, MEDICINE: DISPENSARY,

BEES: APIARY



39. CLOTHES, WARDROBE, GUNS: ? (ARMOURY, HOSPITAL, AVIARY, AQUARIUM, MUSEUM, CELLAR)

GUNS: ARMOURY, PATIENT: HOSPITAL, BIRDS: AVIARY, FISH: AQUARIUM, CURIOUS: MUSEUM, WINE: CELLAR

GAMES AND PLACE OF PLAYING

- 40. BADMINTON: COURT, BOXING: ? (RING, GROUND, TRACK, STADIUM)

 BOXING: RING, HOCKEY: GROUND, RACE: TRACK, ATHLETICS: STADIUM
- 41. SKATING: RINK, TENNIS: ? (COURT, GYMNASIUM, PITCH, ARENA)

 TENNIS: COURT, EXERCISE: GYMNASIUM, CRICKET: PITCH, WRESTLING: ARENA

 WORKER AND TOOL
- 42. BLACKSMITH: ANVIL, CARPENTER: ? (SAW, HARROW, SPADE, PLUMBLINE)

 CARPENTER: SAW, GARDENER: HARROW, LABOURER: SPADE, MASON: PLUMBLINE

 SURGEON: SCALPEL, SCULPTOR: CHISEL

TOOLS AND ACTION

- 43. NEELE: SEW, CHISEL: ? (CARVE, BORE, DIG, HOLD, SLAUGHTER, ROW)

 CHISEL: CARVE, AUGER: BORE, MATTOCK: DIG, TONGS: HOLD, SWORD: SLAUGHTER,
 OAR: ROW
- 44. SPADE: DIG, SHOVEL: ? (SCOOP, GRIND, GUARD, GRIP, AMPLIFY)

 SHOVEL: SCOOP, AXE: GRIND, SHIELD: GUARD, SPANNER GRIP, LOUDSPEAKER:

 AMPLIFY

WORKER AND WORKING PLACE

- 45. CHEF: KITCHEN, SAILOR: ? (SHIP, GALLERY, PITCH, THEATRE, SITE)

 SAILOR: SHIP, PAINTER: GALLERY, UMPIRE: PITCH, ARTIST: THEATRE, ENGINEER: SITE
- 46. WAITER: RESTAURANT, GAMBLER: ? (CASINO, STAGE, LABORATORY, BATTLEFIELD)

 GAMBLER: CASINO, ACTOR: STAGE, SCIENTIST: LABORATORY, WARRIOR:
 BATTLEFIELD
- 47. GROCER: SHOP, WORKER: ? (FACTORY, PARLOUR, GARAGE, OBSERVATORY, RESTAURANT)



WORKER: FACTORY, BEAUTICIAN: PARLOUR, MECHANIC: GARAGE, ASTRONOMER: OBSERVATORY, WAITER: RESTAURANT

WORKER AND PRODUCT

- 48. MASON: WALL, CHOREOGRAPHER: ? (BALLET, NEWSPAPER, DESIGN, PLAY, FILM)

 CHOREOGRAPHER: BALLET, EDITOR: NEWSPAPER, ARCHITECT: DESIGN, DRAMATIST: PLAY
- 49. TAILOR: CLOTHES, AUTHOR: ? (BOOK, MEAT, SHOES, FOOD, ORNAMENTS)

 AUTHOR: BOOK, BUTCHER: MEAT, COBBLER: SHOES, CHEF: FOOD, GOLDSMITH:

 ORNAMENTS

PRODUCT AND RAW MATERIAL

PAIR RELATIONSHIP

- 50. BUTTER: MILK, PRISM: ? (GLASS, GRAPES, ASPHALT, LEATHER, LATEX)
 PRISM: GLASS, WINE: GRAPES, ROAD: SAPHALT, SHOES: LEATHER, RUBBER: LATEX
- 51. OIL: SEED, CLOTH: ? (FIBRE, YARN, WOOL, FLAX, ORE)

 CLOTH: FIBRE, FABRIC: YARN, PULLOVER: WOOL, LINEN: FLAX, METAL: ORE
- 52. PAPER: PULP, WALL:? (BRICK, PAPER, JUTE, GOLD, SUGARCANE)

 WALL: BRICK, BOOK: PAPER, SACK: JUTE, JEWELLERY: GOLD, JAGGERY: SUGARCANE

 PART AND WHOLE RELATIONSHIP
- 53. PEN: NIB, PENCIL: ? (LEAD, ARC, COCKPIT, WHEEL)

 PENCIL: LEAD, CIRCLE: ARC, AEROPLANE: COCKPIT, CART: WHEEL
- 54. BOOK: CHAPTER, BICYCLE: ? (PEDAL, NEEDLE, STEERING, BLADE)
 BICYCLE: PEDAL, CLOCK: NEEDLE, CAR: STEERING, FAN: BLADE
- 55. SHOES: SOCKS, SHIRT: ? (TROUSERS, BLOUSE, SAUCER, TABLE)
 SHIRT: TROUSERS, SAREE: BLOUSE, CUP: SAUCER, CHAIR: TABLE
- 56. PENCIL: ERASER, HORSE:? (CARRIAGE, KEY, WINDOW, ANSWER
 HORSE: CARRIAGE, LOCK: KEY, DOOR: WINDOW, QUESTION: ANSWER
 STUDY AND TOPIC



- 57. ORNITHOLOGY: BIRDS, SEISMOLOGY: (EARTHQUAKES, MAN, DISEASES, ALGAE, FOSSILS)
 - SEISMOLOGY: EARTHQUAKES, ANTHROPOLOGY: MAN, PATHOLOGY: DISEASES, PHYCOLOGY: ALGAE, PALAEONTOLOGY: FOSSILS
- 58. TAXONOMY: CLASSIFICATION, ENTOMOLOGY: ? (INSECTS, HEART, BODY, SOIL, FISHES)
 ENTOMOLOGY: INSECTS, CARDIOLOGY: HEART, PHYSIOLOGY: BODY, PEDOLOGY:
 SOIL, ICHTHYOLOGY: FISHES
- 59. SELENOGRAPHY: MOON, BOTANY: ? (PLANTS, FUNGI, BLOOD, KIDNEY, AMPHIBIANS)
 BOTANY: PLANTS, MYCOLOGY: FUNGI, HAEMATOLOGY: BLOOD, NEPHROLOGY:
 KIDNEY, HERPETOLOGY: AMPHIBIANS, ECRINOLOGY: SECRETIONS
- 60. CRANIOLOGY: SKULL, ASTROLOGY: ? (FUTURE, ANIMALS, SHELLS, ARFACTS, EGGS)

 ASTROLOGY: FUTURE, ZOOLOGY: ANIMALS, CONCOLOGY: SHELLS, ARCHAEOLOGY:

 ARTIFACTS, OOLOGY: EGGS, PALAEOGRAPHY: WRITINGS, ONOMATOLOGY: NAMES,

 VIROLOGY: VIRUSES

WORD AND INTENSITY

- 61. ANGER: RAGE, WISH: ? (DESIRE, DROWN, RENOWNED, SIN, PUSH)

 WISH: DESIRE, SINK: DROWN, FAMOUS: RENOWNED, CRIME: SIN, TOUCH: PUSH,

 QUARREL: WAR
- 62. UNHAPPY; SAD, MOISTEN: ? (DRENCH, BURN, BLUNDER, DENY, SHOUT)

 MOISTEN: DRENCH, KINDLE: BURN, ERROR: BLUNDER, REFUSE: DENY, SPEAK: SHOUT

 WORD AND SYNONYM
- 63. ABODE: DWELLING, BLEND: ? (MIX, PREDICT, DEFECT, REPLACE, ASSUME)

 BLEND: MIX, PREASAGE: PREDICT, SUBSTITUTE: REPLACE, PRESUME: ASSUME,

 SEDATE: CALM, ABDUCT: KIDNAP
- 64. SOLICIT: REQUEST, ASSIGN: ? (ALLOT, VIOLENT, REPAIR, EDGE, SQUANDER)
 ASSIGN: ALLOT, FIERCE: VIOLENT, MEND: REPAIR, BRIM: EDGE, DISSIPATE:
 SQUANDER, VACANT: EMPTY
- 65. BAN: PROHIBITION, HAUGHTY: ? (PROUD, ILLUSION, DESCEND, HOME, SCARCITY)

 HAUGHTY: PROUD, FALLACY: ISSUSION, ALIGHT: DESCEND, HOUSE: HOME, DEARTH: SCARCITY



WORD AND ANTONYM

- 66. ATTACK: DEFEND, ADVANCE: ? (RETREAT, WEAK, SHALLOW, HOSTILE, DENY)

 ADVANCE: RETREAT, ROBUST: WEAK, DEEP: SHALLOW, CORDIAL: HOSTILE, AFFIRM: DENY, LEND: BORROW, GRADUAL: ABRUPT
- 67. SINK: FLOAT, BEST: ? (BEST: WORST, FRESH: STALE, INITIAL: FINAL, MOURN: REJOICE, CONDENSE: EXPAND, CHAOS: PEACE
- 68. CRUEL: KIND, GENTLE: ? (HARSH, NOTICE, ALERTNESS, EXTINGUISH, DESTROY)

 GENTLE: HARSH, IGNORE: NOTICE, LETHARGY: ALERTNESS, KINDLE: EXTINGUISH,

 CREATE: DESTROY



SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

SEATING ARRANGEMENTS

Eg-1. DIRECTIONS: Study the following information and answer the questions follows.

- 1. Eight people E,F,G,H,L,M,N and O are sitting in a straight line facing North.
- 2. H is sitting second to the right of N
- 3. L is siting to the fourth to the right of H
- 4. M is sitting to the right of F
- 5. Number of person can sit between G&L as same as the number of person can sit between O&F (G&L=O&F)
- 6. O is sitting to the immediate left of G, who is not an immediate neighbour of L
- 7. F is not an immediate neighbour of N.

NEHOGFLM

- 1. Who is immediate right of F? = L
- 2. Which of the following pairs siting between H&F? = OG
- 3. What is the position of G with respect to E? = Third to the right.

Eg-2. DIRECTIONS: Study the following information carefully and answer the question given below. Eight people are sitting in two parallel rows containing 4 people each in such a way that there is an equal distance between adjacent persons.

- A,B,C&D are seated and all of them are facing South.
- P,Q,R&S are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of other row.
- R sits second to the left of person who faces A
- S is an immediate neighbour of R
- Only one person sits between A&D
- One of the immediate neighbours of C faces Q.



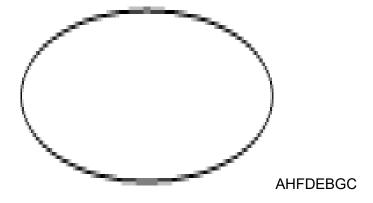
B does not sit at any of the extreme end of the lines.

DBAC

RSQP

Eg-3. Study the following information carefully to answer these questions.

- 1. Eight friends A,B,C,D,E,F,G & H are sitting around a circle facing centre.
- 2. A sits third to the left of B, while second to the right of F
- 3. D does not sit next to A or B
- 4. C and G always sit next to each other
- 5. H never sits next to D.
- 6. C does not sit next to B



(i) Which of the following pairs sit between H & E?

F&D, H&B, C&G, E&G, None

(ii) Starting from A position. If all the eight were arranged in alphabetical order inclock wise directions the seating positions of how many members (excluding A) not change?

None, One, Two, Three, Four

(iii) Which of the following pairs has only one person sitting between them, if the counting is done in clock wise direction?

AB, CD, FE, GH

(iv) Who sits to the immediate right of E?

A, **D**, F, H, None

(v) What is the position of B with respect to C?

Second to the left, Third to the right, Third to the left, Can't determine, None of these.

Eg-4. A,B,C,D,E,F,G & H are eight friends and sitting around a circular table but not necessarily in the same order. Some of them are facing inside and some of them are facing outside.



- i. A is third to the right of H
- ii. There are 2 people sit between H and B
- iii. C sits second to left of B
- iv. There are three people sit between B & E
- v. D is second to left of F, who is not immediate neighbour of A
- vi. Immediate neighbours of H faces same direction as H
- vii. F sits third to left of A, who faces Centre
- viii. The immediate neighbour of A face opposite to the direction of A.



CHEGADBF

- 1. Who is sitting third to the right of F? = E
- 2. Who is facing inside? AD, AGH, AB, ADC, None
- 3. Who sits opposite of H? = D
- 4. How many people are sitting between C & B, when counted from left of C? = One
- 5. Who is sitting exactly between D & C, when counted from right of D? = B & F

EXERCISE-A

Directions (Q. 1-5): Study the following information carefully and answer the questions given below:

A,B,C,D,E & F live on different floors in the same building having six floors numbers 1 to 6 (The ground floor No.1, the above is 2 and so on...)

A lives on even No. floor .There are 2 floors between the floor in which D & F live. F live on a floor above D's floor. D does not live on floor No.2. B does not live on odd No floor. C does not live on any of the floors below F's floor. E does not live on a floor immediately above or immediately below the floor on which B lives.

- 1. Who lives 6th floor? 1. A 2. D 3. B 4. F
- 2. Who lives between B & F ? 1. A 2. D 3. C 4. F
- 3. Who lives below E? 1. A 2. D 3. G 4. F
- 4. Who lives between D & E? 1. A 2. D 3. G 4. F
- 5. Who lives at ground floor? 1. A 2. D 3. G 4. F



Directions (Q. 6-10): Study the following information carefully and answer the questions given below:

In a 5 letters English alphabet word there are 2 letters L & P. S is not placed immediately next to L. There is only one letter between S &A . S is towards right of A. S is not placed immediately next to E.

- 6. Who is sitting at extreme right end?
- 7. Who is sitting at middle?
- 8. Who is sitting at left end?
- 9. Who is sitting second left of P?
- 10. Who is sitting third to the right of E?

Directions (Q. 11-15): Study the following information carefully and answer the questions given below:

Eight personals EFGHJKL and M are sitting around a circular table facing Centre. Each of different profession. Charted Accountant, Columnist, Doctor, Engineer, Financial Analyst, Lawyer, Professor and Scientist but not necessarily in the same orders. F is sitting second to the left of K. The Scientist is an immediate neighbour of K. There are only 3 people between scientist and E. Only one people sit between the Engineer and E. The columnist is to be the immediate right of Engineer. M is second to the right of K. H is the scientist. G & J are immediate neighbour of each other. Neither G nor J is an Engineer. The Financial Analyst is to be immediate left of F. The lawyers is second to the right of columnist. The Professor is an immediate neighbour of the Engineer. G is second to the right of the Charted Accountant.

- 11. Who is Financial analist?
- 12. Who is Second right of L?
- 13. Who is Professor?
- 14. Who is sitting second left of F?
- 15. Who is Doctor?

EXERCISE-A

Directions (Q. 1-5): Study the following information carefully and answer the questions given below:

A,B,C,D,E,F,G,H and K are sitting around a circle facing the center B is fourth to the left of G, who is second to the right of C. F is fourth to the right of C and is second to the left of K. A is 4th to right of K. D is not an immediate neighbor of either K or B. H is third to the right of E.

- 1. In which of the following combinations is the third person sitting between the first and the second persons?
 - 1. EKB 2. CHB 3. AGC 4. FGD 5. None of these.
- 2. Who is fourth to the left of E? 1. A 2. C 3. G 4. Data inadequate 5. None of these.
- 3. Who is second to the right of K? 1. C 2. H 3. F 4. E 5. Data inadequate.
- 4. Who is third to the right of H? 1. A 2. D 3. G 4. F 5. None of these.
- 5. Who is fourth to right of D? 1. K 2. H 3. E 4. B 5. None of these.

Directions (Q. 6-10): Study the following information carefully and answer the questions given below:

A,B,C,D,E,F,G,H and K are sitting around a circle facing the center. F is fourth to the right of A, who is third to the right of B. K is fourth to the left of B and third to the right of D. C is third to the right of H. E is second to the left of G.

6. Who is fourth to the left of G? 1. C 2. A 3. D 4. K 5. Data inadequate.



- 7. What is E's position with respect to B?
- 1. 2nd to the left 2. 3rd to the right 3.4th to the right 4.3rd to the left 5. None of these.
- 8. Who is third to the right of K? 1. F 2. E 3. G 4. Data inadequate 5. None of these.
- 9. Who is an immediate right of F? 1. B 2. G 3. E 4. Data inadequate 5. None of these.
- 10. In which of the following combinations is the third person sitting between the first and the second person?
 - 1. GFB 2. BGH 3. ADC 4. KEC 5. EGF.

Directions (Q. 11-15): Study the following information carefully and answer the questions given below:

A,B,C,D,E,F,G and H are sitting around a circle facing the circle. B is second to the right of D, who is third to the right of F. C is second to the left of A, who is second to the left of F. G is third to the right of E.

- 11. In which of the following combinations is the first person sitting between the second and the third person?
 - 1. GCD 2. FGH 3. EFH 4. ABE 5. None of these.
- 12. Who is third to the right of H? 1. G 2. D 3. C 4. Data inadequate 5. None of these.
- 13. Who is on the immediate right of A? 1. B 2. E 3. F 4. Data inadequate 5. None of these.
- 14. What is H's position with respect to B?
 - 1. 5th to the right 2. 3rd to the left 3. 5th to the left 4. 3rd to the right 5. 4th to the left.
- 15. Who is on the immediate left of G? 1. H 2. F 3. D 4. Data inadequate 5. None of these.

Directions (Q. 16-20): Study the following information carefully and answer the questions given below:

P,Q,R,S,T,V,W and Z are sitting around a circle facing the circle. T is second to the right of R, who is third to the right of P. S is second to the left of P and fourth to the right of Q. Z is third to the right of V, who is not an immediate neighbor of P.

- 16. In which of the following combinations is the first person sitting between the second and the third persons?
 - 1. VTS 2. TZS 3. QRV 4. PWQ 5. VRT
- 17. Who is second to the right of T? 1. S 2. Z 3. P 4. R 5. None of these.
- 18. What is P's position with respect to S?
 - 1. 4th to the left 2. 4th to the right 3. 5th to the left 4. 6th to the left 5. None of these.
- 19. Who is on the immediate left of Z? 1. T 2. P 3. S 4. V 5. None of these.
- 20. Who is second to the right of W? 1. R 2. Q 3. Z 4. S 5. None of these.

Directions (Q. 21-25): Study the following information carefully and answer the questions given below:

P,Q,R,S,T,V and W are sitting around a circle facing the center. T is second to the left of P and third to the right of V. S is second to the right of W, who is on the immediate right of T. Q is third to the right of U.

- 21. In which of the following pairs is the third person sitting in between the first and the second person?
 - 1. USP 2. VRU 3. TQW 4. WPS 5. None of these.
- 22. Who is on the immediate left of T? 1. Q 2. W 3. R 4. Data inadequate 5. None of these.
- 23. Who is second to the right of P? 1. S 2. V 3. U 4. Q 5. None of these.
- 24. What is R's position with respect to W?
 - 1. 3^{rd} to the left 2. 4^{th} to the left 3. 6^{th} to right 4. 5^{th} to the left 5. None of these.
- 25. Who is fourth to the left of R? 1. U 2. P 3. S 4. W 5. None of these.



Directions (Q. 26-30): Study the following information carefully and answer the questions given below:

A,B,C,D,E,F,G and H are sitting around a circle facing the center. F is second to the right of A and third to the left of C. B is second to the left of C and fourth to the right of H. D is second to the right of G.

- 26. Who is to the immediate left of D? 1.H 2. C 3. G 4. Data inadequate 5. None of these.
- 27. Who is second to the right of E? 1. B 2.G 3. H 4. Data inadequate 5. None of these.
- 28. Who is third to the left of B? 1. E 2. H 3. F 4. Data inadequate 5. None of these.
- 29. What is the position of G with respect to A?
 - 1. 3rd to the left 2. 3rd to the right 3. 5th to the left 4. 5th to the right 5. 4th to the right.
- 30. In which of the following combinations is the third person sitting in between the first and the second persons?
 - 1. BGC 2. EFB 3. DAH 4. AEF 5. GCD.

EXERCISE-B

Directions (Q. 1-5): Study the following information carefully and answer the given questions.

- i. Five topics, A,B,C,D,E are to be discussed, one topic on each day, from Monday to Saturday.
- ii. Topic A will be discussed before E and topic B will be discussed before D.
- iii. Topics B and D will not be discussed on the first day.
- iv. There will be one rest day denoted by F.
- v. There will be a gap of two days between the days on which topics D and B will be discussed.
- vi. Topic C will be discussed immediately before the rest day. The rest day will not be the second or the fourth day
- 1. Which of the following is the correct sequence of the discussion on the topics including the rest day F?
 - 1. AEBFCD 2. ABECFD 3. AEBCFD 4. Cannot be determined 5. None of these.
- 2. Wchich of the following is a correct statement?
- 1.Topic A will be discussed on Tuesday 2. Discussion on topic C will be immediately preceded by discussion on topic B. 3. Discussion on topic B will take place before that on A. 4. Thursday is the rest day. 5. None
- 3. On which of the following days will the topic C be discussed? 1.Tue 2. Wed 3.Fri 4.Can't d'mind 5.None
- 4. How many days gap will be there between the days on which topic E and B will be discussed?
 - 1. Nil 2. One 3.Two 4. Three 5. None of these.
- 5. With reference to A, the discussion on topic E will take place ------
 - 1. Immediately on the next day 2. After a day's gap 3. After three days 4. Cannot be determined 5. None

Directions (Q. 6-12): Study the following information carefully and answer the questions given below:

A,B,C,D,E,F,G and H are sitting around a circular table facing the center. Each of them has a different profession, viz doctor, engineer, architect, pilot, banker, teacher, businessman and politician.

The politician sits third to the right of G. C is an immediate neighbor of G. The architect sits second to the right of C. B sits third to the right of H. H is neither a politician nor an architect. Only one person sits between C and teacher. A and F are immediate neighbors of each other. Neither A nor F is a politician. The doctor sits second to the right of A. Two people sit between D and engineer, D is not a politician. The pilot is not an immediate neighbor of the politician. The banker sits second to the left of A.

6. Who amongst the following is a businessman? 1. A 2. H 3. C 4. F 5. D



- 7. What is the position of F with respect to the politician? 1. Immediate right 2. Third to the left 3. Second to the right
- 4. Fourth to the left 5. Second to the left.
- 8. Who sit(s) exactly between the teacher and engineer?
 - 1. C and H 2. Only the politician 3. Only the doctor 4. C and H 5. The architect and the banker.
- 9. Which of the following is true with respect to the given seating arrangement? 1. D is an immediate neighbor of G. 2. G is a banker. 3. The banker and the teacher are immediate neighbors of each other. 4. The pilot sits exactly between the architect and the businessman. 5. The doctor sits second to the right of the businessman.
- 10. What is the profession of G? 1. Businessman 2. Pilot 3. Banker 4. Teacher 5. Architect
- 11. Four of the following five are alike in a certain way based on the given seating arrangement and thus form a group. Which is the one that does not belong to that group?
 - 1.G-Doctor 2. E-Architect 3. H-Businessman 4. E-Politician 5. D-Pilot.
- 12. What is the profession of E? 1.Businessman 2. Architect 3. Banker 4. Politician 5. Engineer.

Directions (Q. 13-19): Study the following information carefully and answer the questions given below:

- P,Q,R,S,T,V and W are sitting in a straight line facing north. Each one of them lives on a different floor in the same building which is numbered from one to seven. Q sits fourth to the left of the person living on the 6th floor. Either Q or the person living on the 6th floor sits at the extreme ends of the line. Only one person sits between Q and W. W lives on the 3rd floor. The person living on the 1st floor sits third to right of S. S is not an immediate neighbor of W. Only one person lies between T and person who live on the 2nd floor. P and R are immediate neighbor of each other. P does not live on the 6th floor. One who lives on the 5th floor sits third to right of the one who lives on the 7th floor.
- 13. Who amongst the following lies on the 4th floor? 1.P 2.Q 3.R 4.S 5.V
- 14. On which of the following floors does T live? 1.1^{st} 2.2^{nd} 3.5^{th} 4.6^{th} 5.7^{th}
- 15. How many floors are there between the floors on which V and P live?
 - 1.One 2. Two 3.Three 4. Four 5.None
- (**Q.16-19**): Four of the following five are alike in a certain way based on the given arrangement and thus form a group. Which is the one that does not belong to that group?
- 16. 1. W 2. T 3. S 4. P 5. Q
- 17. 1. T-2nd floor 2. R-7th floor 3. V-3rd floor 4. S-5th floor 5. Q-6th
- 18. Which of the following is true with respect to the given arrangement?
- 1. The one who lives on the 5th floor is an immediate neighbor of S. 2. V lives on the 1st floor. 3. T sits second to the left of the person who lives on the 2nd floor. 4. R and V are immediate neighbors of each other. 5. The one who lives on the 4th floor sits at one of the extreme ends of the line.
- 19. If all the persons are made to live in alphabetical order from the bottom-most floor to the topmost floor (ie,. P lives on the 1st floor , Q lives on the 2nd floor and finally W live on the 7th floor), who would still live on the same floor as the original arrangement?
 - 1. R 2. V 3. W 4. T 5. S

Directions (Q. 20-26): Study the following information carefully and answer the questions given below:

Eight friends A,B,C,D,E,F,G and H are sitting around a circular table not necessarily in the same order. Three of them are facing outward while five are facing towards the centre. There are equal number of males and females in the group. C is facing the centre. E is sitting third to the right of C. F is sitting third to the left of E. Three persons are sitting between F & B. The immediate neighbours of B are females. G is sitting third to the right of F. D is sitting third to the



right of A. A is not an immediate neighbour of E. Neighbours of E are males. The immediate neighbours of D are and females and face outside. The one sitting third to the left of B is a male. No female is an immediate neighbour of G.

- 20. Who is sitting second to the right of E? 1. A 2.B 3.G 4. H 5. None of these.
- 21. How many persons are sitting between H and C when counted from the left side of H?
 - 1. One 2. Two 3. Three 4. Four 5. More than four.
- 22. Which of the following statements is true regarding H?
- 1. The one who is second to the right of H is a female. 2. H is facing the centre. 3. H is a male. 4. The immediate neighbours of H are facing out side. 5. None is true.
- 23. What is D's position with respect to G?
 - 1. Third to the left 2. Third to the right 3. Second to the left 4. Second to the right 5. None of these.

Directions (Q.24-25): Four of the following five are alike in a certain way based on their seating positions in the above arrangement and hence from a group. Which of the following does not belong to the group?

24. 1. BE 2. CG 3. GA 4. DH 5. AF

25. 1. B 2. F 3. G 4. A 5. D

26. If all the friends are asked to sit in an alphabetical order starting from A in an anti clockwise direction, the positions of how many will remain unchanged (excluding A)? 1. Four 2. Three 3. Two 4. One 5. None

Directions (Q.27-31): Study the following information to answer the given questions: Each of the seven plays viz P,Q,R,S,T,V and W are scheduled to be staged on a different day of a week starting form. Monday and ending on Sunday of the same week. Play V is scheduled on Thursday. Two plays are scheduled to be held between play V and play P. Only one play is scheduled between play T and play S. Play T is not scheduled on the days immediately before or immediately after the day when play V is scheduled. Play R is scheduled the day immediately before the day when play W is scheduled. Play S is not scheduled after play Q.

- 27. How many plays are scheduled to be staged between play R and play S?
 - 1. None 2. One 3. Two 4. Three 5. Four
- 28. Which of the following plays is scheduled on Saturday? 1. Q 2. W 3. R 4. S 5. T
- 29. R is related to S in a certain way. In the same way P is related to V based on the given schedule. Which of the following is W related to following the same pattern? 1. P 2. Q 3. R 4. T 5. Cannot be determined.
- 30. On which of the following days is play W scheduled? 1. Monday 2. Tuesday 3. Wednesday 4. Saturday
- 31. Which of the following plays is scheduled on Friday? 1. R 2. T 3. Q 4. W 5. S



EXPLANATION

Rules:

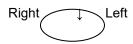
- 1. First count the number of people/objects to be arranged.
- 2. Directions sense is quite important in case of arrangements. In a linear arrangement where a person is facing north, directions with respect to him are as followed.

Left ↑ Right Directions with respect to that person.

3. For a person facing South the directions with respect to him are as followed.

Right \ Left Directions with respect to that person.

4. In case of a circular arrangement for a person facing center left with respect to him is in clock wise direction and right is anti-clock wise direction.



5. In case of a circular arrangement if a person is facing outside left of that person is Anti-clock wise directions right of him is clock wise direction.

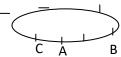
Left ↓ Right

6. Understand the statement the correct way. 1. A is 2nd to left of B but (and/while) third to right of C means

C__A_B



2. A is 2nd to left of B who is third to right of C mean CA B



7. When the person in the statement has no relation with the already arranged people then we should wait till we get some reference or else try all the possibilities. In the first case we have to arrange them outside the circle and then try to fit that into the arrangement late on.

Theory of Complex Arrangements:

- 1. No number should be repeated in any column or row.
- 2. So in this kind of problems let us take an example where we need to assign 7 subjects and 7 colours for students P,Q,R,S,T,U & V. First step is to make a table having 3 columns with students in the middle, subjects and colours on both sides of that.
- 3. If somebody is assigned some colour or subject for sure keep it inside of the table if he can't take up some thing for sure keep it out side. Ex. P likes Mathematics but doesn't like either blue or black.

Blue or Black

Colour	Students	Subjects
	Р	Maths



M	Hindi
---	-------

M likes Hindi

This way we have to fill up the given data first in the table and then look for the other clues.

@ If something was written outside the table later we should integrate that in into table.

Ex. Yellow colour is liked by English student.

English—Yellow (Combination) as we don't know who is that student we have to write outside and integrate the same in table later.

@ A study in college X with only B means only two students can study in college X.

EXERCISE-A ANSWERS

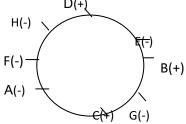
K-E-F-D-G-A-C-H-B 1) 4 2) 1 3)2 4)3 5)4 Arrangement in clockwise direction Arrangement in clockwise direction G-F-E-K-C-A-D-H-B 6)1 7)4 8)3 9)2 10)5 Arrangement in clockwise direction E-A-B-C-D-G-H-F 11)4 12)3 13)2 14)5 15)1 Arrangement in clock direction Z-S-T-V-R-Q-W-P 16)5 17)2 18)4 19)3 20)1 Arrangement in clockwise direction R-V-U-S-P-W-T-Q 21)5 22)1 23)3 24)1 25)2 26)2 27)1 28)5 29)4 30)3 Arrangement in clockwise direction G-B-F-E-A-H-D-C

EXERCISE-B ANSWERS

Monday-A, Tuesday-E, Wednesday-B, Thursday-C, Friday-F, Saturday-D 1)3 2)2 3)5 Thursday 4)1 5)1 6)1 7)3 8)3 9)5 10)2 11)4 12)4 SVQTWPR

1111111

13)4 14)1 15)2 16)3 Expect S, all others live on a floor with odd number. 17)5 The floor number of every person is written by increasing 1 in their actual floor number but that of Q it is written by decreasing 1. 18)5 19)5



20)3 21)2 F and A 22)1 23)2 24)3 Other pairs consist of immediate

Neighbours. 25)4 Other is facing towards the centre 26)4 Mon-P, Tue-R, Wed-W, Thu-V, Fri-S, Sat-Q, Sun-T 27)3 28)1 29)2 30)3 31)5



SAI EDUCATION FOR COMPETITIVE EXAMINATION

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CLASSIFICATION

CLASSIFICATION means to assort the items of a given group on the basis of a certain common quality they possesses and then spot the stranger or odd one out.

- 1. Choose the word which is least like the other words in the group.
 - (a) Zebra (b) Lion (c) Tiger (d) Horse (e) Giraffe

 Here all except Horse, are wild animals, while Horse can be domesticated, Answer =d
- (a) Parrot (b) Bat (c) Crow (d) Sparrow (e) Pigeon
 All except Bat, belong to the class of Aves (birds), while Bat is mammal
- 3. (a) Copper (b) Zinc **(c) Brass** (d) Aluminium (e) Iron All except brass are metals, while brass is an alloy
- 4. (a) January (b) May (c) July (d) August **(e) November**November has 30 days. But all have 31 days
- (a)Apple (b) Marigold (c) Rose (d) Lily (e) Lotus
 All except Apple are flowers
- 6. (a)Amethyst (b) Ruby (c) Marbles (d) Sapphire (e) Diamond All except Marble are precious stones.
- 7. (a)Ginger (b) Onion (c) Beetroot (d) Coriander (e) Potato All except Coriander are modified stems
- 8. (a)Bake **(b) Peel** (c) Fry (d) Boil (e) Roast All except Peel are different forms of cooking
- (a)Pistol (b) Sword (c) Gun (d) Canon (e) Rifle
 All except Sword, are fire arms, and can be used from a distance
- 10. (a)Cathedral (b) Mosque (c) Church (d) Monastery (e) Temple
 All except Monastery are places of worship, while monastery is a place where monks stay
- 11. (a)Poland (b) Greece (c) Spain (d) Italy (e) KoreaAll except Korea are European countries, while Korea is an Asian Country
- 12. (a)Calf (b) Cub (c) Piglet (d) Duckling **(e) Hireling**All except Hireling are young ones of animals
- 13. (a) Sketch (b) Diagram (c) Poster (d) Chart (e) Paper



All others can on paper

- 14. (a) Metre (b) Furlong (c) Yard (d) Mile (e) Acre

 All except Acre are units of measuring distance, while are is a unit of area.
- 15. (a)Run (b) Walk **(c) Think** (d) Jump (e) Swim

 All except Think denote physical activities



CODING-DECODING

EXERCISE-A.

Directions (Q.1-6): Study the following information to answer the given questions; In a certain code, "always create new ideas" is written as "ba ri sha gi", "Ideas and neew thoughts" is written as "fa gi ma ri", "create thoughts and insights" is written as "ma job a fa", and "new and better solutions" is written as "ki ri to fa".

- 1. What is the code for 'Ideas'? 1) sha 2) ba 3) gi 4) ma 5) None
- 2. What does 'fa' stand for? 1) thoughts 2) insights 3) new 4) and 5) solution
- 3. 'fa to ba' could be a code for which of the following? 1)thoughts and action 2) create and innovate 3) ideas and thoughts 4) create new solutions 5) always better ideas
- 4. What is the code for 'new'? 1) ki 2) ri 3) to 4) fa 5) ba
- 5. Which of the following may represent 'insights always better'? 1) jo ki to 2) ki to ri 3) sha jo ri 4) to sha jo 5) sha to ba
- 6. What is the code for 'thoughts'? 1) ma 2) fa 3) ba 4) jo 5) either jo or fa

Directions (Q. 7-12): Study the following information to answer the given questions; In a certain code 'for profit order now' is written as 'ho ja ye ga', 'right now for him' is written as 'ga ve ja se', 'place order for profit' is written as 'ga bi ho ye' and 'only in right order' is written as 've du ye zo'.

- 7. What is the code for 'him'? 1) ga 2) ve 3) ja 4) se 5) cannot be determined
- 8. What does 'bi' stand for? 1) profit 2) order 3) place 4) for 5) now
- 9. 'fo ve du' could be a code for which of the following? 1) in right spirits 2) only in profit 3) order only him 4) place in right 5) order only now
- 10. What is the code for 'profit'? 1) ye 2) ga 3) bi 4) ja 5) ho
- 11. Which of the following may represent 'only for now'? 1) ja bi za 2) do zo ga 3) zo ga ja 4) zo ga ye 5) du bi ja
- 12. What is the code for 'order'? 1)ye 2) ga 3) bi 4) ja 5) ho

Directions (Q. 13-18): Study the following information to answer the given questions; In a certain code, 'her idea has merit' is written as 'fo la bu na', 'merit list has been displayed' is written as 'jo ke la si na', 'her name displayed there' is written as 'ya sib u zo' and name in merit list' is written as 'na ya go ke'.

- 13. What does 'ke' stand for? 1) been 2) has 3) merit 4) name 5) list
- 14. What is the code for 'idea'? 1) fo 2) la 3) bu 4)na 5) either bu or na
- 15. Which of the following represents 'name has been displayed'? 1) ya la ke si 2) jo si ya la 3) si jo ke na 4) buy a ke la 5) ya si jo zo
- 16. What does 'zo' stand for? 1) there 2) displayed 3) name 4) her 5) cannot be determined
- 17. Which of the following may represent 'her name is there'? 1) zo ya go wo 2) buy a zo go 3) zo ya bu ke 4) ya zo wo bu 5) wo go zo ya
- 18. What is the code for 'in'? 1) na 2) ya 3) go 4) ke 5) cannot be determined

Directions (Q. 19-22): Study the following information to answer the given questions; In a certain code,

'ze lo ka gi' is a code for 'must save some money' 'fe ka so ni' is a code for 'he made good money', 'ni lo da so' is a code for 'he must be good' and 'we so ze da' is a code for 'be good save grace'.

- 19. Which of the following is the code for 'must'? 1) so 2) da 3) lo 4) ni 5) cannot be determined
- 20. What does the code 'ze' stand for? 1) some 2) must 3) be 4) grace 5) save



- 21. Which of the following is the code for 'good'? 1) so 2) we 3) ze 4) lo 5) fe
- 22. 'grace of money' may be coded as 1) ka da fe 2) we ka so 3) ja da we 4) ka we yo 5) j aka ze **EXERCISE-B.**
- 1. By following certain logic HOUSEWIFE is written as ERRVBZFIB. How is HOUSEHOLD written in that logic? 1.ERRVBEROA 2. ERRVBEOLA 3. ERRVBKOLA 4. ERRVBKLOA 5.None of these
- 2. By following certain logic MTUXTRVN is written as NUVXTQUM. How is ASUMNJKL written in that logic? 1. BTVMNIJK 2. BTVMNKLM 3. BTVNMIJK 4. ZRTMNIJK . None of these
- 3. In a certain code language the word LAEST is written as IDQHPW. Howwill the word PAPERS be written in that language? 1. SXSBUP 2. MDSBUP 3. MDMHOV 4. MDMHUV 5. None
- 4. In a certain code language the word ATMOSPHERE is written as BSLPROGFQF. How will the word NEIGHBOURS be written in that language? 1. MFJFGAPVQR 2. MFJFGAPVQR 3. ODJFIAPSTR 4. ODJEIAPTSR 5. None of these
- 5. In a certain code language, the word HOARDING is written as RAKQPJID. How will the word LIMERICK be written in that language? 1. EMOKENRI 2. MEOKENIR 3. EOMKENIR 4. EMOKENIR
- 6. In a certain code language, the word AMASSED is written as JUHYXIG. How will KNOBBLY be written in that language? 1. TVUHGPB 2. SUTGFOA 3. TTUVPQC 4. TVUHHOB 5. None of these
- 7. In a certain code language IMPLICIT IS written as LRWUTPXK. How will INTROVERT be written in the same code? 1. LSAZAITMI 2. LSAAZITIM 3. LSASIZTIM 4. LSAIZATIM 5. None
- 8. In a certain code language the word SMOULDER is written as UHGOXRPV. How will the word NEWSCAST be written in that language?1. QHZVFDWV 2. WVFDVZHQ 3.WVDFVZHQ 4. WVDFZVH
- 9. In a certain code language the word HOARDING is written as 23191321 and LIMERICK is written as 21182714. How will the word SUITABLE be written in that language? 1. 21290317 2. 20290317 3.40290317 4. 71309204 5. None
- 10. In a certain code language UMBERALLA is written as 1111321851212 and as VULNERABLE is written 112111121451812125. How is YTTERBIUM written in that code? 1. 111110110518291111 2. 115110110518291113 3. 113110110518291113 4. 1151101105182911113 5. None
- 11. In a certain code language 3960 means YOU WILL HELP ME, 1369 means IWILL HELP YOU. 12469 means WHY I WILL HELP THEM, and 748 means KILL THEM DOCTOR. On the basis of the above information the code for which of the following can't be obtained with certainly? 1. Me 2. Why 3. You 4. Them 5. Doctor
- 12. In a certain code language CAT is written as 3120 and DOG is written as 4157. Then which of the following is certainly the decoded form of 25144? 1. BEND 2. BEADD 3. YADD or YND 4. Can't be determined 5. None
- 13. If DELHI is coded as 73541 and CALCUTTA as 82589662, how can CALICUT be coded? 1. 5279431 2. 5978213 3. 8251896 4. 8543691 5. None
- 14. In a certain code, RIPPLE is written as 613382 and LIFE is written as 8192. How is PILLER written in that code? 1.318826 2.318286 3.618826 4.338616 5. None
- 15. If Z=52 and ACT=48 then BAT will be equal to? 1. 39 2.41 3.44 4. 46 5. None
- 16. If REASON is coded as 5 and BELIEVED as 7, what is the code number for GOVERNMET?
 - 1.6 2.8 3.9 4.10 5. None of these
- 17. If GO=32, SHE=49, then SOME=? 1. 56 2. 58 3. 62 4. 64 5. None



- 18. If AT=20, BAT=40, the CAT will be equal to. 1. 30 2. 50 3. 60 4. 70 5. None
- 19. In a certain code language YOU REQUIRE MORE CONCENTRATION is written as TIG SEEG LOOG ROOG; STRESS REQUIRE FOR ARITHMETICS is written as MIYA LOTA LOOG KOTA; NON VERBAL IS MORE EASY is written AS SEEG YOOG BEEG LAA; and STRESS MORE ON NON-VERBAL is written as SEEG MOTA YOOG MIYA. Then the code for which of the following can't be determined? 1.more 2. Require 3. On 4. Is 5. Stress
- 20. In a certain code POT JIT JACK means TALL GREEN TREE, KOT JIT POT means SMALL GREEN TREE and JACK SON KOT means SMALL AND TALL. Then which words in that language means tall and green respectively? 1.jack and kot 2. Jack and jit 3. Jack and pot 4. Cant' say 5. None
- 21. In a certain code CHOR MOUSERA TO BHAI means BEST AWARD IS NOBEL, DAR TO KAHE means RAJU IS WORRY, SAIYAN KOTWAL KAHE means I AM WORRY, DAR TO CHOR KAA means RAJU IS BEST ACTOR and CHOR MOUSERE means BEST AWARD. Then which of the following words can't be decoded with certainty? 1. Dar 2. Bhai 3. Kaa 4. Kotwal 5. Kahe
- 22. In a Certain code HOLI GHOLI MOLI means READ AND WRITE; GHOLI JHOLI ALENSOLI means WRITE A LETTER; and MOLI ALENSOLI TOIL means READ THE LETTER. How will you code READ THE LETTER AND WRITE? 1. Can't say 2. Moli toil alensoli jholigholi 3. Moli toil alensoli jholi gholi 4. Jholi gholi alensoli toil moli 5. None of these
- 23. In a certain code language PIT JO HA means VERY GOOD BOY and JO NA PA means SHE IS GOOD. Then which of the following means VERY in that code language? 1. Pit 2. Jo 3. Ha 4. Either pit or ha 5. None of these.
- 24. If BLUE is called GREEN, GREEN is called BLACK, BLACK is called WHITE, WHITE is caller RED and RED is called BROWN, then which is the colour of the ordinary post-box? 1. Green 2. Red 3. White 4. Brown 5. None of these.
- 25. If ice is called water, water called rain, rain is called wind, wind is called air and air is called sky, then you will find amphibians on land and in. 1. Wind 2. Water 3. Sky 4. Air 5. Rain
- 26. In a certain code language "auto goes for strike" is written as \$1!* "strike gives right" is written as ?!& and "auto drivers are right" is written as -*?#. Then what is the code 'goes' in that language? 1. \$ 2. 1 3. * 4. Data inadequate 5. None of these
- 27. In a certain code "FEAR" is as "**+x-***" and READ is written as "***x-\$**". How FADE is written in that code? 1. +-\$x 2. X-+\$ 3. \$-+* 4. -\$+x 5. None of these
- 28. In certain code language GAME is written as \$-*% and BEAD is written as #%-x, How will the word MADE be written in that code language? 1. \$-x% 2. *-\$% 3. *-x% 4. #-x% 5. None of these
- 29. In a certain code language PEN PENCIL is written as \$&, ERASER SHARPENER is written as @# and PENCIL ERASER is written as \$@, then what is the code for PEN? 1. & 2. @ 3. \$ 4. # 5. None
- 30. In a certain code language BEAM is written as 5%*k and COME is written as \$7k%. How is BOMB written in that code? 1.5%k5 2.57k5 3.\$7k\$ 4.5\$%5 5. None of these.
- 31. How many pairs of letter are there are in the word 'PRESENCE'. Which have as many letter between them in the word as in the alphabet?

EXPLANATION

RULE-1: A very simple of way coding is where we use symbols for alphabets. In this case we need to replace the alphabet with given codes as identified in given examples. BANK means ?#@+, KHEL means +#=*, Then LEAN means *=#@



RULE-2: Sometimes alphabets in given word can be coded with their numerical position when counting is done in alphabetical order. A,B,C,D,E,....Z = 1,2,3,4,5......26. EJOTY =5,10,15,20,25

RULE-3: Few times alphabets are coded as per their numerical position in the reverse alphabetical order. Alphabets Numerical position in reverse alphabetical order=26-position in alphabetical order.

RULE-4:Sometimes words can be coded with the sum or product of the numerical positions of the alphabets in the word. NEFT=45---14+5+6+20, RTGS=64---18+20+7+19 etc.

RULE-5: Alphabets in the given word can be replaced with alphabet which comes numerically in the same position in the reverse alphabetical order. GUNS=TFMH, Numerical position alphabetically G=7 T=7 in the reverse order etc.

RULE-6: Alphabets in the given word can be made into groups, then jumbled and replaced by new set of alphabets based on the logic considered. FIGHTER=TERHFIG, +1 -1, +1 +2 +3 etc.

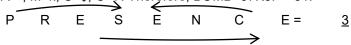
RULE-7: Blue is Red, Red is Green, Green is Pink, Pink is White. Then what is the colour of blood? As a colour of blood is red and red is coded as green so colour of blood is green.

RULE-8: How many pairs of alphabets are they in the word SECURITY which is having as many alphabets in between them as in English alphabets. This question is concerned with number of alphabets in between any pair of alphabets? For example E and I has FGH. Ie, 3 alphabets in between them in alphabets. Similarly in the given word between E and I they have CUR that is 3 alphabets so they are a pair. So are the R and T-2, U and Y-3

ANSWER-A:1.3, 2. 4 3. 2 4. 2 5. 4 6. 1 7. 4 8. 3 9. 1 10. 5 11. 3 12. 1 13. 5 14. 1 15. 2 16.1 17.4 Code for IS is not known but out of the given five options only YA ZO WO BU may be the coding. 18. 3 GO 19. 3 20. 5 21. 1 22. 4

EXERCISE-B: 1. 4 2. 1 First three letters move+1 step as in English alphabet and the last three letters move -3 step as in English alphabet. The rest remains as it is. 3. 3 Odd-number-positioned letters are shifted three places leftward and even-number positioned letters are shifted three places rightward as in English alphabet.4.2 Vowels shift one place forward while the consonants shift one place backward as in English alphabet. 5.4 6.5 The letters are coded as 9,8,7,...3 letters forward respectively. Thus k+9, N+8, O+7, B+6, B+5, L+4 and Y+3 ie, TVHGPB. 7. 2 The letters are coded as +3, +5, +7 ...forward as in English alphabet. 8. 3 All letters are coded as three letters forward as in English alphabet but they are arranged in reverse order. 9. 3 10. 4 Each letter of the word is coded as the number equal to the position of the letter in English alphabet. But those letters which are ahead of S are coded as follows: U->21st letter, code used 111; V->22nd letter, coded as 112, ie digits at ten's place is coded as sequence of equal in number to the face value of digits at tenth's place. Hence, whenever 2 comes at ten's place then 2 is replaced by 11. 11.5 12.4 Decoding with certainty is not possible. 13.3 14.1 15.4 In the given code, A=2, B=4, C=6...Z=52. So, ACT=2+6+40=48 and BAT=4+2+40=46. 16. 3 Code for the given word =(Numbers of letters in the word)-1. So, code for GOVERNMENT=10-1=9. 17. 1 In the given code, Z=1, GO=20+12=32 SHE=8+19+22=49. X=3...C=24. B=25,A=26. So and SOME=8+12+14+22=56 18.3 19.4 20.4 21.4 22.2 23.4 24.4 The colour of post box is red, and red called brown. Hence its colour is brown.

25. 5 Amphibians are creatures that live on land as well as in water. 26. 4 27.1 28.3 29.1 30.2 Here B=5, E=%, A=*, M=k, C=\$, O=7. Therefore, BOMB=57K5. 31.





SAI EDUCATION FOR COMPETITIVE EXAMINATION

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BLOOD RELATIONS

EXERCISE-A

Directions (Q.1-4): Read the following information carefully and answer the questions given below it.

P/Q means P is father or Q

P+Q means P is mother of Q

P-Q means P is the brother of Q

P*Q means P is the sister of Q



- 1. If A+B/C-D, then A is D'? 1. Sister 2. Grandfather 3. Grandmother 4. Father 5. None
- 2. If A*B/C-D+E, then A is E's? 1. Grand-aunt 2. Brother 3. Maternal uncle 4. Mother 5. None
- 3. Which of the following shows that A is aunt of E? 1. A-B+C/D*E 2. A*B/C*D-E 3. A/B*C+D-E 4.A+B-C*D/E 5. None
- 4. P-Q means Q is son of P and P*Q means P is brother of Q, P/Q means Q is sister of P, and P+Q means P is mother of Q. Which of the following is definitely true about N*K-M/L 1. K is father or L&M 2. L is the daughter of K and is the niece of her uncle N 3. K is the father of M and L-his son and daughter respectively 4. M is the uncle of K's brother N 5. None

Directions (Q.5-9): Read the following information carefully and answer the questions given below it.

A+B means A is the daughter of B

A-B means A is the husband of B

A*B means A is the brother of B

- 5. If P+Q-R, which of the following is true? 1. R is the mother of P 2. R is the sister-in-law of P 3. R is the aunt of P 4. R is the mother-in-law of P 5. None
- 6. If P*Q+R, which of the following is true? 1. P is the brother of R 2. P is the uncle of R 3. R is the aunt of P 4. P is the father of P 5. None
- 7. If P+Q*R, which of the following is true? 1. P is the niece of R 2. P is daughter of R 3. P is the cousin of R 4. P is the daughter in law of R 5.None
- 8. If P+Q means P is the husband of Q, P/Q means P is the sister of Q and P*Q means P is the son of Q, which of the following shows A is the daughter of B? 1.C*B/A 2.B+C*A 3.D*B+C/A 4.A/D*B 5.None
- 9. X-Z means X is the mother of Z; X&Z means X is the father of Z and X+Z means X is the daughter of Z. Now, if M-N*T+Q, then which of the following is not true? 1.T is N's daughter 2.N is wife of Q 3.M is mother of law of Q 4. Q is wife of N 5. None

Directions (Q.10-12): Read the following information carefully and answer the questions given below it.

A+B means A is the father of B, A-B means A is sister of B, A*B means A is the husband of B, A/B means A is the wife of B

- 10. Which of the following means S is granddaughter of R? 1.R+P/Q+S 2.K/R+P*Q-L+S 3.K/R+P/Q+S-L 4.Can't be determined 5.Nne
- 11. Which of the following means P has blood relation with Q? 1.R/P+K*L-M+Q 2.R/P+K/L+Q-M 3.R/P+K-L*M-N+Q 4.R/P+K*L-Q 5.None
- 12. Which of the following means P is grandmother of Q? 1.P/R+S*T-U*Q 2.P/R+S+T/Q 3.P/R+S+B+K*L-Q 4.P/R+S-T+Q*U 5.None

Directions (Q.13-14): Read the following information carefully and answer the questions given below it.

A-B means A is the sister of B, A*B means A is the husband of B, A/B means B is the brother of A, A+B means B is the mother of A.

- 13. If P+Q-R/S*T, then R is T's? 1.Brother in law 2.Sister in law 3.Either brother in law or Sister in law 4. Can't be determined 5. None
- 14. Which of the following shows N is the mother in law of K? 1.K/L*M+N 2.K*L-M+N 3.K-L+M*N 4.K/L+M*N 5.None

Directions (Q.15-16): Read the following information carefully and answer the questions given below it.



A+B means A is the brother of B, A-B means A is the sister of B, A*B means A is the father of B, A/B means A is the mother of B.

- 15. If P/Q-R*S, then P is S's? 1.Grandmother 2.Maternal grandmother 3.Maternal aunt 4.Sister 5.None
- 16. Which of the following shows that T is the grandmother of W?
- 1.T*U+V/W 2.T*U-V/W 3.T+U/V*W 4.T/U*V-W 5.None

Directions (Q.17-20): Read the following information carefully and answer the questions given below it.

A+B means A is the sister of B, A-B means A is the father of B, A*B means A is the brother of B, A/B means A is the mother of B.

- 17. If K/L+M*N, then K is N's? 1.Aunt 2.Uncle 3.Grand aunt 4.Grandmother 5.None
- 18. If K+LM*N/P, then K is P's? 1.Grand aunt 2.Grandmother 3.mother 4.sister 5.None
- 19. Which of the following shows that C is the maternal grandfather of F? 1.C+D-E/F 2.C*D-E+F 3.C*D+E-F 4.C-D/E*F 5.None
- 20. If A+B means A is the sister of B, A-B means A is the brother of B, A*B means A is the daughter of B, which of the following shows the relation that E is the maternal uncle of D?

1.D+F*E 2.D-F*E 3.D*F+E 4.D*F-E 5.None

Directions (Q.21-25): Read the following information carefully and answer the questions given below it.

P,Q,R,S,T and X are members of a family. There are two married couples. Q is an engineer and father of T. X is the grandfather of R and is a lawyer. S is the grandmother of T and is a housewife. There is one engineer, one lawyer, one teacher, one housewife and two students in a family.

- 21. Who is the husband of P? 1.R 2.X 3.Q 4.S 5.T
- 22. Which of the following two are married couples? 1.XS,QP 2.XS,QT 3.XS,RP 4.TS,RX 5.None
- 23. Which of the following is definitely a group of male members? 1.Q,X,T 2.X,t 3.Q,X,P 4.Q,X 5.None
- 24. Who is the sister of T? 1.R 2.S 3.P 4.Data inadequate 5.None
- 25. Which of the following can be P's profession? 1. Housewife 2.Engineer 3.Teacher 4.Engineer or Teacher 5.Housewife or Teacher
- 26. Amit said, this girl is the wife of the grandson of my mother. What is Amit to the girl?

 1.Father 2.Grandfather 3.Husband 4.Father in law 5.None
- 27. Pointing to a man in a photograph, a woman said, "His brother's father is the only son of my grand father. How is the woman related to the man in the photograph? 1.Mother 2.Aunt 3.Sister 4.Daughter 5.None
- 28. Showing the man receiving the prize, Seema said, "He is brother of my uncle's daughter". What is the man to Seema? 1.Son 2.Brother in law 3.Nephew 4.Uncle 5.Cousin
- 29. Pointing to a person, a man said to a woman, "His mother is the only daughter of your father". How was the woman related to the person? 1.Aunt 2.Mother 3.Wife 4.Daughter 5.None
- 30. Pointing to a lady, a girl said, "She is the only daughter in law of the grandmother of my father's only son". How is the lady related to the girl? 1.sister in law 2.Mother 3.Aunt 4.Mother in law 5.Cousin



EXPLANATION



Mother's or Father's son Brother

Mother's or Father's daughter Sister

Mother's or Father's brother Uncle

Mother's or Father's sister Aunt

Mother's or Father's father Grand father

Mother's or Father's Mother Grand mother

Son's wife Daughter-in-law

Daughter's husband Son-in-law

Husband's or wife's sister Sister-in-law

Husband's or wife's brother Brother in law

Brother's son Nephew

Brother's daughter Niece

Uncle or Aunt's son or daughter Cousin

Sister's husband Brother-in-law

Brother's wife Sister –in-law

Grandson's or Granddaughter's daughter Grand great daughter

RULE:** Keep a notation for gender eg. MALE '+' and FEMALE '-'

Eg. A and B is brothers.... $A^{(+)} + B^{(+)}$, A is wife of B..... $A^{(-)} \times B^{(+)}$, A is son of B.... $A^{(+)} \leftarrow B$, Similarly if A is grandson of C..... $A^{(+)} \leftarrow C$, which shows two generations gap. This way tries to keep the things given questions in notation of your own.

Sometimes using gender we can eliminate the wrong answers.

Answers: 1.3 Choice 2 and 4 are wrong as A+B means A is a mother, hence a female. Generation gap between A and D is (+1) + (+1) + (0) = 2. So, A must be a grandmother.

- 2.1 A*B means A is a sister, hence a female. Generation gap (0) + (+1) + (0) + (+1) = +2. So, A is E's grandmother's generation.
- 3.2 In choice, 1, generation gap is 0+1+1+0=2. So, A is E's grandma's generation. In choice 2, gap is 0+1+0+0=1. In choice 3, gap is 1+0+1+0=2. So, A is E's grandma's generation. So choices, 1,3,4 are eliminated.
- 4.2, 5.1 R is mother of P 6.3 P is son of R 7.1 P is niece of R 8.4 9.4
- 10.3 Choice 1,2 is not correct as sex of S is not known.

11.4

12.4 If P is to be grandmother of Q, P and Q should have generation gap of 2 between them. Now, out of the given four relationships only one ie, +(father) has a relationship that has some gap. So a correct answer must

^{**} Try to create a family tree for the questions by creating your own notation for blood relations.



have exactly 2+ sign between P and Q. This eliminates choice 1. Again if Q was to be a grandchild the path between P and Q should have continuous blood relations. But in choice (2), Q and T are not blood related. In choice 3 S and B are not blood related. This leaves choice 4 only.

- 13.3 14.2 15.1 16.4 17.5 18.1 19.4
- 20.5 All choices are wrong as sex of E is not known is any of them.
- 21.3 22.1 23.4 24.4 25.3
- 26.4 Mother's grandson---son, Son's wife-----daughter in law

27.5

- 28.5 Brother of uncle's daughter-----uncle's son----Cousin, man is seema's cousin
- 29.1 Daughter of your father ---- your sister, the person's mother is the woman's sister. Woman is person's aunt.
- 30.2 My father's only son----my brother, grandmother of my brother----my grandmother, Daughter in law of grandmother----my mother. So the lady is girl's mother.

SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

ELEMENTS SERIES

Directions (Q.1-6): Study the following arrangements carefully and answer the questions given below.

F4@32E%MPSW9@IQR6UH3Z7*ATB8V#G\$YD



- What should come in place of question mark? In the following series based on above arrangements? J E M 5 9 I R U 3 ? 1.7AB 2.7AT 3.*78 4.ABV 5.None
- 2. How many such consonants are there in the above arrangement, each of which is immediately preceded by a number but not immediately followed by a number?1.None 2.One 3.Two 4.Three 5.Four
- 3. Which of the following is the tenth to the right of the nineteenth from the right end of the above arrangement? 1.M 2.T 3.# 4.2 5.None
- 4. How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter? 1.None 2.One 3.Two 4.Three 5.More than three
- 5. Four of the following five are a like in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group? 1.@24 2.pwm 3.R16 4.RUQ
- 6. If all the symbols are dropped from the above arrangement, which of the following will be the fourteenth from the left end? 1.R 2.Q 3.U 4.3 5.None

Directions (Q.7-11): Study the following arrangements carefully and answer the questions given below.

B M % R 3 J @ K © D F 6 9 W 4 * N E P 2 \$ A Y 5 I Q Z # 7 U G

- 7. Which of the following is the sixth to the left of the twentieth from the left end of the above arrangement? 1.J 2.Q 3.W 4.E 5.None
- 8. How many such consonants are there in the above arrangement, each of which is immediately preceded by a symbol and immediate followed by a number? 1.None 2.One 3.Two 4.Three 5.None
- 9. If all the symbols and all the vowels are dropped from the above arrangement, which of the following will be twelfth from the right end? 1.9 2.6 3.P 4.Y 5.None
- 10. How many such numbers are there in the above arrangement, each of which immediately proceeded by a letter but not immediately followed by a number? 1.None 2.One 3.Two 4.Three 5.More than three
- 11. What should come in place of question mark (?) in the following series based on the above arrangement?

 MRJ©F9*E2 1.Y5I 2.YIQ 3.A5Q 4.YIZ 5.None

Directions (Q.12-17): Study the following arrangements carefully and answer the questions given below.

W7@IRP39BA\$4HD5©ME2%T*B&UQNIV#KF

- 12. How many such consonants are there in the above arrangement, each of which is immediately preceded by a consonant and immediate followed by a symbol?
 - 1. None 2. One 3. Two 4. Three 5. More than three
- 13. If all the symbols are dropped from the above arrangement, which of the following will be fifteenth form the left end? 1.E 2.5 3.D 4.2 5.None
- 14. How many such numbers are there in the above arrangement, each of which is immediately preceded by a symbol and immediately followed by a consonant? 1.None 2.One 3.Two 4.Three 5.More than three
- 15. Four of the following five are a like in a certain way based on their positions in the above arrangement and so form a group, which is one that does not belong to that group? 1.T*2 2.QN& 3.39R 4.6VK 5.%TE
- 16. Which of the following is the ninth to the right of the twenty second from the right end of the above arrangement? 1.H 2.# 3.T 4.@ 5.None
- 17. How many such symbols are there in the above arrangement, each of which is immediately preceded by a number and immediately followed by a letter? 1.None 2.One 3.Two 4.Three 5.More than three

Directions (Q.18-22): Study the following arrangements carefully and answer the questions given below.

H93P\$KE%4FR1U@WG2MI5BQZ6©*N&8VJ



- 18. If all the symbols are numbers are dropped from the above arrangement which of the following will be the fourteenth from the right end? 1.M 2.K 3.W 4.E 5.None
- 19. What should come in place of the question mark (?) in the following series based on the above arrangement? $P \ K \% \ R \ U \ W \ M \ 5 \ Q \ 1. \ @N8 \ 2. \ @N$ \ 3.$*$ \ 4.6*8 \ 5.None$
- 20. How many such consonants are there in the above arrangement each of which is immediately preceded by a letter and immediately followed by a symbol? 1.None 2.One 3.Two 4.Three 5.None
- 21. Which of the following is the seventh to the left of the twentieth from the left end of the above arrangement?

 1.U 2.S 3.M 4.N 5.None
- 22. How many such consonants are there in the above arrangement each of which is immediately followed by a number but not immediately preceded by a number? 1.None 2.One 3.Two 4.Three 5.More than three

Directions (Q.23-28): Study the following arrangements carefully and answer the questions given below.

M 5 % P U Z A \$ 4 3 Z E K 1 9 Q R I @ D 7 F & 8 W N 6 # V © J * Y

- 23. Which of the following is the ninth to the right of the seventeenth from the right end of the above arrangement? 1. N 2.\$ 3.4 4.W 5.None
- 24. Which of the following is the fourth to the left of the sixth to the left of W in the above arrangement?
 - 1.U 2.D 3.E 4. © 5. None
- 25. How many such symbols are there in the above arrangement each of which is immediately preceded by a letter and immediately followed by a number? 1.None 2.One 3.Two 4.Three 5.More than three
- 26. How many such consonants are there in the above arrangement ech of which is immediately followed by a symbol but not immediately preceded by a number? 1.None 2.One 3.Two 4.Three 5.More than three
- 27. Four of the following five are like in a certain way based on their position in the above arrangement and so form a group. Which is the one that does not belong to that group? 1.PSA 2.4AE 3.QIK 4.F8@ 5.VN*
- 28. If all the symbols and the numbers in the above arrangement are dropped, which of the following will be the twelfth from the left end? 1.E 2.K 3.Z 4.D 5.None

Directions (Q.29-30): Study the following arrangements carefully and answer the questions given below.

4 K @ 1 E F © 2 H D % 3 8 B I M 6 * U W Y 5 \$ 9 G J # 7 A

- 29. Which of the following is the eight to the left of the nineteenth from the left end of the above arrangement? 1.% 2.U 3.D 4.# 5.None
- 30. How many such consonants are there in the above arrangement, each of which is immediately preceded by a letter and immediately followed by a number? 1.None 2.One 3.Two 4.Three 5.Four

ANSWER AND EXPLANATIONS

1.1 2.2 3.2 4.4 5.3 6.5 7.3 8.2 9.1 10.5 11.4 12.1 13.1 14.2 15.4 16.5 17.4 18.1 19.2 20.1 21.5 22.1 23.5 24.3 25.5 26.5 27.1 28.2 29.1 30.3

In the above series we can observe 3 kinds of elements

- 1. Alphabets or letters-Consonants and Vowels
- 2. Numbers Even numbers and Odd numbers
- 3. Symbols

A few things which we needed to understand to solve these question fast. They are

- 1. Left end means beginning of the series
- 2. Right end means end of the series,



- 3. A is preceded by B meansB,A
- 4. A is preceding B means......A,B
- 5. A is followed by B means.....A,B
- 6. A is following B meansB,A
- 7. **Position with respect to ends:- (*)** Left and Left (-), (***) Right and Right (-), (***) Left and Right (+), (****) Right and Left (+)
 - Eg; Element which comes in place of 6th to right of 8th from left end means 6+8=14th from left end. Element which comes in place 9th to the right of 16th from right end means 16-9=7th from right.
- 8. **Position with respect to an element;-** (*) Left and Left (+), (**) Left and Right (-),
 - (***) Right and Left (-), (****) Right and Right (+)
- 9. When the series is written in reserve order left end becomes right end and vice versa. So if the given series is written in reverse order which element comes in place of 8th to right of 19th from right end means 19-8=11th from right end in new series which is nothing but 11th from left in the old series.
- 10. If 1st and 2nd, 3rd and 4th, 5th and 6th elements get interchanged and so on then 14th element gets interchanged with 13th not 15th as we can see odd position gets interchanged with next even position. Similarly if 1st with 20th, 2nd with 19th, 3rd with 18th, and so on then 8th element gets interchange with 13th as we could see sum of numerical positions of the pair is 21.

SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

DIRECTIONS

- 1. Deepak starts walking 75 mtr towards East. Then he turn and walks 25 mtr left. Again he turns left and walks 40 mtr. Finally he turns left and walks 25 mtr. How far away from his starting point? 1.25 2.35 3.40 4.45 5.None
- 2. Dev walks 78 mtr North. Then he turns left and walk 25 mtr. Again he turns left and walk 80 mtr. Then he truns 45° right direction. Which is his direction? 1. SE 2.SW 3.NW 4. NE 5.None.
- 3. Arun walks towards North 10 mtr. Then he turns South 6 mtr, then he turns left and walk 3 mtr. Find his distance and direction from starting point? 1.5 Mtr NE 2.5Mtr NW 3.5Mtr E 4.5 Mtr W 5.7Mtr NE

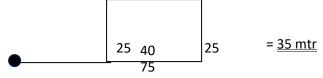


- 4. A man is facing North. He turn 80^o CW and 60^o ACW again 120^oCW and finally 50^o ACW direction. Find his direction. 1.E 2.S 3.W 4.N NW
- 5. If South East is called East, North West is called West and so on, what will North be called? 1.NW 2.NE 3.SE 4.N 5.W
- 6. A watch read 4:30. Its minutes hand point towards South East. In which direction its hour hand points?

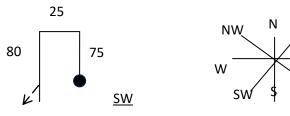
 1.SE 2.SW 3.NE 4.NW 5.W
- 7. Gautam walked 35 meters towards south. Then he turned to his left and walked 40 meters. He then turned towards his left and walked 15 mtrs. He again turned to his right and walked 25 Mtrs. At what approximate distance is he from the starting point and in which direction? 1.60 Mtr NE 2.35Mtr SE 3.67Mtr E 4.67Mtr SE 5.None
- 8. A person starts from his house and travels a distance of 10Mtr Southwards and then travels a distance of 12Mtr rightwards, then travels distance of 10Mtr rightwards and finally travels a distance of 10Mtr in Eastern direction. At what horizontal distance is he from his house? 1.2 2.10 3.12 4.Can't say 5.None
- 9. Saritha starts moving towards North, then turns right then left again. In what direction is she moving now? 1.E 2.W 3.N 4.S 5.None
- 10. A crow starts from its nest in a tree, then travels 6KM towards the East then travels 7KM South, then travels 4KM towards left then travels 12 KM towards the left and finally travels 6KM towards the right. In which direction is the crow now with reference to the starting point? 1.S 2.SW 3.SE 4.NE 5.None
- 11. A person starts from his house, then travels 6KM towards the East, then goes 12KM towards the left, then travels 6KM towards the right, then 7KM South, then travels 4KM towards the left then travels 12KM towards the left and finally travels 6KM towards the right. Where is he now with reference to the starting point? 1.24 S 2.24 N 3.12 E 4.Can't say 5.None

EXPLANATION

1. Deepak starts walking 75 mtr towards East. Then he turn and walks 25 mtr left. Again he turns left and walks 40 mtr. Finally he turns left and walks 25 mtr. How far away from his starting point?



2. Dev walks 78 mtr North. Then he turns left and wlks 25 mtr. Again he turns left and walks 80 mtr. Then he truns 45° right direction. Which is his direction?

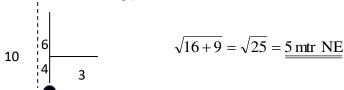


NE

SE



3. Arun walks towards North 10 mtr. Then he turns South 6 mtr, then he turns left and walk 3 mtr. Find his distance and direction from starting point?

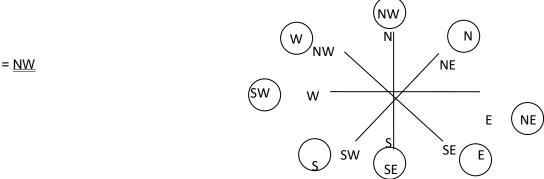


4. A man is facing North. He turn 80° CW and 60° ACW again 120° CW and finally 50° ACW direction. Find his direction. $CW = 80^{\circ} + 120^{\circ} = 200^{\circ}$

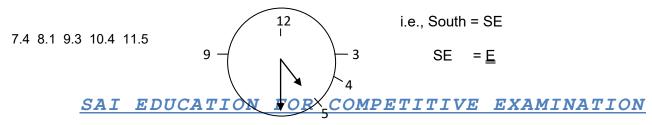
$$ACW = 60^{\circ} + 50^{\circ} = 110^{\circ}$$

 $CW = 90^{\circ} = East$

5. If South East is called East, North West is called West and so on, what will North be called?



6. A watch read 4:30. Its minutes hand point towards South East. In which direction its hour hand points?



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MACHINE INPUT-OUTPUT

Directions (Q.1-6): Study the following arrangements carefully and answer the questions

A word and a number arrangement machine when given an input line of words and numbers rearrange them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input: day 74 night 36 25 68 for all

Step I: all day 74 night 36 25 68 for

Step II: all 74 day night 36 25 68 for

Step III: all 74 day 68 night 36 25 for

Step IV: all 74 day 68 for night 36 25

Step V : all 74 day 68 for 36 night25

And step V is the last step of the rearrangement of the above input.



As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

1. Step III of an input: bond 86 goal 12 33 like high 46.

Which of the following will be step VII?

- a. bond 86 goal 46 like 12 33 high.
- b. bond 86 goal 46 high like 33 12.
- c. Bond 86 goal 46 high 33 like 12.
- d. There will be no such step.
- e. None of these.
- 2. Input: mind new 27 35 19 59 own tower.

Which of the following steps will be the last but one?

- a. VI b. IV c. V d. VII e. None of these
- 3. Step IV of an input: dear 63 few 51 16 19 yrs now.

How many more steps will be required to complete the arrangement?

- a. Four b. five c. Three d. Two e. None of these
- 4. Step IV of an input is: Car 73 18 25 wear 49 long for

Which of the following is definitely the input?

- a. 18 25 wear 49 long for car 73
- b. 73 18 car 25 wear 49 long for
- c. 18 73 25 car wear 45 long for
- d. Cannot be determined
- e. None of these
- 5. Input: war 52 and peace 43 16 now 24

How many steps will be required to complete the rearrangement?

a. Four b. Five c. Six d. Seven e. None of these

Directions (Q.6-10): A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: 17 put show on 39 27 85 gold

Step I: show 17 put on 39 27 85 gold

Step II: show 85 17 put on 39 27 gold

Step III: show 85 put 17 on 39 27 gold

Step IV: show 85 put 39 17 on 27 gold

Step V: show 85 put 39 on 17 27 gold

Step VI: show 85 put 39 on 27 17 gold

Step VII: show 85 put 39 on 27 gold 17



As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

6. Input: glass full 15 37 water now 85 67

Which of the following will be step VI of the above input?

- a. Water 85 now 67 full glass 15 37
- b. Water 85 now 67 glass full 15 37
- c. Water 85 now 67 glass 37 full 15
- d. There will be no such step
- e. None of these
- 7. Step II of an input is: ultra 73 12 16 mail sort 39 kite

Which of the following steps will be the last but one?

- a. VIII b. IX c. VII d. VI e. None of these
- 8. Step III of an input is: win 75 voice 15 39 store gap 26

Which of the following is definitely the input?

- a. Voice 15 win 75 39 store gap 26
- b. Voice win 75 15 39 store gap 26
- c. 15 75 win voice store gap 26
- d. Cannot be determined
- e. None of these
- 9. Step II of an input is: tube 83 49 34 garden flower rat 56

How many steps will be required to complete the rearrangement?

- a. Four b. Five c. Six d. Three e. None of these
- 10. Input: hunt for 94 37 good 29 48 book

How many steps will be required to complete the rearrangement?

a. Four b. Five c. Six d. Seven e. None of these

Directions (Q.11-16): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: gone 93 over 46 84 now for 31

Step I: 31 gone 93 over 46 84 now for

Step II: 31 over gone 93 46 84 now for

Step III: 31 over 46 gone 93 84 now for

Step IV: 31 over 46 now gone 93 84 for

Step V: 31 over 46 now 84 gone 93 for

And step V is the last step of the rearrangement of the above input. As per rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

11. Step III of an input: 15 window 29 93 86 sail tower buy



Which of the following will be step IV?

- a. 15 window 29 tower 86 sail 93 buy
- b. 15 window 29 tower 86 93 sail buy
- c. 15 window 29 tower 93 86 sail buy
- d. There will be no such step
- e. None of these
- 12. Input: station hurry 39 67 all men 86 59

How many steps will be required to complete the rearrangement?

- a. Four b. Five c. Six d. Three e. None of these
- 13. Step II of an input is: 49 zone car battery 56 87 71 down

Which of the following is definitely the input?

- a. Car 49 battery zone 56 87 71 down
- b. Zone 49 car battery 56 87 71 down
- c. Battery car 49 zone 56 87 71 down
- d. Cannot be determined
- e. None of these
- 14. Input: news 79 53 glory for 46 29 task

Which of the will be step IV?

- a. 29 task 46 news 53 glory 79 for
- b. 29 task 46 news 53 79 glory for
- c. 29 task 46 news 79 53 glory for
- d. 29 news 79 53 glory for 46 task
- e. None of these
- 15. Step III of an input is: 27 tube 34 gas chamber row 74 53

Which of the following will be the last but one?

- a. VI b. VII c. VIII d. V e. None of these
- 16. Step II of an input: 19 years 85 74 near gone 26 stone

How many more steps will be required to complete the rearrangement?

a. Three b. Four c. Two d. Five e. None of these

Directions (Q.17-21): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: gain 96 63 forest 38 78 deep house

Step I: deep gain 96 63 forest 38 78 house

Step II: deep 38 gain 96 63 forest 78 house

Step III: deep 38 forest gain 96 63 78 house

Step IV: deep 38 forest 63 gain 96 78 house



Step V: deep 38 forest 63 gain 78 96 house

Step VI: deep 38 forest 63 gain 78 house 96

And step VI is the last step of the rearrangement of the above step. As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

17. Input: train 59 47 25 over burden 63 sky

Which of the following will be the last but one?

- a. VI b. V c. IV d. VII e. None of these
- 18. Input: service 46 58 96 of these desk 15

Which of the following will be step VI?

- a. Desk 15 over service 46 58 96 there
- b. Desk 15 over 46 service there 58 96
- c. Desk 15 over 46 service 58 there 96
- d. Desk 15 over 46 service 58 96 there
- e. There will be no such step
- 19. Step II of an input is: below 93 12 house floor 69 57 task

Which of the following will definitely be the input?

- a. 93 house 89 57 below task floor 12
- b. 93 house below 69 57 task floor floor 12
- c. 93 house floor 69 57 task below 12
- d. Cannot be determined
- e. None of these
- 20. Step III of an input is: art 24 day 83 71 54 star power

Which of the following steps will be the last?

- a. V b. VIII c. IX d. VII e. None of these
- 21. Step II of an input is: cold 17 wave 69 never desk 52 43

How many more steps will be required to complete the rearrangement?

a. Six b. Five c. Four d. Three e. None of these

Directions (Q.22-27): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: sale data 18 23 for 95 then 38

Step I: data sale 18 23 for 95 then 38

Step II: data 95 sale 18 23 for then 38

Step III: data 95 for sale 18 23 then 38

Step IV: data 95 for 38 sale 18 23 then

Step V: data 95 for 38 sale 23 19 then

Step VI: data 95 for 38 sale 23 then 18



And step VI is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

22. Input: year 39 stake 47 house full 94 95

How many steps will be required to complete the rearrangement?

- a. Five b. Six c. Four d. Seven e. None of these
- 23. Step II of an input is: car 83 lost ever 32 46 74 now

How many more steps will be required to complete the rearrangement?

- a. Three b. Four c. Five d. Six e. None of these
- 24. Step III of an input is: and 79 code 27 18 new goal 34

Which of the following will definitely be the input?

- a. Code and 79 27 18 new goal 34
- b. Code 27 18 new goal 34 and 79
- c. Code 27 and 18 79 new goal 34
- d. Cannot be determined
- e. None of these
- 25. Input: water fall never 35 78 16 height 28
 - a. VI b. VII c. VIII d. IX e. None of these
- 26. Step II of an input is: high 69 store pay 36 43 15 there

Which of the following will be step VI?

- a. high 69 pay 43 store 36 there 15
- b. high 69 pay 43 store 36 15 there
- c. high 69 pay 36 43 store 15 there
- d. There will be no such step
- e. None of these
- 27. Input: train more 29 53 fast gear 37 84

Which of the following steps will be the last but one?

a. IX b. VIII c. VII d. VI e. None of these

Directions (Q.28-30): Study the following information carefully and answer the given questions:

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of an input and rearrangement.

Input: go now 52 38 17 for again 65

Step I: 65 go now 52 38 17 for again

Step II: 65 again go now 52 38 17 for

Step III: 65 again 52 go now 38 17 for

Step IV: 65 again 52 for go now 38 17



Step V: 65 again 52 for 38 go now 17

Step VI: 65 again 52 for 38 go 17 now

Step VI is the last step of the rearrangement.

As per the rules followed in the above steps, find out in each of the following questions the appropriate step for the given input.

28. Input: show 51 36 new far 81 46 goal

Which of the following steps will be the last but one?

a. VII b. VIII c. VI d. V e. None of these

29. Input: home turf 39 24 86 44 roll over

Which of the following steps will be the last?

a. X b. IX c. VII d. VIII e. None

30. Input: buy win task 52 38 43 door 12

Which of the following will be step IV?

- a. 52 buy 43 door 38 task 12 win
- b. 52 buy 43 door 38 task win 12
- c. 52 buy 43 door task win 38 12
- d. There will be no such step

ANSWERS & EXPLANATION

1. 3 2.5 3.3 4.4 5.3 6.4 7.4 8.4 9.3 10.1 11.1 12.2 13.4 14.2 15.4 16.2 17.2 18.5 19.4 20.4 21.3 22.2 23.2 24.4

In bank exams mainly find the model in which given words and numbers are arranged based on logic.

Ex. A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input rearrangement.

Input: but 32 71 glory fair south 65 84

Step I: south but 32 71 glory fair 65 84

Step II: south 84 but32 71 glory fair 65

Step III: south 84 glory but 32 71 fair 65

Step IV: south 84 glory 71 but 32 fair 65

Step V: south 84 glory 71 fair but 32 65

Step VI: south 84 glory 71 fair 65 but 32

And Step VI is the last step of the rearrangement.

In some other exams they jumble the words and numbers based on positions and may not follow any logic in jumbling the elements at various steps.

Model I: Procedure: To attempt this model first we should observe the last step (output) and identify logic.

Ex. If input is: 68 it at 46 32 be 79 he



Output: it 32 at 79 he 46 be 68

Logic: 1. Series: Words and numbers are positioned alternately

2. Words: Last word in the alphabetical order first then first in the alphabetical order. And then 2nd from reverse order at 3rd place and 2nd from beginning at 4th place.

3. Number: Smallest number first, highest number 2nd and next smaller number 3rd etc.

Step II: To achieve the last step we move the needed elements (from Step I to last step) exactly in the order of the elements in output.

Step III: If any element is already in order we don't count that step. When forgiven step "definitely" previous step or input is asked we can't find that so answer should be "can't be determined".

If input is: key 48 may 38 12 hey 69 buy

Output is: 12 may 38 key hey 69 buy

If step III is 12 may 38 48 hey buy key 69

Then what is definitely the step II. To take as an example all the below can give the required step III.

12 may 48 38 hey buy key 69

12 may 48 hey buy key 69 38

12 may 48 hey 38 buy key 69 and more.....So we can't find step II so is the input.

Qn. For the above logic if the input is: 35 68 93 to go it be 47. Then how many steps are needed to finish the arrangement.

To find this we just need to cancel the elements that are to be moved as per the order in the output and place them at their respective positions. Number of cancellations is the number of steps required to get the output.

Input: 35 68 93 to go it be 47. So 4 steps are needed to finish the arrangement.

Model-II: Even though this model is not asked in Bank exams frequently it is good to have an idea.

Input: 36 may 48 buy 62 kin

Step I: 36 may kin buy 62 48

3—6

Step II: may 36 in 62 buy 48

1—2 4—5

Interchanged

This way positions get jumbled in this model. So similarly we should follow the steps given in question when we face this kind of model.



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CODED INEQUALITIES

EXERCISE-A

Directions (Q.1-10): In the following questions the symbols @,©,#,\$,and % are used with the following meanings as illustrated below:

P © Q means P is neither greater than nor smaller than Q.

P # Q means P is either greater than or equal to Q

P \$ Q means P is either smaller than or equal to Q

P %Q means P is greater than Q

P@Q means P is smaller than Q

In each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true.

Give answer 1, if only conclusion I is true.

Give answer 2, if only conclusion II is true.

Give answer 3, if either conclusion I or conclusion II is true.

Give answer 4, if neither conclusion I nor conclusion II is true.

Give answer 5, if both conclusions I and II are true

1. Statements : M \$ J, J @ R, R © D

Conclusions: I. D%M II. R%M

2. Statements : N # T, T @ F, F % B

Conclusions: I. F\$N II. B\$T

3. Statements: H @ J, M % J, M # K

Conclusions: I. K%J II. M%H

4. Statements: V \$ T, T # R, R © B



Conclusions: I. V@B II. B%T

5. Statements: R % M, M # B, B @ D

Conclusions: I. D%R II. D\$R

6. Statements: E © F, F @ K, K \$ J

Conclusions: I.J%F II. K%E

7. Statements: B # N, N % D, D \$ W

Conclusions: I. W%B II. N%W

8. Statements: T @ B, B \$ K, K % M

Conclusions: I. K%T II.M%B

9. Statements: H © T, T @ M, M # J

Conclusions: I. J@H II.J#H

10. Statements: R \$ M, N © M, D#N

Conclusions: I. D@R II. D#M

EXERCISE-B (New Pattern)

Directions (Q.1-5): In these questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer 1, if only conclusion I is true.

Give answer 2, if only conclusion II is true.

Give answer 3, if either conclusion I or conclusion II is true.

Give answer 4, if neither conclusion I nor conclusion II is true.

Give answer 5, if both conclusions I and II are true

1. Statements : $T < R \le U$; $L > U \le K$; $P \ge R$

Conclusions: I. K > R II. L > R

2. Statements: H = I < R; M > R < S

Conclusions: I. M = I II. M > I

3. Statements: $D > H \ge N$; $S > I \le H$

Conclusions: I.N < S II. I < D

4. Statements: $P \le O < I$; P > Y > M

Conclusions: I.Y < I II. O > W

5. Statements: $A \ge B > C \ge F$; $Z < C \le D < E$

Conclusions: I.A > Z II. F < E

Directions (Q. 6-10): In these questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer 1, if only conclusion I is true.

Give answer 2, if only conclusion II is true.



Give answer 3, if either conclusion I or conclusion II is true.

Give answer 4, if neither conclusion I nor conclusion II is true.

Give answer 5, if both conclusions I and II are true

- 6. Statements : $A \ge B = C$; $B < D \le E$
 - Conclusions: I. D > A II. E > E
- 7. Statements : L > U > K; Z < U < R
 - Conclusions: I. L > Z II. K < R
- 8. Statements: $Y < J = P \ge R > I$
 - Conclusions: I. J > I II. Y < R
- 9. Statements: $V \ge K > M = N$; M > S; T < K
 - Conclusions: I. T < N II. V = S
- 10. Statements: $F \le X < A$; $R < X \le E$
 - Conclusions: I. $F \le E$ II. R < F

Directions (Q. 11-15): In these questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer 1, if only conclusion I is true.

Give answer 2, if only conclusion II is true.

Give answer 3, if either conclusion I or conclusion II is true.

Give answer 4, if neither conclusion I nor conclusion II is true.

Give answer 5, if both conclusions I and II are true

- 11. Statements : $T < P \le U$; $L > U \le K$; $P \ge R$
 - Conclusions: I. $K \ge R$ II. L > R
- 12. Statements : H = I < R; M > R < S
 - Conclusions: I. M = I II. M > I
- 13. Statements: D > H > N; S > I < H
 - Conclusions: I. N < S II. I < D
- 14. Statements: P < O < I; P > Y > W
 - Conclusions: I. Y < I II. O > W
- 15. Statements: A > B > C > F; Z < C < D < E
 - Conclusions: I. A > Z II. F < E

Directions (Q. 16-20): In these questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer 1, if only conclusion I is true.

Give answer 2, if only conclusion II is true.

Give answer 3, if either conclusion I or conclusion II is true.



Give answer 4, if neither conclusion I nor conclusion II is true.

Give answer 5, if both conclusions I and II are true

- 16. Statements : $A \ge B = C$; $B < D \le E$
 - Conclusions: I. D > A II. E > C
- 17. Statements : L > U \geq K; Z < U < R
 - Conclusions: I. L > Z II. K < R
- 18. Statements: $Y < J = P \ge R > I$
 - Conclusions: I. J > I II. Y < R
- 19. Statements: V≥ K > M = N; M > S; T < K
 - Conclusions: I. T < N II. V = S
- 20. Statements: $F \le X < A$; $R < X \le E$
 - Conclusions: I. $F \le E$ II. R < F



ANSWERS AND EXPLANATIONS

This topic tests the ability to compare the given quantities based on the conditions given.

Basic Terminology:

- 1. A is smaller than B.....A < B......A is neither greater than nor equal to B
- 2. A is greater than B......A > B.....A is neither smaller than nor equal to B
- 3. A is equal to B......A = B.....A is neither greater than nor smaller than B
- 4. A is greater than or equal to B.....A ≥ B.....A is not smaller than B
- 5. A is smaller than or equal to B......A ≤ B......A is not greater than B

Important Rules:

- A > B & A > C (or) A < B & A < C (or) A ≤ B & A ≤ C (or) A ≥ B & A ≥ C (or) A ≥ B & A > C and in all other similar cases where similar inequalities are used comparison between B & C is not possible. le, B > C or B = or B < C all possibilities exist. B > C or B = C or B < C all possibilities exist. In this kind of cases correct option is which covers all the 3 possibilities. B > C or B < C are correct conclusions.
- 2. A ≤ B < C ≤ D < E the for comparing any two quantities in this kind of equation we should always take in to consideration the inequality which covers the least possible option between the quantities to be compared.

For the given equation A < E or B < D are correct conclusions.

If the given equation is $A \le B \le C \le D < E$ correct conclusions. I) A < E II) $A \le D$ III) $B \le D$ are correct conclusions. I) A < D III) B < D etc. are wrong conclusions.

3. A < B ≤ C > D ≥E When the <,≤ and >.≥ like inequalities are combined into one equation we can't compare the quantities on the sides of dissimilar inequalities. A and C can be compared and conclusion is A < C whereas A and D or A and E can't be compared.

EXERCISE-A: 1. 5 M \leq J.....(I), J < R (II), R = D (III). Combining all (I), (II), (III), we get D = R > J > M (conclusion II) and D > M (conclusion I).

- 2. 1, here $N \ge T$ (I), T = F(II), F > B(III). Combining all (I), (II), (III) we get $N \ge T = F > B = N$ N > F and T > B. Hence conclusion I (F < N) is true. But conclusion II (B < T) is not true.
- 3. 2; Here, H < J(I), M > J(II), $M \ge T(III)$. From (II) and (III), no specific relation between K and J can be established. Hence conclusion I (K > J) is not necessarily true. Again combining (I) and (II), we get M > J > H = M > H (conclusion II). Hence conclusion II (M > H) is true.



- 4. 4; Here, $V \le T \dots$ (I), $T \ge R \dots$ (II), $R < B \dots$ (III). From all (I), (II) and (III), no specific relation between V and B or between B and T can be established hence, neither conclusion I (V < B) nor conclusion II (B > T) is necessarily true.
- 5. 3; Here, $R > M \dots(I)$, $M \ge B \dots(II)$, $B < D \dots(III)$. From all (I)< (II) and (III), no specific relation between D and R can be established. But, both conclusion I (D > R) and conclusion II (D \le R) together make a complementary pair. Hence either conclusion I (D > R) or conclusion II (D \le R) is true.
- 6. 5; Here, $E = F \dots$ (I), $F < K \dots$ (II), $K \le J \dots$ (III). Combining (II) and (III), we get $J \ge K > F = > F$. Hence, conclusion I (J > F) is true. Again, combining (I) and (II), we get K > F = E = > K > E. Hence conclusion II (K > E) is true.
- 7. 4; Here, $B \ge N$ (I), N > D (II), $D \le W$ (III). From (II) and (III), no specific relation between N and W can be established. Hence conclusion II (N > W) is not necessarily true. Again, from all (I)<(II) and (III), no specific relation between W and B can be established. Hence, conclusions I (W > B) is not necessarily true.
- 8. 1; Here, $T < B \ldots (I)$, $B \le K \ldots (II)$, $K > M \ldots (III)$. Combining I(I) and (II), we get $K \ge B > T = K > T$. Hence, conclusion I (K > T) is true. Again, from (II) and (III), no specific relation between M and B can be established, ence conclusion II (M > B) is not necessarily true.
- 9.3; Here, H + T (I), T < M (II), no specific relation between J and H can be established. But, conclusion I(J < H) and conclusion $II(J \ge H)$ together make a complementary pair. Hence either conclusion II(J > H) is true.
- 10.2; Here, R \leq M (I), N = M (II), D \geq N(III). Combining all (I),(II) and (III), we get D \geq N = M \geq R = > D \geq M and D \geq R Hence, conclusion II (D \geq M) is true. But, conclusion I (D = R) is not true.

EXERCISE-B (NEW PATTERN)

- 1. 5: R < P < U < K, U < L I. K > R is true. II. L > R is true.
- 2. $3:H = I \le R \le M$. Hence, $M \ge I$ I. M + I, II. M > I. either I or II is true.
- 3. 2: $D > H \ge N$, $H \ge I < S$, I. $N \le S$ is not true. II. I < D is true.
- 4. 2: W < Y < P < O < I, I. Y < I is false. II. O > W is true.
- 5: A > B > C > F, E > D > C > Z. I. A > Z is true. II. F < E is true.
- 6. 2: A > B = C < D < E, I. D > A is not true. II. E > C is true.
- 7. 5: Split them as L > U..... (I)U $\geq K$ (II); Z < U (III) and U < R(IV), combining (I) and (III), we get L > U > Z or L > Z. Hence I follows.
- 8. 1: Y < J = P > R > I, I. J > I is true. II. Y < R is not true.
- 9. 4: $V \ge K > M = N > S$, K > T I. T < N is not true. II. V = S is false.
- 10. 1: Split them as $F \le X$ (I), $X \le A$ (II); $R \le X$ (III) and $X \le E$ IV). Combining (I) and (IV), we get $F \le X \le E$ or $F \le E$. Hence I follows. From (I) and (III), $R \le E$ and $R \le E$ compared. Hence II does not follow.
- 11. 5: $R \le P \le U \le K$, $U \le L$. I. $K \ge R$ is true. II.L > R is true.
- 12. 3: $H = I \le R \le M$. Hence, $M \ge I$ I. M = I, II. M > I. Either I or II is true.



- 13. 2: $D > H \ge N$, $H \ge I < S$ I. $N \le S$ is not true. II. I < D is true.
- 14. 2: W < Y < P \leq O < I. I. Y \leq I is false. II. O > W is true
- 15. $A \ge B > C \ge F$, $E > D \ge C > Z$. I. A > Z is true. II. F < E is true.
- 16. 2: A > B = C < D < E, I. D > A is not true. II. E > C is true.
- 17. 5: Split them as L > U (I), $U \ge K$ (II); Z < U (III) and U < R (IV). Combining (I) and (III), we get L > U > Z
- Or L > Z. Hence I follow. Combining (II) and (IV), we get $K \le U R$ or K < R. Hence II follows.
- 18. 1: $Y < J = P \ge R > I$ I. J > I is true. II. Y < R is not true.
- 19. 4: V > K > M = N > S, K > T. I. T < N is not true. II. V = S is false.
- 20. 1: Split them as $F \le X$ (I), $X \le A$ (II); $R \le X$ (III) and $X \le E$ (IV) Combining (I) and (IV),

we get $F \le X \le E$ or $F \le E$. Hence I follows. From (I) and (III), R and F can't be compared. Hence II does not follow.

SAI EDUCATION FOR COMPETITIVE EXAMINATION

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SYLLOGISM



Directions: In the following type of questions, two statements are being provided followed by two conclusions I and II. You have to study the two statements and then decide whether, from those two statements,

Give Answer a) Only I follows b) Only II follows c) Either I or II follows d) Neither I nor II follows.

- e) Both I and II follow.
- 1. Statements: All cats are bats. All bats are tables.

Conclusions: I Some tables are bats. II Some tables are cats.

2. Statements: Some tables are watches. Some watches are lamps

Conclusions: I Some tables are lamps II Some tables are not lamps.

3. Statements: No tables are watches. Some watches are lamps.

Conclusions: I Some lamps are tables. II Some lamps are not table.

4. Statements: Some rooms are stones. All stones are radios.

Conclusions: I Some rooms are radios. Il some stones are rooms.

5. Statements: All roads are poles. No pole is a house.

Conclusions: I Some roads are houses. II Some houses are poles.

6. Statements: All birds are trees. Some trees are hens.

Conclusions: I Some birds are hens. I Some hens are trees.

7. Statements: All tables are chalks. All chalks are chairs

Conclusions: I All chairs are tables. II all tables are chairs.

8. Statements: Some girls are flowers. Some flowers are books.

Conclusions: I Some girls are books. II No book is a flower.

9. Statements: Some hens are cows. All cows are horses.

Conclusions: I Some horses are hens. II Some hens are horses.

10. Statements: Some dogs are bats. Some bats are cats.

Conclusions: I Some dogs are cats. Il some cats are dogs.

Set-II. Directions (Q.1-5) In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give Answer a) Only I follows b) Only II follows c) Either I or II follows d) Neither I nor II follows. e) Both I and II follow.

- (Q.1-2) Statements: All gliders are parachutes. No parachute is airplane. All airplanes are helicopters.
- 1. Conclusions: I No helicopter is a glider. II All parachutes being helicopter is a possibility.
- 2. Conclusions: I No glider is an airplane. II All gliders being helicopters is a possibility.
- Q.3. Statements: Some mails are chats. All updates are chats.
- 3. Conclusions: I All mails being updates is a possibility. Il No update is a mail.
- (Q.4-5) Statements: No stone is metal. Some metals are papers. All papers are glass.
- 4. Conclusions: I No glass is metal. II At least some glasses are metals.
- 5. Conclusions: I All stones being glass in possibility. II No stone is paper.



Directions (Q.6-11) In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Give Answer a) Only I follows b) Only II follows c) Either I or II follows d) Neither I nor II follows. e) Both I and II follow.

6. Statements: All rings are circles. All square are rings. No ellipse is a circle.

Conclusions: I Some rings being ellipses is a possibility. II At least some circles are squares.

7. Statements: No house is an apartment. Some bungalows are apartments.

Conclusions: I No house is a bungalow. II all bungalows are houses.

8. Statements: Some gases are liquids. All liquids are water.

Conclusions: I All gases being water is a possibility. II All such gases which are not water can never be liquids.

9. Statements: All minutes are seconds. All seconds are hours. No second is a day.

Conclusions: I No day is an hour. II At least some hours are minutes.

Q.10-11) Statements: Some teachers are professors. Some lectures are teachers.

- 10. Conclusions: I All teachers are well as professors being lecturers is a possibility. II All those teachers who are lecturers are also professors.
- 11. Conclusions: I No professor is a lecturer. II All lecturers being professors is a possibility.

Directions (Q.12-18): In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Give Answer a) Only I follows b) Only II follows c) Either I or II follows d) Neither I nor II follows. e) Both I and II follow.

- (Q.12-13) Statements: Some institutes are banks. All institutes are academies. All academies are schools.
- 12. Conclusions: I Some institutes are not schools. II All academies being banks is a possibility.
- 13. Conclusions: I All banks can never be schools. II All bank which is an institute is a school.
- (Q. 14-15) Statements: All energies are forces. No force is torque. All torques are powers.
- 14. Conclusions: I All energies being power is a possibility. II All powers being force is a possibility.
- 15. Conclusions: I All those powers if they are forces are also energies. II No energy is torque.
- 16. Statements: All circles are squares. Some squares are rectangles.

Conclusions: I All rectangles being squares is a possibility. II All circles being rectangles is a possibility.

17. Statements: No gadget is a machine. All machines are computers.

Conclusions: I No computer is a gadget. II All computers being gadgets is a possibility.

18. Statements: Some paintings are drawings. All sketches are paintings.

Conclusions: I All sketches are drawings. II Some sketches being drawings is possibility.

Directions (Q.19-25) In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.



Give Answer a) Only I follows b) Only II follows c) Either I or II follows d) Neither I nor II follows. e) Both I and II follow.

- (Q.18-19) Statements: All buildings are houses. No house is an apartment. All apartments are flats.
- 18. Conclusions: I No flat is a house. II No building is an apartment.
- 19. Conclusions: I all buildings being flats is a possibility. II All apartments being building is a possibility.
- (Q. 20-21) Statements: Some oceans are seas. All oceans are rivers. No river is a canal.
- 20. Conclusions: I All rivers can never be oceans. II All canals being oceans is a possibility.
- 21. Conclusions: I No oceans is a canal. II No river is a canal.
- (Q.22-23) Statements: No day is night. All nights are noon. No noon is an evening.
- 22. Conclusions: I No day is noon. II No day is an evening.
- 23. Conclusions: I No evenings are nights. II All days being noon is a possibility.
- (Q.24-25) Statements: Some papers are boards. No boards are a card.
- 24. Conclusions: I No card is a paper. II some papers are cards.
- 25. Conclusions: I All cards being papers is a possibility. II All boards being papers is a possibility.

EXPLANATIONS

Syllogism means "Inference of deduction". This is one of the definite questions in all competitive exams. 5-10 marks come from this topic in general. There are mainly two approaches to solve the syllogisms. There is a very simple approach to solve the syllogisms using **Euler's circle**. Given below are the statements which we encounter in recruitment exams. Their notation can be understood from the corresponding diagram.

Euler's Circles and representation of the four propositions

PROPOSITION	PICTORIAL REPRESENTATION



A. All S are P	BD (Always) P S S
E. No S are P	BD (Always)
I. Some S are P	BD (Either) Some S are P (Some S are not P)
	Or Some S are P(All S are P) S
	Or Some S are P (All P are S)
O. Some S are not P	BD (Either) Some S are not P (Some S are P)
	Or,SomeSarenotP(AllPareS)
	Or, Some S are not P (No S are P)

BD: Basic Diagram: When we read the statements first we should draw the basic diagrams keeping in mind the other possible ways of drawing the diagram.

So when the question is related to definite conclusion for all possible diagrams that statement should be true then only it becomes definite conclusion. If it is true for one Diagram and false when we draw it the other way we can consider that only as a possibility not definite conclusion.

Major 4 statements of Syllogisms are:

A: All pins are guns, **E**: No pin is gun, **I**: Some pins are guns, **O**: Some pins are not guns.

Table: Rules of Conversion

A statement of the type	When converted becomes a statement of the type (These are automatically true for the given statements)	
A - All Pins are guns	I- Some guns are pins	
E- No pin is gun	E- No gun is pin	
I- Some pins are guns	I- Some guns are pins	
O - Some pins are not guns	O- Type statement cannot be converted.	



Complimentary Pair: (They should be able to cover all the possible cases) If the given statements are

1. Some cricketers are singers. 2. Some singers are actors

Conclusions: I Some cricketers are actors. II No cricketer is an actor.

For the above problem if the 1st statement is wrong then 2nd statement is definitely correct and complimentary.

If **2nd statement** is wrong then definitely the **1st statement** will be correct. Complimentary statement for "No cricketer is an actor" is "Some cricketers are actors" not "all cricketers are actors"

Similarly "Some books are not guides" and "All guides are books" are complimentary.

2nd approach to solve the syllogisms (This is mostly useful for clerical exams. Not useful for the questions where 3 or more statements and 3 or more conclusions are present. Also this is not useful for the questions in which possibilities are asked.

Table: to draw conclusions from a pair of aligned statements

If the first statement is of the Type	And the second statement is of the type	Then the conclusion will be
A	A	Α
А	Е	Е
А	I	-
А	0	-
Е	A	0
Е	E	-
Е	1	0
Е	0	-
I	A	I
	E	0
	I	-
1	0	-
0	A/E/I/O	-

Note: Short form for the table

A+A=A, A+E=E, E+A=O, E+I=O, I+A=I, I+E=O

So how do we combine these statements:

EX. 1.All doors are windows. 2. No window is roof.

So first statements object has become 2nd statements subject. Then we have to write the resultant as **A+E=E**. Resultant is No statement and starts with first statement's subject and end with 2nd statements object. ie,. "No door is roof". If the 2nd statements is not starting with the object of 1st statements but has the same as object part. Then we should follow the conversion so that we can link them by making it as subject.



9 GOLDEN RULES

- 1. SOME + ALL = SOME
- 2. SOME + SOME = NONE FOLLOWS
- 3. SOME + NO = SOME NOT
- 4. ALL +ALL = ALL
- 5. ALL + NO = NO
- 6. ALL + SOME = NONE FOLLOWS
- 7. NO + NO = NONE FOLLOWS
- 8. NO + SOME = SOME NOT RESERVED
- 9. NO + ALL = SOME NOT RESERVED

ANSWERS

SET-I: 1.E, 2. C, 3. B, 4. E, 5. D, 6. B, 7. B, 8. D, 9. E, 10. D

SET-II: 1.B, 2. E, 3. A, 4. B, 5. A, 6.B, 7. D, 8. E, 9. A, 10. A, 11. B, 12. B, 13. B, 14. A, 15. B, 16. E, 17. D, 18. B, 19.D, 20. D, 21. E, 22. D, 23. E, 24. C, 25. E

SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

DECISION MAKING

Directions (Q.1-5): Study the following information carefully and answer the questions given below:

Following are the conditions for selecting management trainee in an organization:

The candidate must

- i) Be a graduate with at least 60 percent marks.
- ii) Be not less than 21 years and not more than 28 years as on 01.01.2010.
- iii) Be ready to pay Rs. 50,000 as security deposit.
- iv) Have secured at least 40 percent marks in the selection examination.



v) Have secured at least 50 percent marks in personal interview.

In the case of a candidate who has satisfied all the above conditions **except** at (i) above, but has secured at least 65 percent marks in post-graduation, the case is to be referred to GM-Personal.

At (iii) above, but is ready to sign a bond for one year, the case is to be referred to ED-Personnel.

In each question below are given details of one candidate. You have to take one of the following

courses of action based on the information provided and the conditions and sub conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.01.2010.

Mark answer (i) if the data provided are not adequate to take a decision

Mark answer (ii) If the candidate is to be selected

Mark answer (iii) If the candidate is not to be selected

Mark answer (iv) If the case is to be referred to GM-Personnel

Mark answer (v) If the case is to be referred to ED-Personnel

- 1. Sohan Awasthi was born on 8th June 1987. He has secured 55 percent marks in both selection examination and personnel interview. He can pay the security deposit of Rs. 50000/-. He has secured 68 percent marks in post-graduation and 59 percent marks in graduation.
- 2. Anuj Soren was born on 25th March 1984. He has secured 58 percent marks in graduation and 63 percent marks in post-graduation. He has secured 50 percent marks in both selection examination and personnel interview. He is ready to pay the security deposit of Rs. 50,000.
- 3. Seema Biswas was born on 15th May 1985. She has secured 65 marks in graduation and 70 percent marks in past graduation. She is ready to pay Rs. 50,000 as security deposit. She has also secured 45 percent marks in the selection examination.
- 4. Abhinav Ghosal has secured 52 percent marks in the personnel interview and 40 percent marks in the selection examination. He can pay Rs. 25,000 as security deposit. Alternatively, he can sign a bond of one year. He was born on 3rd December 1984. He has secured 63 percent marks in graduation.
- 5. Namita Jaiswal has secured 62 percent marks in graduation and 52 percent in personnel interview. She has born on 12th July 1983. She is ready to pay the security deposit of Rs. 50,000. She has secured 46 percent marks in the selection examination.

Directions (Q.06-10): Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Senior-Manager-General Banking in a bank.

The candidate must

- i) Be secured with at least 60 percent marks in Std XII.
- ii) Be at least 25 years and not more than 35 years as on 01.03.2010.



- iii) Have secured at least 60 percent marks in postgraduate degree/diploma in Management/Economic/Statistics.
- iv) Have secured at least 50 percent marks in the written examination.
- v) Have secured at least 40 percent marks in personal interview.
- vi) Have secured at least 55 percent marks in Graduation in any discipline.

In the case of a candidate who has satisfied all the above conditions except

- (a) At (iii) above, but has secured at least 60 percent marks in CA or ICWA the case is to be referred to VP-Recruitment.
- (b) At (vii) above, but has secured at least 65 percent marks in the written examination and at least 35 percent marks in the personal interview, the case is to be referred to President-Recruitment.

In each question below are given details of one candidate. You have to take one of the following

courses of action based on the information provided and the conditions and sub conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.03.2010.

Mark answer (i) if the date provided are not adequate to take a decision

Mark answer (ii) If the candidate is to be refered to VP Recruitment.

Mark answer (iii) If the candidate is to be refered to President Recruitment.

Mark answer (iv) If the candidate is to be selected

Mark answer (v) If the candidate is not to be selected

- 6. Kesav Vora was born on 8th November 1978. He has secured 65 percent marks in Std. XII and 60 percent marks in Graduation. He has secured 58 percent marks in MA Economics and 60 percent marks in ICWA. He has been working in a bank as a Generalist Officer for the past two years after completing his education. He has also secured 50 percent marks in the written examination and 45 percent marks in the personal interview.
- 7. Arindam Ghosh has been working in a bank as a Generalist Officer for the past four years after completing his post-graduation diploma in management with 60 percent marks. He has secured 50 percent marks in the written examination and 40 percent marks in Std. XII. He was born on 25th February 1975.
- 8. Sohan Majhi has secured 65 percent marks in B.Sc. and 70 percent marks in M.Sc. Statistics. He has been working in a bank as a generalist officer for the past three years after completing his post- graduation. He has secured 55 percent marks in written examination and 50 percent marks in the personal interview. He was born on 8th July 1982.
- 9. Neha Salve has been working in a bank as a generalist officer for the past four years after completing her post graduate degree in Economics with 60 percent marks. She has secured 60 percent marks in both graduation



- and Std. XII. She was born on 24th August 1979. She has secured 70 percent marks in the written examination and 38 percent marks in the personal interview.
- 10. Neeta Jaiswal was born on 2nd June 1980. She has been working in a bank as generalist officer for the past three years after completing her postgraduate degree in Economic with 60 percent marks. She has secured 68 percent marks in HSC and 58 percent marks in B.Com. She has also secured 50 percent marks in both written examination and personal interview.

Directions (Q.11-15): Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Senior-Manager- credit in a bank. The candidate must

- i) Be a graduate in any discipline with at least 60 percent marks.
- ii) Be at least 30 years and not more than 40 years as on 01.04.2010.
- iii) Have post-qualification work experience of at least ten years in the Advances Section of a bank.
- iv) Have secured at least 40 percent marks in the Group Discussion.
- v) Have secured at least 50 percent marks in the Interview.

In the case of a candidate who has satisfied all the above conditions except

- (a) At (i) above, but has secured at least 50 percent marks in graduation and at least 60percent marks in post graduation in any discipline, the case is to be referred to the General Manager-Advances..
- (b) At (ii) above, but has total post qualification work experience of at least seven years, out of which at least three years as Manager credit in a bank, the case is to be referred to the Executive Director.

In each question below are given details of one candidate. You have to take one of the following

courses of action based on the information provided and the conditions and sub conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each guestion. All these cases are given to you as on 01.04.2010.

Mark answer (i) if the candidate is to be referre to the Executive Director.

Mark answer (ii) If the candidate is to be refered to to the General Manager Advances.

Mark answer (iii) If the data are inadequate to take a decision

Mark answer (iv) If the candidate is not to be selected

Mark answer (v) If the candidate is to be selected

11. Shoba Gupta has secured 50 marks in the Interview and 40 percent marks in the Group Discussion. She has been working for the past eight years, out of which four years as Manager Credit in a bank, after completing her BA degree with 60 percent marks. She was born on 12th September 1978.



- 12. Rohan Maskara was born on 8th March 1974. He has been working in a bank for the past 12 years after competing his B.Com degree with 70 percent marks. He has secured 50 percent marks in both the Group Discussion and Interview.
- 13. Prakash Gokhale was born on 4th August 1977. He has secured 64 percent marks in post graduation and 58 percent marks in graduation. He has been working for the past ten years in the Advances Department of a bank after completing his post graduation. He has secured 45 percent marks in the Group Discussion and 50 percent marks in the Interview.
- 14. Sudha Mehrotra has been working in the Advances Department of a bank for the past twelve after completing her B.Com degree with 60 percent of marks. She has secured 60 percent marks in the Group Discussion and 40 percent marks in the Interview. She was born on 15th February 1972.
- 15. Amit Narayan was born on 28th Ma 1974. He has been working in the Advances department of a bank for the past eleven yeas after completing his B.Sc Degree with 65 percent marks. He has secured 55 marks in the Group Discussion and 50 percent marks In the Interview.

Directions (Q.16-25): Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Chief Manager- Marketing in an organization. The candidate must

- i). Be a graduate in any discipline with at least 55 percent marks.
- ii). Be at least 35 years old as on 01.02.2010.
- iii). Have secured at least 60 percent marks in post graduate degree/diploma in Marketing Management.
- iv). Have post qualification work experience of at least 10 years in the Marketing Division of an organization.
- v). Have secured at least 50 percent marks in the selection process.

In the case of a candidate who has satisfied all the above conditions except

- (a) At (iv) above, but has post qualification work Experience of at least six years as Manager Marketing, the case is to be referred to the Head Marketing Division.
- (b) At (ii) above, but has secured at least 65 percent marks in post graduate degree/diploma in Marketing Management, the case is referred to GM-Marketing.

In each question below are given details of one candidate. You have to take one of the following

courses of action based on the information provided and the conditions and sub conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.02.2010.

Mark answer (i) if the candidate is to be selected.

Mark answer (ii) If the candidate is to be referred to the Head Marketing Division.



- Mark answer (iii) If the case is referred to GM-Marketing
- Mark answer (iv) If the candidate is not to be selected
- Mark answer (v) If the data provided are inadequate to taka a decision.
- 16. Arnab Behera has secured 65 percent marks in PG Degree in Marketing Degree and 58 percent marks in graduation. He has been working in the Marketing Division of an organization for the past eleven years after completing his postgraduate degree. He has secured 55 percent marks in the selection process. He was born on 8th July 1970.
- 17. Neeta Ghosal was born on 4th May 1974. She has been working in the Marketing division of an organization for the past twelve years after completing her postgraduate diploma in Management with 70 percent marks. She has obtained 60 percent marks in graduation and 50 percent marks in the selection process.
- 18. Sudesh Sarkar was born on 15th June 1974. He has secured 55 percent marks in the selection process and 50 percent marks in graduation. He has been working in the Marketing Division of an organization for the past twelve years after completing postgraduate degree in Marketing Management with 75 percent marks.
- 19. Sudha Naik was born on 14th April 1973. She has been working in the Marketing Division of an organization for the past fourteen years after completing her postgraduate diploma in Marketing management with 70 percent marks. She has secured 50 percent marks in the selection process and 52 percent marks in graduation.
- 20. Sunitha Jaiswal was born on 5th July 1976. She has secured 55 marks in graduation and 58 percent marks in selection process. She has been working in the Marketing Division of an organization for the past ten years after completing post graduate degree in Marketing Management with 57 percent marks.
- 21. Nayan Dastur was born on 8th October 1968. He has secured 55 percent marks in both graduation and selection process. He has been working in the Marketing Division of an organization for the past ten years after completing post graduate diploma in Marketing Management with 65 percent marks.
- 22. Sunil Kamanth has secured 58 percent marks in graduation. He was born on 24th May 1974. He has been working in the Marketing Division of an organization for the past seven years as Manager Marketing after completing post graduate degree in Marketing Management with 65 percent marks. He has secured 50 percent marks in the selection process.
- 23. Md. Yusuf was born on 29th January 1975. He has secured 55 percent marks in graduation and 52 percent marks in the selection process. He has also secured 68 percent marks in postgraduate diploma in marketing management. He has been working for the past twelve years in the Marketing Division of an organization.
- 24. Navind Ghosh was born on 12th December 1973. He has been working in the Marketing Division of an organization for the past ten years after completing his post graduate degree in Marketing Management with 63 percent marks. He has secured 54 percent marks in graduation and 45 percent marks in selection process.
- 25. Avinash Sargota has been working for the past eight years, out of which six years as Manager Marketing in an organization after completing his post graduate degree in Marketing Management with 62 percent marks. He



has secured 58 percent marks in graduation and 52 percent marks in the selection process. He was born on 14th February 1972.

Directions (Q.26-30): Study the following information carefully and answer the questions given below:

Following are the conditions for selecting Marketing-Manager- in an organization. The candidate must

- i). Be a graduate in any discipline with at least 55 percent marks.
- ii). Have a post graduate degree/diploma in Marketing Management with at least 60 percent marks.
- iii). Have post-qualification work experience of at least five years in the Marketing Division of an organization.
- iv). Have secured at least 45 percent marks in the selection examination.
- v). Have secured at least 40 percent marks in the Interview.

In the case of a candidate who has satisfied all the above conditions except

- (a). At (iii) above, but has post qualification work experience of at least three years as Deputy Marketing Manager, the case is to be referred to GM-Marketing.
- (b). At (v) above, but has secured 60 percent marks in the selection examination, the case is to be referred to VP-Marketing.

In each question below, details of one candidate are given. You have to choose one of the following courses of action base on the information provided and the conditions and the sub conditions given above. Mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.05.2010.

Mark answer (i) if the candidate is to be selected.

Mark answer (ii) If the candidate is not to be selected.

Mark answer (iii) If the case is to be referred to GM Marketing

Mark answer (iv) If the case is to be referred to VP-Marketing

Mark answer (v) If the data provided are not adequate to take a decision.

- 26. Nidhi Agarwal has secured 60 percent marks in the selection interview and 40 percent marks in the selection examination. She has been working in the Marketing division of an organization for the past eight years after completing her postgraduate degree in Marketing Management with 65 percent marks. She has secured 59 percent marks in B.Sc.
- 27. Navin Desai has secured 56 percent marks in BA. He has been working in the marketing Division of an organization for the past seven years after completing his postgraduate degree in Marketing with 62 percent marks. He has secured 62 percent marks in the selection examination and 38 percent marks in the selection interview.
- 28. Manoj Malhotra has secured 65 percent marks in B.Sc. and 60 percent marks in postgraduate degree in Marketing Management. He has also secured 50 percent marks in both selection examination and selection



- interview. He has been working in the Marketing Division of an organization for the past six years after completing his post graduation in Marketing.
- 29. Sabina Handa has been working for the past four years as Deputy Marketing Manager in an organization after completing her postgraduate diploma in Marketing Management with 65 percent marks. She has secured 45 percent marks in both selection examination and selection interview. She has also secured 58 percent marks in B.Com.
- 30. Varsha Akolkar has secured 59 percent marks in BA. She has secured 42 percent marks in the selection interview and 48 percent marks in the selection examination. She has been working in the Marketing Division of an organization for the past seven years after completing her post graduation in marketing Management with 57 percent marks.

ANSWERS AND EXPLANATION

1.4 2. 3 3. 1 4.5 5. 2 6. 2 7. 5 8. 1 9. 3 10. 4 11. 1 12. 3 13. 2 14. 4 15. 5 16. 1 17. 5 18. 3 19. 3 20. 4 21. 1 22.2 23. 1 24. 4 25. 2 26. 2 does not satisfy (a) 27. 4 satisfy (b) 28. 3 satisfies (a)

29. 1 satisfies all conditions 30. 2 does not satisfy (ii).

Decision Making does not involve much theory or logic but basic understanding of the given data. And this is one of the most practicing models in real life also.

- Eg. 1. Whether a student is eligible for a particular exam or not.
 - 2. Whether a person is eligible for particular job or not.

So all of us at some point of time we checked whether we satisfy all the criteria or not to be eligible for admission or job etc....

Certain points that are to be taken into account while solving these questions are:

- (i). Never assume anything on your own.
- (ii). If as per criteria 60% is needed in exam but in the question nothing was mentioned about the % then we can neither reject him of select as data is inadequate.
- (iii). If a person fails 2 conditions and satisfy both the exceptions then we should reject him as general course of action is given based on single exception.
- (iv). If any condition for which there is no exception is failed by the aspirant that person should be rejected.



SAI EDUCATION FOR COMPETITIVE EXAMINATION

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ANALOGIES

Directions: There is a certain relation between two given words on one side of and one word is given on another side of while another word is to be found from the given alternatives, having the same relation with this word as the given pair has. Select the best alternative.

1. PIGEON: PEACE:: WHITE FLAG:?

1. Enmity 2. Victory 3. Surrender 4. War

2. MATURE: REGRESSED:: VARIED:?

1.Rhythmic 2. Monotonous 3. Decorous 4. Obsolete

Simple Analogy:-

<u>Directions</u>: For the following questions, choose the best option.

- 3. CYCLONE is related to ANTICYCLONE in the same way as FLOOD is related to?
 - 1.Devastation 2. Havoc 3. River 4. Drought
- 4. AFLATOXIN is related to FOOD POISONING in the same way as HISTAMINE is related to?



- 1. Allergy 2. Headache 3. Anthrax 4. Inhabited.
- 5. OSTRICH is related to ANTELOPE in the same way as EGRET is related to.....?
 - 1.Cow 2. Buffalo 3. Camel 4. Zebra.

Choosing the analogous pair. Directions: The following questions consist of two words each that have a certain relationship to each other followed by four lettered pairs of words. Select the lettered pair that has the same relationship as the original pair of words.

- 6. YAWN: BOREDOM
 - 1.Anger:Madness 2. Dream: Sleep 3. Smile: Amusement 4. Impatience: Rebellion.
- 7. EMBARRASS: HUMILIATE
 - 1.Enquire:Ask 2. Embezzle:Peculate 3. Gamble: Investment 4. Annoy:Exasperate

Double Analogy- Directions: In the following question, two words indicated by I and II have been left out. The correct word to come in place of I is given as one of the four alternatives against I and the correct word to come in place off I is given as one of the four alternatives against II. Read with the correct words, there is some relationship between the two words to the left of the sign (::) and the same relationship obtains between the two words to the right of the sign (::) The correct combination is given as one of the four alternatives (1), (2),(3) and (4). Find the correct combination in each case.

- 8. I. SHEEP:: SANATORIUM: II
 - I (a) Kennel (b) Fold (c) Bray (d) Farrow II (p) Horse (q) Soldiers (r) Invalids (s) Fishes

(1)as (2) dq (3) br (4) cp

Choosing a Similar Word: In this type of questios, a group words is given, followed by four other words as alternatives. The candidate is required to choose the alternatie, which is similar to the three words.

- 9. SITAR : GUITAR : TANPURA :
 - (1)Trumpet (2) Violin (3) Harmonium (4) Mridanga

Directions: In each of the following questions, a group of three interrelated word is given. Choose a word from the given alternatives that belongs to the same group.

- 10. POTATO: CARROT: RADDISH
 - (1)Tomato (2) Spinach (3) Sesame (4) Groundnut
- 11. PATNA: BOMBAY: DISPUR
 - (1)Cochin (2) Trombay (3) Udaipur (4) Chennai

Detecting Analogies: In this type of questions, the candidate is required to trace out the hidden analogy or common characteristic among the given words or to choose the word which possesses the same characteristic as the given word.



Directions: Three words in bold letters are given in each question, which have something in common among themselves. Out of the four given alternatives, choose the most appropriate description about these three words.

12. MARS: MERCURY: VENUS

(1)They have no opposite motion (2) They are evil planets (3) They are the planets nearest to the earth (4) They have no corresponding lucky stone.

13. PRAKRIT: PALI: SANSKRIT

(1)They are classical languages of Asia and Europe (2) The Vedas are written in these languages (3) They are old languages of India (4) They are dead languages

Three Word Analogy: In this type of questions, a group of three interrelated words is given. The candidate is required to trace out the relationship among these three words and choose another group with similar analogy, from among the alternatives provided.

Directions: In each of the following questions, some words are given which are related in some way. The same relationship obtains among the words in one of the four alternatives given under it. Find the correct alternative.

14. EVAPORATION: CLOUD: RAIN

(1)Sneezing: Cough :Cold (2) Accident : Injury : Pain (3) Tanning : Leather :Purse (4) Bud :Flower : Fragrance.

15. LIZARD: REPTILE: INSECTS

(1)Fox: Wolf: Forest (2) Fly: Insect: Bee (3) Man: Mammals: Meat (4) Tiger: Mammal: Deer

Number Analogy: **Directions**: In each of the following questions, there is a certain relation between two given numbers on one side of :: and one number is given on another side of :: while another number is to be found from the given alternatives, having the same relation with this number as the numbers of the given pair bear. Choose the best alternatives.

16. 583: 293: 488: ? (1) 291 (2) 378 (3) 487 (4) 581

Directions: In each of the following question choose one number which is similar to the numbers in the given set.

17. Given set: 131, 243, 355 (1) 372 (2) 467 (3) 572 (4) 684

Directions: In each of the following questions, choose that set of numbers from the four alternative sets that are similar to the given set?

18. Given set: (49,25,9) (1) (36,16,4) (2) (36,25,16) (3) (39,26,13) (4) (64,27,8)

Alphabet Analogy: In this type of questions, two groups of alphabets related to each other in same way, are given. The candidate is required to find out this relationship and choose a group of alphabets which is related in the same way to a third group provided in the question.



Directions: In each of the following questions, there is some relationship between the two terms to the left of :: and the same relationship holds between the two terms to its right. Also, in each question, one term either to the right of:: or to the left of it is missing. This term is given as one of the alternatives below each question. Find out this term.

- 19. ACE: FHJ:: OQS:? (1) PRT (2) RTU (3) TVX (4) UWY
- 20. Dda: aDD:: Rrb:? (1) BBr (2) bRR (3) RRR (4) DDA
- 21. BUCKET: ACTVBDJLDFSU: BONUS: ?
 - (1) ACMNMOTVRT (2) SUNOB (3) ACNPMOTVRT (4) ACMNMOTURT
- 22. As COUNSEL is to BITIRAK, so also GUIDANCE is to?
 - (1) EOHYZKBB (2) FOHYZJBB (3) FPHZZKAB (4) HOHYBJBA
- 23. RATIONAL is to RATNIOLA as TRIBAL is to?

TIRLAB (2) TRIALB (3) TIRLBA (4) TRILBA

Choosing the odd word: Directions: In each of the following questions, four words have been given out of which three are alike in some manner and one is different. Choose out the odd one.

- 24. (1) Metre (2) Furlong (3) Mile (4) Acre (1) 1 (2) 2 (3) 3 (4) 4
- 25. (1) Nephrology (2) Entomology (3) Astrology (4) Mycology (1) 1 (2) 2 (3) 3 (4) 4

Choosing the odd pair of words: Directions: In each of the following question four pairs of words are given out of which the words in three pairs bear a certain common relationship. Choose the pair in hich the words are differently related.

- 26. (1) Bottle: Wine (2) Cup: Tea (3) Pitcher: Water (4) Ball: Bat (1) 1 (2) 2 (3) 3 (4) 4
- 27. (1) Ornithology: Birds (2) Mycology: Fungi (3) Biology: Botany (4) Phycology: Algae
 - (1) 1 (2) 2 (3) 3 (4) 4

Directions: In each of the following questions, four pairs of words are given out of which the words in three pairs bear a certain common relationship. Choose the pair in which the words are differently related.

- 28. (1) Crime: Punishment (2) Judgment: Advocacy (3) Enterprise: Success (4) Exercise: Health
 - (1) 1 (2) 2 (3) 3 (4) 4
- 29. (1) Broad: Wide (2) Light: Heavy (3) Tiny: Small (4) Big: Large (1) 1 (2) 2 (3) 3 (4) 4



ANSWERS EXPLANATION

There are 10 different type of questions in Analogy. 1. Simple Analogy 2. Choosing the analogous pair 3. Double Analogy 4. Choosing a similar words 5. Detecting Analogies 6. Three Word Analogy 7. Number Analogy

- 8. Alphabet Analogy $\,$ 9. Choosing the odd word $\,$ 10. Choosing the odd pair of words.
 - 1. 3. Pigeon is a symbol of peace and while flag is a symbol of surrender.

2. 2. The Words in each pair are opposites of each other

- 3. 4. Both create opposite conditions. 4. 1. First causes the second 5. 2. Both live together to derive benefits from each other. 6. 3. Yawn indicates boredom, Similarly, smile indicates amusement.
- 7.4. The words in each pair are synonyms. 8.3 First is the place where the second are kept
- 9.2. Sitar, Guitar and Tanpura are all string instruments violin is also a string instrument.
- 10.4. All grow underground 11.. 4. All are capital cities. 12. 3. 13.3 14.2 15.3 Second denotes the class to which the first belongs. Also, first feeds on the third.
 - 16.2. Sum of digits of the first number is 2 more than the sum of digits of the second number.
- 17. 2. The first digits of the numbers form the series 1,2,3,4. The second digits of the numbers form the series 3,4,5,6. The last digits of the numbers form the series 1,3,5,7 18.1. Each set contains squares of three consecutive alternate numbers in reverse order. 19.3. Each letter of the first group is moved five steps forward to obtain the corresponding letter of the second group. 20.2. The order of the letters of the first group is reversed and the middle small letter replaced by a capital letter to obtain the second group.
- 21. 3. Each letter of the first group is replaced by two letters- One that comes after it and one that comes before it, in the second group.



- 22. 2. The first, third, fifth and seventh letters of the first group are each moved one step backward to obtain the corresponding letters of the second group. The movement of other letters is not required to find the answer.
- 23.4. The first three letters do not shift their positions. The next three letters show a cyclic movement.
- 24. 4. All except Acre are units of measuring distance, while acre is a unit of area.
- 25. 3. All except Astrology are are concerned with biology.
- 26.4. In all other pairs, first is used to hold the second.
- 27. 3.In all other pairs, first is the study of second.
- 28. 2. In all other pairs, second is the result of the first.
- 29.2. The words in all other pairs are synonyms

SAI EDUCATION FOR COMPETITIVE EXAMINATION

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LOGICAL SERIES

Directions (Q.1-6): In each of the following questions, two rows of numbers are given. The resultant numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the questions below the rows of numbers are to be answered. The operations of numbers progress from the left to right.

- 1. 15 8 21
 - P 3 27 If 'P' is the resultant of the first row, what will be the resultant of second row?
 - 1. 58 2. 76 3. 27 4.82 5. None of these.
- 2. 12 64 17
 - 20 m 16 If 'm' is the resultant of the first row what will be the resultant of second row?
 - 1. 69 2.85 3. 101 4. 121 5. None of these.
- 3. 85 17 35
 - 16 19 r If 'r' is the resultant of the first row, what will be the resultant of second row?
 - 1. 175 2. .5 3. 75 4. 210 5. None of these.
- 4. 24 15 3
 - d 6 15 If 'd' is the resultant of the first row, what will e the resultant of second row?
 - 1. 37 2. 8 3. 22 4. 29 5. None of these
- 5. 28 49 15



- h 3 12 If 'h' is the resultant of the first row, what will be the resultant of second row?
- 1.13 2.15 3.19 4.27 5.None of these
- 6. 36 15 3
 - 12 3 n If 'n' is the resultant of the first row, what will be the resultant of second row?
 - 1.15/27 2.32 3.12/17 4.36 5.None of these

Directions (Q.7-11): In each of the following questions, two rows of numbers are given. The resultant number are given. The resultant number in each row is to be worked out separately based on the following rules and the questions below the rows of numbers are to be answered. The operations of numbers progress from the left to right.

- 7. 16 7 25
 - M 23 22 If 'm' is the resultant of the first row, what will be the resultant of second row?
 - 1.132 2.88 3.122 4.78 5.None of these
- 8. 97 45 71
 - 48 8 11 What is the sum of the resultant of the two rows?
 - 1.68 2.19 3.147 4.64 5.None of these
- 9. 125 64 33
 - 282 x 39 If 'x' is the resultant of the first row, what will be the resultant of second row?
 - 1.45 2.42 3.39 4.36 5.None of these
- 10. 84 14 13
 - 360 24 17 What is the difference between the resultants of the first row and the second row?
 - 1.100 2.46 3.56 4.90 5.None of these
- 11. 24 7 81
 - X 27 19 If 'x' is the resultant of the first row, what will be the resultant of second row?
 - 1.87 2.114 3.4 4.6

Directions (Q.12-14): Following questions are based on the five numbers given below:

851 743 624 319 298.

- 12. If the positions of the first and the third digits in each of the above numbers are interchanged, which of the following will be the third highest number? 1.851 2.743 3.624 4.319 5.298
- 13. If the position of the first and second digits in each of the above numbers is interchanged, which of the following will be the second highest number? 1.851 2.743 3.624 4.319 5.298



14. If the position of the second and the third digits in each of the above numbers are interchanged, which of the following will be the second smallest number? 1.851 2.743 3.624 4.319 5.298

Directions (Q.15-19): Following questions are 7based on the five numbers given below:

129 642 921 476 308.

- 15. Which of the following numbers will be obtained if the second digit of the lowest number is added to the third digit of the highest number after adding 4 to each number? 1.5 2.6 3.7 4.8 5.None of these
- 16. If the digits in each of the five numbers are arranged in descending order, the position of how many umbers will not change? 1. None 2. One 3.Two 4.Three 5.Four
- 17. Based upon the given set of numbers, four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group? 1.647 2.264 3.912 4.192 5.380
- 18. If in each number, the first and the last digits are interchanged, which will be the second lowest number?

 1.129 2.642 3.921 4.476 5.308
- 19. If in each number, the first and the last digits are interchanged, which will be the second lowest number?1.129 2.642 3.921 4.476 5.308



ANSWERS AND EXPLANATIONS

- (Q.1-6) RULES: (I) If an odd number is followed by another composite odd number, they are to be added
- (ii) If an even number is followed by an odd number they are to be added.
- (iii) If an even number is followed by a number which is the perfect square, the even number is to be subtracted from the perfect square.
- (iv) If an odd number is followed by a prime odd number the first number is to be divided by the second number.
- (v) If an odd number is followed by an even number, the second one is to be subtracted from the first number.
- 1.1 2.5 3.2 4.3 5.4 6.1
- (Q.7-11)RULES: (i) If a two-digit even number is followed by another even number, the first one is to be divided by the second one.
- (ii) If an even number is followed by a prime number, the two are to be multiplied.
- (iii) If an odd number is followed by another odd number, the two are be added.
- (iv) If three-digit number is followed by a two-digit number which is perfect square, the number is to be subtracted from the first number.
- (v) If three-digit number is followed by a two-digit number which is not a perfect square, the first number is to be divided by the second number.
- 7.5 8.1 9.2 10.2 11.4 12.3 13.1 14.4 15.4 16.1 17.2 18.3 19.1



SAI EDUCATION FOR COMPETITIVE EXAMINATION

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STATEMENT - ASSUMPTIONS

DIRECTIONS: A statement is given followed by several assumptions. An assumption is something assumed or taken for granted.

Read the statement carefully and decide which of the assumptions are implicit in the statement.

1. **Statement**: "I don't care if the world calls me conservative. But my wife won't work in films after she marries me".-An actor in an interview.

Assumptions: i. The actor is not much bothered about what the world thinks of him.

- ii. The actor is unmarried
- iii. Not allowing the wife to work in films may be taken as a sign of conservatism.
- (1) I and ii are implicit (2) ii and iii are implicit (3) I and iii are implicit (4) All are implicit
- 2. **Statement**: "Nokia introduces the world's easiest-to-use cellular phone. Small in size, huge in performance"-an advertisement.

Assumptions: i. People want convenience while using a cellular phone.

- ii. People want small-sized cellular phones. lii. Cellular phones were not available before.
- (1) Only I is implicit (2) Only ii is implicit (3) Only iii is implicit (4) I and ii are implicit

Directions: In each question below is given a statement followed by two assumptions numbered I and ii. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give Answer: (1) If only assumption I is implicit (2) If only assumption ii is implicit (3) If either I or ii is implicit (4) If neither I nor ii is implicit and (5) If both I and ii are implicit.



3. **Statement**: To pass the examination, you have to practice very hard.

Assumptions: I. Passing the examination is desirable. li. Hard practice leads to passing of exam.

4. **Statement**: The function will start at 3 PM. You are requested to take your seats before 3 PM.- Last sentence in an invitation card.

Assumption: i. If the invitee is not in his seat before 3PM, the function will not start. Ii. Function will start as scheduled.

Directions: In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit in the statement.

5. **Statement**: Radios are fast getting replaced by transistors.

Assumptions: i. Transistors are supporter to radios. li. Government has banned manufacturing of radios..(1) Only I is implicit. (2) Only ii is implicit. (3) Either I or ii is implicit. (4) Neither I nor ii is implicit.

6. **Statement**: "Certain routes are closed for vehicular traffic during procession" – An order from the concerned authorities.

Assumptions: i. The procession will culminate in a public meeting. Ii. The procession would be large enough to cause congestion on the road.

(1) Only I is implicit (2) Only ii is implicit (3) Either I or ii is implicit (4) Neither I nor ii is implicit.

Directions: In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit in the statement.

7. **Statement**: "Reservation of short journey can be done only three days in advance'- a NOT PUT UP BY Railway authorities.

Assumptions: i. People do not plan short journeys more than three days in advance. li. Short journeys do not need reservations. lii. Administratively, it is not convenient for the Railways to provide the facility of reservation of short journeys more than 3 days in advance.

(1) Only ii is implicit (2) Only ii & iii are implicit (3) only I & iii are implicit (4) Only iii is implicit

Directions: In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit in the statement.

8. **Statement**: "It is desirable to keep common medicines with you when you go on a long journey". A advises B. **Assumptions**: (1) only I & iii are implicit (2) Only iii is implicit (3) Only I & ii are implicit (4) Only I is implicit.



9. **Statement**: "Candidates called for the interview will be 'reimbursed' to and fro IInd class rail fare by the Mail/Express trains'. An instruction in the advertisement.

Assumptions: i. Candidates will be producing the railway ticket along with the claim for money. Ii Candidates will be travelling by passenger train. Iii. Candidates will be travelling by IInd class. Iv. Candidates will be reimbursed the fare by the shortest possible route.

(1) Only I is implicit (2) Only I, ii & iii are implicit (3) Only I, ii & iv are implicit. (4) Only I & iv are implicit

Directions: In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit I the statement.

10. **Statement:** STD/ISD locks must be provided to the telephones in the office and the key should be available only with a responsible officer.

Assumptions: i. STD/ISD lock can be 'built-in' the telephone system. Ii. Someone may need to make an STD/ISD call. Iii. The staff may misuses the facility of STD/ISD.

- (1) Only I is implicit. (2) Only I & ii are implicit (3) Only I & iii are implicit (4) Only ii & iii are implicit.
- 11. Statement: "Send the envelope by "speed-post" to reach the destination quickly"- A advises B.

Assumptions: i. The "Speed-Post" service is available to the desired destination. Ii. "A" always uses "Speed Post" service. Iii. No other service is available for sending the envelope. Iv.For B, reaching of the envelope to the destination is an emergency.

(1) Only ii & iv are implicit (2) Only I & iv are implicit (3) Only I, ii & iv are implicit (4) Only ii, iii & iv are implicit.

Directions: In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit in the statement.

12. **Statement:** "Smoking Prohibited"- A notice at a petrol pump.

Assumptions: i. All those who come to the petrol pump are smokers. Ii. Smoking at a petrol pump is hazardous. Iii. People are expected to follow such notices.

- (1) Only I & lii are implicit (2) Only ii & iii are implicit (3) Only ii is implicit (4) All I, ii & iii are implicit.
- 13. **Statement**: "Doctor available on call-24 hours" A notice at the Hotel reception.

Assumptions: i. Some lodgers may need medical help at any point of time. Ii. No longer can be a doctor, iii. The hotel has employed a doctor. Iv. Arrangements have been made by the management of the hotel to make a doctor available in case of need.

(1) Only I & iv are implicit (2) Only I & iii are implicit (3) Only I, iii & iv are implicit (4) All ii, iii & iv are implicit.



In each question below is given a statement followed by several assumptions. An assumption is something supposed or taken for granted. You have to consider the statement along with the assumptions and then decide as to which of the assumptions is implicit in the statement.

14. **Statement:** "Unless the quality of inputs is improved and maintained, the quality of outputs cannot be improved". –Production Manager: -tells the Purchase Manager.

Assumptions: i. Customer complaints have increased ii. The root cause of poor quality of out puts is the poor quality of inputs. Iii. Quality of inputs is in tangible for be controlled.

- (1) Only ii is implicit (2) Only I, iii are implicit (3) Only I & ii are implicit (4) Only ii and iii are implicit
- 15. Statement: "India must take steps to achieve industrial development so as to increase employment".

Assumptions: i. Industrial backwardness is the root cause of unemployment in India. Ii. Employment generation is one of the major objectives to be achieved. Iii. Labour intensive industries are to be developed preferentially.

- (1) Only I & iii are implicit (2) All I, ii & iii are implicit (3) Only ii is implicit (4) Only I & ii are implicit
- 16. Statement: "Drinking of water helps maintain body equilibrium", Doctor advises patient.

Assumptions: i. Drinking water is available in abundance. Ii. Patient would follow Doctor's advice. Iii. Patient desires body equilibrium.

(1) Only I & iii are implicit (2) Only ii is implicit (3) Only iii is implicit (4) Only ii & iii are implicit

Directions: In each question below is given a statement followed by two assumptions numbered I and II. An assumptions is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer: (1) If only assumption I is implicit (2) if only assumption ii is implicit (3) if neither I nor ii is implicit (4) if both I and ii are implicit and (5) if either of I or ii is implicit.

17. Statement: "Buy pure and natural honey of company X" –an advertisement in a newspaper.

Assumptions: i. Artificial honey can be prepared. Ii. People do not mind paying more for pure and natural honey.

Statement: "If I am not well you will have to go for the meeting"- a manager tells his subordinate.

- 18. **Assumptions:** i. Is not necessary that only manager level personnel attend the meeting. li. If the manager is well, he would himself like to go for the meeting.
- 19. **Statement:** In order to bring punctuality in our office, we must provide conveyance allowance to our employees"- In charge of company tells personnel manager.

Assumptions: i. Conveyance allowance will not help in bringing punctuality. Ii. Discipline and reward should always go hand in hand.

20. **Statement:** The successful man has the ability to judge himself correctly.



Assumption: i. To judge other is of no use to a successful man. Ii. The successful man cannot make a wrong judgment.

21. **Statement:** Over 1.4 lakh quintals of cotton have been procured in the state under cotton procurement scheme, a press note said.

Assumptions: i. Cotton procurement scheme is successful. Ii. No cotton procurement should be done now.

22. Statement: "Please put more people on the job but make up for the delay".

Assu+mptions: i. Delay is inevitable in most jobs. Ii. Output will increase with more number of people on the job.

23. **Statement:** "use aluminium – The versatile metal for packaging" – an advertisement.

Assumptions: i. Aluminium is the only versatile metal. Ii. Some companies use metallic packing.

EXERCISE

Directions (Q. 1-5): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer (1) If only assumption I is implicit.

Give answer (2) If only assumption II is implicit.

Give answer (3) If either assumption I or assumption II is implicit.

Give answer (4) If neither assumption I nor assumption II is implicit.

Give answer (5) If both assumptions I and assumption II are implicit.

1. Statement: The govt has decided to earmark a separate lane in the metropolis for passenger vehicles with more than one occupant.

Assumptions: I. The move may help decongest the roads of the metropolis. II. Many people may resort to car pool system to avoid traffic snari.

2. Statement: Manish invited all his friends to his house for dinner on his birthday and requested his mother to arrange for the birthday party.

Assumptions: I. Most of Manish's friends may attend his birthday party. II.Manish's mother may be able to make all the arrangements including food for all his friends.

3. Statement: The civic authority of the metropolis has decided to suspend sanctioning of new building proposals for six months and assess the impact of the current building projects on the city's smenities.

Assumptions: I. The builder's lobby may move the court against the civic body's decision. II. The civic authority may be able to complete the impact study in about six months.



4. Statement: The railway authority has announced that it will carry out major repair work for two days beginning Saturday on the main line connecting the two big cities in the state, bringing the rail servie to a halt.

Assumptions: I. People may reschedule their journey in view of the railway authority's decision. II. People may still plain their travel by train between the two cities even on these two days.

5. Statement: The govt. has directed all the degree colleges to declare results of all the examinations within a fortnight after the last date of examination.

Assumptions: I. The college authorities may not be able to declare all the results within the stipulated time. II. Many college authorities may not be able to conduct all the examinations in time.

Directions (Q.6-10): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer (1) If only assumption I is implicit.

Give answer (2) If only assumption II is implicit.

Give answer (3) If either assumption I or assumption II is implicit.

Give answer (4) If neither assumption I nor assumption II is implicit.

Give answer (5) If both assumptions I and assumption II are implicit.

6. Statement: The driver of the huge truck pulled the emergency brakes to avoid hitting the auto rickshaw which suddenly came in front of the truck.

Assumptions: I. The auto rickshaw driver may be able to steer his vehicle away from the oncoming truck. II. The truck driver may be able to stop the truck before it hitsthe auto rickshaw.

7. Statement: The doctor warned the patient against any further consumption of alcohol if he desired to get cured from the ailment and live a longer life.

Assumptions: I. The patient may follow the doctor's advice and stop consuming alcohol. II The doctor may be able to cure the patient from the alignment if the patient stops consuming alcohol.

8. Statement: The chairman of the company urged all the employees to refrain from making long personal calls during working hours in order to boost productivity.

Assumptions: I. Majority of the employees may respond positively to the chairman's appeal. II. Most of the employees may continue to make long personal calls during working hours.

9. Statement: The local cultural club decided to organize a musical event to raise money for the construction of the club building.



Assumptions: I. The local residents may not allow the club to organize the musical event in the locality. II. The money collected by organizing the musical event may be substantial enough for the club to start construction.

10. Statement: The traffic police department has put up huge notice boards at all the major junctions of the city, warning drivers to refrain from using cell phones while driving or else their licenses will be impounded.

Assumptions: I. The drivers of the vehicles may ignore the warning and continue using cell phnes while driving. II. The traffic police department be able to nab most of the offenders and impound their licenses.

Directions (Q.11-15): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer (1) If only assumption I is implicit.

Give answer (2) If only assumption II is implicit.

Give answer (3) If either assumption I or assumption II is implicit.

Give answer (4) If neither assumption I nor assumption II is implicit.

Give answer (5) If both assumptions I and assumption II are implicit.

11. Statement: The largest domestic airlines corporation has announced new summer schedules in which more number of flights in trunk routes are introduced.

Assumptions: I. More number of passengers may travel by this airlines corporation during summer months in trunk routes. II. Other airlines companies may also increase the number of flights in all the sectors.

12. Statement: The chairman of the company decided to hold a grand function to celebrate silver jubilee during the next weekend and invited a large number if guests.

Assumptions: I. The company officials may be able to make all the necessary preparation for the silver jubilee celebration. II. Majority of the guests invited by the chairman may attend the function.

13. Statement: The largest computer manufacturing company stashed the prices of most of the desktop models by about 15 percent with immediate effect.

Assumptions: I. The company may incur heavy losses due to reduction in prices of the desktop. II. The sales of desktop manufactured by the company may increase substantially in the near future.

14. Statement: The school authority decided to rent out the school premises during weekends and holidays for organizing various functions to augment its resources to meet the growing needs of the school.

Assumptions: I. The parents of the school students may protest against the decision of the school authority. II. There may not be enough demand for hiring the school premises for organizing functions.



15. Statement: The local civic body has urged all the residents to voluntarily reduce consumption of potable water by about 30 percent to tide over the water crisis.

Assumptions: I Many residents may reduce consumption of potable water. II.

Many activists may welcome the civic body's move and spread awareness among residents.

Directions (Q.16-20): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer (1) If only assumption I is implicit.

Give answer (2) If only assumption II is implicit.

Give answer (3) If either assumption I or assumption II is implicit.

Give answer (4) If neither assumption I nor assumption II is implicit.

Give answer (5) If both assumptions I and assumption II are implicit.

16. Statement: A very large number of people sttod in the queqe for buying tickets for the one day international cricket match scheduled to be played in the city on the next day.

Assumptions: I. No other one day international cricket match may be played in the city for the next six months. II. Majority of those who stood in the queue may be able to get ticket for the one day international cricket match.

17. Statement: The highway police authority put up large boards at regular intervals indicating the speed limit and dangers of over speeding in the highways.

Assumptions: I. Most of the motorists may drive their vehicles within the speed limit on the highways. II. Motorists generally ignore such cautions and over speed on the highways.

18. Statement: The employees' association urged its members to stay away from the annual function as many of their demands were not met by the management.

Assumption: I. Majority of the members of the association may not attend the function. II. The management may cancel the function.

19. Statement: The sarpanch of a village called a meeting of all the heads of the families to discuss the problem of acute shortage of drinking water in the village.

Assumptions: I. The sarpanch has earlier called such meetings to discuss about various problems. II. Most of the heads of the families attend the meeting called by the sarpanch.

20. Statement: The municipal corporation advised all the people living in the shanties along the beaches to move to higher places during monsoon.



Assumption: I. Many people living in the shanties may leave the city and relocate themselves elsewhere in the state. II. Majority of the people living in the shanties along he beach may try to relocate to higher places during monsoon.

Directions (Q.21-25): In each question below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.

Give answer (1) If only assumption I is implicit.

Give answer (2) If only assumption II is implicit.

Give answer (3) If either assumption I or assumption II is implicit.

Give answer (4) If neither assumption I nor assumption II is implicit.

Give answer (5) If both assumptions I and assumption II are implicit.

21. Statement: Please send an official letter rather than semiofficial on this subject this time.

Assumptions: I. The format and emphasis of different types of letters is different. II. We cansend different types of letters on the same subject.

22. Statement: Pease check the availability of two tickets from Delhi to Lucknow.

Assumptions: I. The person checking knows the desired details of the person travelling.

23. Statement: If you want to increase your writing speed, use 0.7 pen.

Assumptions: I. There are different types of pen available. II. The person being told understands what is 0.7 pen.

24. Statement: In order to build more space, extra FSI needs to e bought.

Assumptions: I. The person being told does not know the meaning of FSI. II. More space will reduce the construction cost.

25. Statement: Let there be a sign board also indicating the directions and instructions.

Assumption: I. Sign board can be prepared without using any language. II. Signboard is the only effective tool to indicate directions.



EXPLANATIONS AND ANSWERS

An assumption is a statement for which no proof or evidence is offered. An assumption is

Something which is assumed, supposed or taken for granted. It is always hidden in the given statement. It is the supposition on the basis of which we may take action. Thus when we go to the railway station to catch a train scheduled at, say 3.00 PM, we assume that the train is on time. Naturally when the assumptions are wrong, the action taken would be wrong and desired result would not be achieved. Hence in the process of decision making, the understanding of assumption implied (ie. Expressed indirectly) in the statement(s) become very essential.

- 1. Suppose an exciting one day cricket match is going on. The other team (Pakistan) has piled up a good total and India, in reply, has lost two quick wickets. Now Sachin Tendulkar comes to bat. You are die-hard fan of "Sachin Tendulkar and despite the odds, you are so excited that you can't help exclaiming "Sachin Tendulkar is a fine bats man, India shall win the match"...(1)
- 2. How do you correlate two facts? One that "Tendulkar is a fine batsman" and secondly that "India Shall win", obviously by assuming that "a fine batsman can help his team win a match". This is an example of assumption.

So the explicit argument could be: (a) Sachin Tendulkar is a fine batsman. (b) A fine batsman is likely to help his team (c) So, India may win the match.

However, when we make the statement (a) the statement (b) is an implicit assumption while making the comment.

Difference between Implication and Assumption

Implication means something which is implied implication mean the hidden meaning of the statement. The following example will help you to make a distinction between assumption and implication.

"I am not going to call off the strike unless the management gives the overtime bonus to each employee which is due since last year"- A trade union leader. Now consider the following three sentences in the light of the above statement:

- (1) Defines overtime bonus as a right of every employee
- (2) Claims that this right is being violated.
- (3) Threatens to carry on the strike until the management announces overtime bonus.



Using (1) and (2) we can say that "many employees fail to get overtime bonus". In (3) he assumes that the "threat of continuation of strike may lead to management in acceptance by his demands".

To summarise, an assumption is something on which the statement is based while an implication is something which is derived and therefore based upon the statement.

Some Standard Categories of Assumptions:

a. Existence/Non-existence of the subject: This category makes a very simple assumption that what is being talked about must be existing. Similarly, if its absence is being talked about it must not be existing.

Statement: Love marriages mostly end in divorce.

Valid Assumptions: i. Love marriages do take place. Ii. There are cases of divorce.

b. Adjectives: We know that an adjective is something which denotes a quality of the subject. Naturally then, if an adjective is attached (unconditionally) to any subject, it must be assumed that "the subject does have the quality as denoted by the adjective'.

Eg. Statement: The Social nature of man leads to cooperation and coordination within the society.

Valid Assumption: Man is social

c. **Cause-effect:** Some statements mention a cause-and-effect relationship. The conjunctions between the clauses are usually "therefore', 'as', 'hence', 'thus' etc. In all such cases it would be a valid assumption to say that 'this cause leads to this effect". There may be different versions of the question: Sometimes it may be in the form of 'Although cause, yet no effect".

Statement: As you do not have the expertise, you cannot be selected.

Valid Assumption: Expertise is essential for selection.

d. **Course of action:** Sometimes a fact/report/observation/study/data is given followed by a suggested course of action. Let us call the given fact/data etc.X and the suggested course of action Y. Then either some negative aspect of X is mentioned and a course of action Y is suggested or some positive aspect of X is mentioned and a course of action Y is suggested. In the former case, ie., when some negative aspect of X is mentioned, the following assumptions will be valid:

Statements: The Delhi High Court in a recent verdict has directed the Election Commission (EC) to compulsorily provide information to the voter through media about criminal background of candidate standing for assembly or parliamentary elections.

Assumptions: I. Candidates with criminal background are harmful to the society. II. Proper information will restrict candidates with criminal background standing for assembly or parliamentary elections.

e. **Analogy:** In some cases it is concluded that because a cause leads to some effect in one type of objects, it will also lead to the same effect in another type of objects. This is an example of reasoning by analogy. In such cases it is assumed that "The effect of the cause on both the species is similar".



Statement: Properly-fed and stared monkeys were made to run through a maze (puzzle), it was seen that starved monkeys could not make their way fast. This proves that the lower intelligence of people in poor countries is the result of malnutrition.

Assumptions: The effect of malnutrition on the intelligence of the monkeys is paralles to those on human beings.

- f. **Advertisement**; In the examinations of today, the statements are usually in the form of an advertisement or an official notice issued in public interest or an appeal.
 - 1. An advertisement/appeal/notice do have some effect.
 - 2. In case of an advertisement, that which is being highlighted is looked for and expected by the people.
 - 3. In case of a public-interest notice, it is the duty of those who issue it, to issue such notices.
 - **4.** In case of public interest notice, what is being advised must be beneficial for people and its non-practice harmful in some way.
 - **5.** In case of an appeal, the reason for issuing it exists (you can determine the reason using your common sense).
 - 6. In case of an official notice, the effect of its implementation will be beneficial for the organization.

Statement: Professional Tutorials-the only training institute that gives exclusive articles on reasoning and mathematics-an advertisement.

Valid Assumptions: I. The advertisement will have some effect on those who read it. II. People look forward to exclusive articles on reasoning and mathematics.

When is an assumption invalid? To find out when an assumption is invalid is of equal importance. We have discussed the validity of assumption. Now, we should also see the cases and reasons wherein an assumption becomes invalid.

i) When an assumption can be out rightly rejected: These assumptions are very easy to be show incorrect because they are either just contrary to what the given statement says or they seem to have simply no connection with what the given statement says. Only a look at them will be enough to declare that they are not valid assumptions for the given statement.

Statement: The government has increased the price of petroleum products.

Invalid Assumption: The price of petroleum products was very low.

Reason: We are not sure whether the prices were very low or not.

- **When an assumption cannot be out rightly rejected**: These are circumstances where the given assumption is likely to force you to do some thinking. Some important categories of such assumptions are;
 - a) Restatement: An assumption will be invalid if is a mere restatement- putting it is



different words of the given statement.

b) Obversion: Obversion is a slightly different case of restating the same fact. In it, two of the trio (subject, verb, predicate) are changed into negative which changes the appearance of the sentence without changing its meaning. An obverted form of the statement is an invalid assumption.

c) Inference: The given assumption is invalid if it is an inference derivable from the given statement. An assumption is something on which the statement is based and not something which itself is based upon (an inference of a statement is based upon the statement.

Statement: Political freedom is incomplete has little meaning without economic independence.

Invalid Assumption: Economic freedom is an essential virtue for any country.

- **Ans 1.** 3. The tone of the remarks implies1. II cannot be assumed as the actor mayor may not be married at present. III is obviously implicit.
- Ans 2. 1. The way the phrase "easiest-to-use" is highlighted in the advertisement, it is apparent that people look for convenience in a cellular phone. Hence, I is implicit. But it is not clear whether the size of the phone is also highlighted. It may be of the tone. "small in size, but huge in performance" or it may be like. "Not only small in size, but also huge in performance". "In one case the advertiser is apologetic about the size, in the other he is boastful of it. So it could be either of these situations and hence II is not implicit. III is not hinted at the statement.
- Ans 3. 1. Assumption I is the basis on which the statement is made, hence I is implicit. II is merely are statement.
- Ans 4. 2. It is mentioned that the function will start at 3 PM. So, assumption I is not implicit. Thus only assumption II is implicit.
- **Ans 5.** 1. Assumption I is implicit since superiority of transistors over radios must be the decisive factor for the replacement of radios by transistors. Assumption II is not implicit since the statement does not, at any stage; imply the banning of the manufacturing of radios by the Government.
- **Ans 6.** 2. Assumption I is not implicit since there is no indication of "public meeting" in the given statement. Assumption II is implicit since the routes are closed for vehicular traffic during procession due to probable congestion on the road because of large size of procession.
- Ans 7. 4. Assumption I is not implicit since people may be planning short journeys more than three days in advance. Assumption II is not implicit since reservation may be necessary for short journeys as well. Assumption III is implicit since providing reservations for short journeys more than 3 says in advance is difficult for the Railways on administrative grounds (Such as occupation of office space, use of ledgers, probable increase in frequencies of cancellations etc.)
- **Ans 8.** 2. Assumption III is implicit as the statement is a suggestion and it is only given because long journey makes oneself uneasy.



- Ans 9. 4. Assumption I is implicit since the word "reimbursed" is used in the question statement. Assumption II is not implicit since the rail fare pertaining to the "Mail/Express" trains is going to be re-imbursed to the candidates. Assumption III is not implicit since the re-imbursement has been limited to IInd class rail-fare (The candidate may travel by Ist class, or even by Air-conditioned class). Assumption IV is implicit since re-imbursement always pertains to the shortest possible route.
- Ans 10. 4. Assumption I is not implicit since the question statement essentially implies an "external" attachment of the STD/ISD lock to the telephone. Assumption II is implicit since there may be a dire need (emergency requirement) of making an STD/ISD call which must be satisfied. Assumption III is implicit since the very purpose of locking is to prevent the probable misuse of the facility.
- Ans 11. 2. Assumption I is implicit since unless the two places are connected by "Speed-post" service, such an advice cannot possibly be given, Assumption II is not implicit since the advice is of a general nature and can be given by anyone having knowledge about it. Assumption III is not implicit since the word "quickly" in the question statement, in fact, suggests that other ways are available, but "speed-post" would act faster. Assumption IV is implicit since it is the need of B to make the envelope reach the destination quicker, which has sought him such an advice.
- **Ans 12.** 2. Assumption I is not implicit since the notice is "general" in nature and is meant for those who are smokers. Assumption II is implicit since the consequences of smoking at the petrol pump are so dangerous that the word "prohibited" has to be used in the notice. Assumption III is implicit since the "prohibition" is so specific in nature that the compliance becomes a necessity.
- Ans 13. Assumption I is implicit since it is the need of some of the lodgers to have medical help, which has called for the services of the doctor on "on call" basis. Assumption II is not implicit since nothing can be said about the professions of the lodgers. Assumption III is not implicit since the employment of the doctor by the hotel is not discussed in the statement at all. Assumption IV is implicit since the availability of the doctor on. "on call" basis for 24 hrs. can be guaranteed only if such arrangements have been pre-planned by the management of the hotel.
- Ans 14. 4. Assumption I is not implicit since "customer complaints" is a separate subject on which nothing an be commented with reference to the statement made by the production manager. Production manager. Assumption II is implicit since the quality of outputs has been directly linked with the quality of inputs. Assumption III is implicit since the purchase Manager can exercise the control over the quality of inputs provided it is in tangible form & controllable.
- **Ans 15.** 2. Assumption I is implicit since "industrial backwardness" and "level of unemployment" have been directly correlated in the question statement. Assumption II is implicit since, by adopting measures of industrial development, a major objective gets achieved. Assumption III is implicit since the industrial development must take place in labour intensive industries so as to generate the required level of employment.



- **Ans 16.** Assumption I is not implicit since the advice is general in nature and does not connect itself with the availability of water. Assumption II is implicit since patient may follow doctor's advice. Assumption III is implicit since the desire of the patient to have body equilibrium has led him to get such advice from the doctor.
- **Ans 17.** 1. Artificial honey can be made. That is why the word "natural" needs to be mentioned in the advertisement. So, assumption I is implicit. No comparison is made of the prices of natural & artificial honey. So, assumption II is not implicit.
- **Ans 18.** 4. Clearly, the subordinate can attend the meeting as told by the Manager only when there is no inhibition. So, assumption I is implicit. The subordinate is told to go only in case when the manager is not well. This also shows the urgency to attend the meeting. So, assumption II is implicit.
- **Ans 19.** 3. Assumption I go against the statement. So, it is not implicit. The allowance will serve as a reward to the employees and shall provoke them to come on time is a generalized statement. So, assumption II is not implicit.
- **Ans 20.** 3. The basic quality of a successful man is he can judge himself. This does not mean that he need not judge others. So, assumption I & II are not implicit.
- **Ans 21.** 3. The statement mentions only the quantity procured and not the success or failure of the scheme. So, assumptions I is not implicit. Since the statement does not mention whether the requirements are fully satisfied, so assumption II is also not implicit.
- **Ans 22.** 2. The advice tells to "make up for the delay" showing that delay is not to be done. So, assumption I is net implicit. Since increase in number of people will avoid the damage caused by delay, it means the output will increase with increase in number. So assumption II is implicit.
- Ans 23. 2. Clearly, "versatility" is mentioned as the special quality of aluminium but it is not the only versatile metal. So, assumption I is not implicit. The advertisement is meant for those who use metallic packing. So, assumption II is implicit.

EXERCISE

1.5, 2.5, 3.2, 4.1, 5.4, 6.2, 7.5, 8.1, 9.2, 10.4, 11.1, 12.5, 13.2, 14.4, 15.1, 16.2, 17.1, 18.1, 19.2, 20.2, 21.5, 22.1, 23.5, 24.4, 25.4.



SAI EDUCATION FOR COMPETITIVE EXAMINATION

THRISSUR, CHERUSSERY, CHALAKUDY, IRINJALAKUDA & THANYAM (9446786631)

STATEMENT – ARGUMENTS

DIRECTIONS: Study the alterative choices.

Give answer 1. If only argument I is strong. 2. If only argument II is strong. 3. If either I or II is strong. 4. If neither I nor II is strong and 5. If both I and II are strong.

- 1. Should there be a complete ban on manufacture of fire crackers in India?
 - Arguments: I. No, this will render thousands of workers jobless. If Yes, the fire crackers use child labour to a large extend.
- 2. Should the tuition fees in all post-graduate courses be hiked considerably?
 - Arguments: I. Yes, this will bring in some sense of seriousness among the students and will improve the quality. II. No, this will for the meritorious poor students. To stay away from ost-graduate courses.

DIRECTIONS: Each question given below is followed by two arguments I and II. You have to decide which of the arguments is a strong argument and which is

Give answer 1. If only argument I is strong. 2. If only argument II is strong. 3. If neither I nor II is strong and 4. If both I and II are strong.

- 3. Statement: Is paying ransom or agreeing to the conditions of kidnappers of political figures, a proper course of action?
 - Arguments: I. Yes, the victims must be saved at all cost. II. No, it encourages the kidnappers to continue their sinister activities.
- 4. Statement: Should telecasting feature films be stopped?
 - Arguments: I. Yes, Young children are misguided by the feature films. II. No, this is the only way to educate the masses.



DIRECTIONS: In making decisions about important questions it is desirable to be able to distinguish between "strong' and "weak" arguments so far as they are related to the question. "Strong" argument must be both important and directly related to the question. "Weak II argument may not be directly related to the questions and may be of minor. Importance or may be related to the trivial aspects of the question.

Each question below is followed by two arguments numbered I and II. You have to dicede which of the arguments a strong argument is and which a weak argument is. Then decide which of the options 1, 2, 3, 4 and 5.

Give answer 1. If only argument I is strong. 2. If only argument II is strong. 3. If either I or II is strong. 4. If neither I nor II is strong and 5. If both I and II are strong.

- 5. Should more autonomy be given to the States in India?
 - I.Yes, By giving more autonomy, States will have more freedom in utilizing their resources for the benefit of their State. II. No, By giving more autonomy, the Central Government is likely to lose its control over the States, thereby weakening the union.
- 6. Should Government provide a support to the prices of Agricultural Products?
 - I.Yes, This will assure the farmers about reasonably good returns, there by ensuring "balanced" production of agricultural products as also help curb the black-marketing practices. II. No, Government has many other things to look after.
- 7. Should we re-adopt the custom "marriage at early age?"
 - I. Yes, Our ancestors were wise enough to have adopted this. II. No, We must change.

Exercise

Directions: Each question given below is followed by two arguments numbered I and II. You have to decide which of the arguments is a "Strong, argument and which a "Weak" argument.

Give answer 1. If only argument I is strong. 2. If only argument II is strong. 3. If either I or II is strong. 4. If neither I nor II is strong and 5. If both I and II are strong.

- 1. Statements: Should a total ban be put on trapping wild animals?
 - Arguments: I Yes, Trappers are making a lot of money. II. No, Beans on hunting and trapping are not effective.
- 2. Statements: Should military service be made compulsory in our country?
 - Arguments: I. No, It is against the policy of non-violence. II. Yes, Every citizen should protect his country.



3. Statements: Should All the remote parts of a country be connected by road?

Arguments: I. No, it will disturb peaceful simple life of the villagers. II. Yes, it must be done immediately.

4. Statements: Should government jobs in rural areas have more incentives?

Arguments: I. Yes, Incentives are essential for attracting government servants there. II. No, rural areas are already cheaper, healthier and less complex than big towns. So, why offer extra incentives.

5. Statements: Should religion be taught in our schools?

Arguments: I. No, Ours is secular state. II. Yes, Teaching religion helps inculcate moral values among children.

6. Statement: Should non-vegetarian food be totally banned in our country?

Arguments: I. Yes, it is expensive and therefore beyond the means of most people in our country. II. No, it will deteriorate the standard of films.

7. Statement: Should films be included in the concurrent lists?

Arguments: I. Yes, it will give respect to the views of the states. II. No, it will deteriorate the standard of films.

8. Statements: Should there be only one university throughout India?

Arguments: I. Yes, This is the only way to bring about uniformity in educational standards. II. No, This is administratively impossible.

9. Statement: Should mercy death be legalized?

Arguments: I. Yes, patients undergoing terrible suffering and having absolutely no chance of recovery should be liberated form suffering through mercy death. II. No, Even mercy death is a sort of killing and killing can never be legalized.

10. Statement: Should there be a world government?

Arguments: I. Yes, it will help in eliminating tensions among the nations. II. No. Then only the developed countries will dominate in the government.

11. Statement: Should the institution of marriages be abolished?

Arguments: I. Yes, it is already showing cracks. II. No, it is necessary for the survival of society.

12. Statement: Should health care service be nationalized?



Arguments: I. Yes, it has been done elsewhere also. II. No, the quality of health care service will deteriorate.

13. Statements: Should telecasting feature films be stopped?

Arguments: I. Yes, Young children are misguided by feature films. II. No, This is the only way to educate the masses.

14. Statement: Should agriculture in rural India be mechanized?

Arguments: I. Yes, it would lead to higher production. II. No, it would lead to rural unemployment.

15. Statement: Should the illiterate be debarred from voting?

Arguments: I. Yes, They are easily misguided. II. No, it is their constitutional right.

16. Statement: Should luxury hotels be banned India?

Arguments: I. Yes, they are places from where international criminals operate. II. No, Affluent foreign tourists will have no place to stay.

17. Statement: Can pollution be controlled?

Arguments: I. Yes, if everyone realizes the hazard it may create and cooperates to be rid of it, pollution may be controlled. II. No, the chief minister commands more power.

18. Statement: Is governorship better than chief minister ship?

Arguments: I. Yes, it is the highest post in a state. II. No, The chief minister commands more power.

19. Statement: Should there be no place for interview in selection?

Arguments: I. Yes, it is very subjective in assessment. II. No, it is the oly instrument to judge the candidates motives and personalized.

20. Statement: Should higher education be completely stopped for some time?

Arguments: I. No, it will hamper the country progress. II. Yes, it will reduce educated unemployment.

21. Statement: Should all news be controlled by the government in a democracy?

Arguments: I. Yes, Variety of news only confuses people. II. No, Controlled news loses credibility.

22. Statement: Should private companies be allowed to operate services in India?



Arguments: I. Yes, India private management usually give better services. II. No, We should not ape the western countries.

23. Statement: Should there be students union in college/University?

Arguments: I. No, this will create a political atmosphere in the campus. II. Yes, it is very necessary students are the future political leaders.

24. Statement: Should new big industries be started in Bombay?

Arguments: I. Yes, it will create new job opportunity. II. No, it will future add to the pollution of the city.

25. Statements: Should India manufacture atom bombs?

Arguments: I. Yes, it is imperative to protect the sovereignty and integrity of the country. II. No, this will create imbalance in the power of nations in this region.

26. Statement: Should computers be used in all possible sectors in India?

Arguments: I. Yes, it will bring efficiency and accuracy in the work. II. No, it will be an injustice to the monumental human resources which are at present underutilized.

27. Statement: Is paying ransoms or agreeing to the conditions of kidnappers of political figures, a proper course of action.

Arguments: I. Yes, The victim must be saved at all costs. II. No, it encourages the kidnappers to continue with their sinister activities.

28. Statement: Should India go in for computerization in industry?

Arguments: I. No, Computerization demands a lot of money. We should not waste money on it. II. Yes, when advanced countries are introducing computers in varius areas, how can we afford to lag behind?

29. Statement: I is monarchy is better than democracy?

Arguments: I. Yes, if the chair has one confirmed ruler, there are no ambitious aspirants fighting for it. II. No, People are more contented and happy in a democracy.

30. Statement: Should doordarshan be given autonomous status?

Arguments: I. Yes, it will help Doordarshan to have fair and impartial coverage of all important events. II. The covrage of the events will be+ decided by a few who may not have a healthy outlook.



EXPLANATIONS AND ANSWERS

An argument is a sequence of two or more phrases, clauses, sentences or statements which includes a claim or a conclusion. This conclusion is arrived at with the help of one or more statements which may be called "premises" or "proposition". In addition, an argument may also take the help of hidden premise/s known as assumptions.

Eg. The courtyard is slippery; hence it must have been raining.

In the above example, the argument proposes a conclusion that "it must have been raining". This has been arrived at using the supporting evidence or premise that "the courtyard is slippery". The conclusion and the premise are connected by assumption (Which is not explicitly stated, but is hidden) that "the courtyard becomes slippery only when it rains".

In other words, the logic of the argument can be broken up as follows:

Premise: The courtyard is slippery.

Assumption (hidden premise): The courtyard becomes slippery only when it rains.

Conclusion: It must have rained.

In this example, the argument needs the support of an assumption (a missing link in the chain of logic), and is a weak argument.

In fact, for an argument to be complete in itself, it should not have missing links. Ie, assumptions. For instance, the following.

Eg. "The courtyard is slippery. The courtyard could not have become slippery without rains. So it must have rained".

Let us consider another example to illustrate the point.

Eg. "If Ramesh watches TV, Ravi also watches TV. If Ravi watches TV, Sushil also watches TV, If Sushil watches TV, Madhu also watches TV. Ramesh watches TV. So, Madhu also watches TV".

In the above example, the first three sentences provide the premises. The last sentences denote the conclusion. As there is no hidden assumption, thus the arguments do not contain any missing link.



Thus in order to tackle problems based on argument-based reasoning, you need to appreciate the following three step process.

- (A) Differentiate between premise/s and conclusions.
- (B) Identify the assumptions/s made.
- (C) Understand the logic of the argument.

NOTE: With adequate practice, you will develop the ability to distinguish between a conclusion and a premise. Often the following list of words and phrases, enables you to identify a "conclusion" therefore, thus, so, hence, as a result, consequently, it can be inferred that, it follows that, suggests that, shows that, proves that, means that, etc.

When a certain premise provides support to reach a conclusion, it makes the argument strong. On the other hand, those premises which do not enable us to reach the conclusion result in weak arguments. In the exam, you are required to evaluate the forcefulness of the proposed arguments.

Note that strong arguments are often directly related to the question, whereas, weak arguments are either unimportant or peripherally related to the question. The following systematic approach will help you to save your precious time. These steps are;

Step 1.

Test for i) Weak argument: (i) Some arguments at first glance itself, give you Ambiguous argument impression of being weak, so that there is no need for further analysis. Certain arguments may not be very clear, thus confusing you and leaving you in considerable doubt. Hence they are ambiguous and are weak arguments.

ii) Merely a simple argument: (ii) There are certain arguments which are clearly related to the

statement but are not backed up by facts or established notions. Thus they are merely simple assertions, and as a result, are weak arguments.

- **iii)** Superfluous argument (iii) There are arguments which merely give a fleeting "glance" at the theme without making a "deep" analysis of the issue. Hence they are superfluous arguments.
- iv) Question- back argument (iv)(iv) These arguments are in the form of question thrown back at the reader by the person supposedly making the argument. It basically lacks



the "core" or substance of the "argumentation" process, and hence such arguments are considered to be weak.

Step II

Explanation. Test whether result follows or not?

A result will follow a course a course of action if

- (a) It is an established fact, or universally acknowledged fact or
- (b) Previous experience predicts, or
 - (c) Result is logically probable.

Whereas a result will not follow a course of action if

- (a) It is against established fact or
- (b) Previous experience contradicts, or
- (c) Result is logically not probable
- (d) Examples, analogies
- (e) Individual perceptions.

After step II if a result follows, then go for step III.

Step III.

Test for desirability of a result.

Desirability of a result an be judged by year experience of day to day life and knowledge about certain facts. If a result is desirable than go for step (IV).

Step IV

Test for proper relation between the argument and course of action.

If an argument directly deals with the main issue of statement and suggests balanced course of action. Then the argument and suggestion is said be to properly related.

Ex. Should education be given by the government free of charge?

Arguments: I. Yes, thus more people will be educated. II. No, there will be deficit in the budget of the government.

Explanation



Step I. Both arguments pass test since none of them is (i) Weak argument (ii) Ambiguous argument (iii) Very simple argument (iv) Superfluous argument (v) Question- back argument.

Step II. Both arguments will follow because they are logically probable.

Step III. Both arguments are desirable.

Step IV. Both arguments are properly related with the course of action. In first argument free education has been advocated because it will makes more people educated. In second argument free education has been discouraged because it will make deficit in the budget. Hence, both he arguments are strong.

This approach is not lengthy and cumbersome as it looks. It is very easy and simple, provided you do regular practice.

Ex. Should smoking is strictly prohibited in public places?

Arguments: I. No, it will adversely affect the tobacco industry. II. No, it will be resented by smokers.

Explanation

First argument will not follow because ban on smoking will be at public places only but not everywhere. Second argument will also not follow because argument is based on assumption. Hence both arguments (I) and (II) are not strong arguments.

Must remember the following tips to detect strong argument.

- (i) They are important and directly related to statement.
- (ii) They are not based o imagination.
- (iii) They are specific
- (iv) They are not generalized
- (v) They are ideal and true.

Study the Instruction

In making decisions about important questions it is desirable to be able to distinguish between "strong" arguments and "weak" arguments so far as they relate to the questions. "strong" arguments must be both important and directly related to the question and may be of minor importance or may be related to the trivial aspects of



the question. Each question below is followed by two arguments numbered I and II. You have to decide which of the arguments is a "strong".

- 1. D: None is strong. If trappers make money, they should not be stopped solely on this ground. And if bans are not effective, then care should be taken to enforce them strictly instead of not banning at all.
- 2. D: If non-violence is that strong a principle then we should not have any army either? Second argument lacks proper relation (See step IV). None is strong.
- 3. D: None is strong. I is rejected because it may not happen (will not follow) II is rejected because it is too simple and does not have argumentative substance.
- 4. E: Both are strong. Incentives do lure people. Second is also established fact.
- 5. B: Second is strong. First is not very clear. If the state is secular, it means it is a against religious bias but not against religious as such. Second is in consonance with the prevailing notions of truth.
- 6. D: Both are weak. It is for the people to decide whether they want to eat expensive food. A ban should not be enforced upon them. Second is weak because it not an acceptable truth. Nobody has said that "democratic" means a country where nothing could be banned. However, harmful, lit was.
- 7. D: Both are weak. Is weak as it not sure that including films in concurrent list would give respect to peoples views. Second will not follow (it seems), hence it is weak.
- 8. B: Second is strong. First is weak because it not correct.(is he only way?) second is perhaps correct, on logical thinking.
- 9. E: Both are strong. They mention a positive and a negative feature of mercy of death both these features are desirable/harmful respectively and both are related with important aspects of topic of mercy death.
- 10. E: Both are strong. On logical thinking both look probable, both are desirable (harmful in the case of second) and both touch significant aspects of the issue.
- 11. B: Second is strong. First is weak as you cannot abolish a system simply because it is showing crack. Second is an accepted truth.
- 12. D: None is strong. First is weak as I is based upon example. Second is weak as it is debatable.
- 13. A: First is strong. First is an acceptable piece of truth backed by evidence. Second is weak as it is not true.



- 14. E: Both are strong both are true (both wil follow) the first is really desirable while the second is really harmful.
- 15. B: Second is strong. First talks of negative eature which does exist but is not sufficient enough to go for such drastic action as disallowing for vote. Second is an established fact.
- 16. B: Second is strong. Affluent foreign tourists tend to prefer luxury hotels. First is debatable and, even if I is true, then what is guarantee that criminals would not operate from other places.
- 17. E: Both are strong although both arguments contradict each other, yet both are based upon sound assumptions or facts and hence, independently both are strong.
- 18. E: Both are strong. Same explanations as in previous question.
- 19. E: I is strong as a subjective mode of selection is not desirable. II is of course right.
- 20. D: None is strong. Temporary stopping of higher education will not hamper the nation progress. It will reduce educated employment but so what it will then increase uneducated unemployment.
- 21. B: Second is strong first argument is debatable while the second is an established fact.
- 22. A: First is strong as it is based upon on established facts. Second is based upon example, hence it weak argument.
- 23. E: I is true as it is based on experiences. And political atmosphere in the campus is not really desirable as the campus is a place of learning, not politics. It is also true because tomorrow's leaders will come from today students and it is good that they gets some political training early.
- 24. E: Both are correct and strong arguments.
- 25. A: I is strong as it is true that atomic power works as determent to possible invades that thus enhances sovereignty. II is not strong argument as the imbalance would be only in India favour and that won't be an undesirable thing.
- 26. E: Both are strong. Using computers does not have the positive feature as mentioned in I but the negative feature as mentioned in II.
- 27. E: Both are strong. Explanation same as in Q.26.
- 28. D: None is strong. We do not waste money if we invest in computers. The second is based upon example.
- 29. E: I talks of a positive feature of "absence of fight for power" in monarchy and this absence of fight is indeed, a desirable thing. II is a strong argument in the sense that is in conformity with today prevailing nations of truth.



30. E: Both are strong arguments.

1. What should come in place of the question mark (?) in the following question?

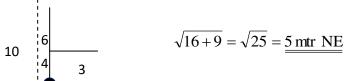
2. Deepak starts walking 75 mtr towards East. Then he turn and walks 25 mtr left. Again he turns left and walks 40 mtr. Finally he turns left and walks 25 mtr. How far away from his starting point?



3. Deepak walks 78 mtr North. Then he tu**7**5s left and wlks 25 mtr. Again he turns left and walks 80 mtr. Then he truns 45° right direction. Which is his direction?



4. Arun walks towards North 10 mtr. Then he turns South 6 mtr, then he turns left and walk 3 mtr. Find his distance and direction from starting point?



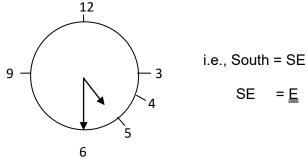
5. A man is facing North. He turn 80° CW and 60° ACW again 120°CW and finally 50° ACW direction. Find his direction.





6. If South East is called East, North West is called West and so on, what will North be called?

7. A watch read 4:30. Its minutes hand point towards South East. In which direction its hour hand points?



8. How many pairs of letter are there are in the word 'PRESENCE'. Which have as many letter between them in the word as in the alphabet?



9. How many independent words can 'HEARTLESS' be divided without changing the order of the letters and using each letter only once?

HE, ART, LESS =
$$\underline{3}$$

10. If the first and second letters in the word 'DEPRESSION' were interchanged, also the third and the fourth letters, the fifth and the sixth letters and so on. Which of the following would be the seventh letter from the right?

D E <u>P RE SS IO N</u> = <u>P</u> (Take 8^{th} no. from right and interchange to 7^{th} one).

11. If the last 4 letters of the word 'CONCENTRATION' are written in reverse order followed by next 2 in the reverse order and next 3 in the reverse order and then followed by the 4 in the reverse order, counting from the end, which letter would be 8th in the new arrangement?



i.e. fully reversed NOITARTNECNOC = \underline{R} or take of 8^{th} from left i.e. CONCENT \underline{R} TION = \underline{R}

12. If the positions of the 1st, 6th letters in the word 'DISTRIBUTE' are interchanged, similarly the positions of the 2nd and 7th, 3rd and the 8th, and so on. Which of the following letters will be the 5th from left after interchanging the positions?

10 letters divided into 5 each. R is the 5th of the 1st half interchanged into 5th of the 2nd half i.e. <u>E</u>

13. If the second half of the given alphabet is written in the reverse order, which letter will be 7th to the right of the 12th letter from the left end?

i.e.,
$$7 + 12 = 19^{th}$$

14. If it is possible to make a meaningful word with the <u>first</u>, the <u>fourth</u>, the <u>seventh</u> and the <u>eleventh</u> letters of the word 'INTERPRETATION'. Which of the following is the 3^{rd} letter of that word? If no such word can be made, give \underline{X} as the answer. If more than one such word can be made give \underline{M} as the answer.

IERT = RITE, TIRE, TIER, i.e. M

15. The letters L M N O P Q R S and T in their order are substituted by 9 integers, 1 to 9 but not in that order. 4 is assigned to P. The difference between P and T is <u>5</u>. The difference between <u>N</u> and T is <u>3</u>. What is the integer assigned to N?

$$N-9=3$$
, i.e., $N=6$ $P-T(4-9)=5$, $4-T=5$, i.e. $T=9$.

16. In the following sequence of instructions, I stands for Run 2 = STOP, 3 = GO, 4 = SIT, 5 = WAIT. If the sequence were continued, which instruction will come next?

17. if the nos. from 1 to 45 which are exactly divisible by 3 are arranged in ascending order, minimum number being on the top, which would come at the 9th place from the top?

$$9 \times 3 = \underline{27}$$
 (3, 6, 9, 12, 15, 18, 21, 24, 27,)

18. How many numbers from 1 to 100 are there each of which is not only exactly divisible by 4 but also has 4 as digit?



$$=$$
 $\underline{7}$ (4, 24, 40, 44, 48, 64, 84)

- 19. How many numbers from 11 to 50 are there which are exactly divisible by 7 but not by 3? i.e. 14, 28, 35, 49 = $\underline{4}$
- 20. A no. is greater than 3 but less than 8. Also, it is greater than 6 but less than 10. The no. is?

4, 5, 6,
$$(7)$$
 8, 9 = $\underline{7}$

21. Today is Thursday. What will be the day on 121st day?

$$121 - 1 = 120 \div 7 = 1$$
 odd day i.e. Thursday + $1 = Friday$

22. 10 March 2003 was Monday. What was the day of the week on 15th August 2003?

$$Mar - 21$$
, $Apr - 30$, $May - 31$, $Jun - 30$, $Jul - 31$, $Aug - 15 = 158 \div 7 = 4$

23. Which of the following months can use the same calendar?

March – August =
$$3 + 2 + 3 + 2 + 3 = 13 = 6$$
 days

May – November =
$$3 + 2 + 3 + 3 + 2 + 3 = 2$$
 days

March – June =
$$3 + 2 + 3$$
 = 1 day

$$April - July = 2 + 3 + 2 = 0 days$$

24. If the day, 2 day after tomorrow be Thursday, what day would have been 2 days before yesterday?

Friday Saturday Sunday Monday Tuesday Wednesday Thursday = Friday

25. Kapil was born on 11th August. Aravind was younger to Kapil by 11 days. This year independence day falls on Thursday. On which day will Aravind's birthday falls?

11 + 11 = 22,
$$15^{th}$$
 = Thursday. So 22^{nd} also Thursday.

26. In a certain code language PROBLEM is written as MPERLOB. How will NUMBERS be written in that code?

$$= \underline{SNRUEMB} \quad -2 \quad -2 \quad -2$$

27. In a certain language PROSE is coded as PPOQE, how is LIGHT coded in that code?



= <u>L G G F T</u>

28. FIELD is coded as GJFME, how is SICKLE coded in that code?

= TJDLMF

29. HAPPY is coded GBOQX, CROSS = BSNTR

$$\uparrow\downarrow\uparrow\downarrow\uparrow$$

30. RESULT = SULTRE, BRIGHT = ? = <u>I G H T B R</u>

- 31. PRAMOD = SODJRA, KESHAV = ? = NBVEDS
- 32. SISTER = 535701, UNCLE = 84670, BOY = 129, SON = ? = <u>524</u> 1 3 20 = 24 * 2 2 1 20 = 23 * 2

33. ACT = 48, BAT = ? =
$$\underline{46}$$

34. if BOX is coded as CDPQYZ. What will be the last letters of word in the same code for HERO = ?= PQ

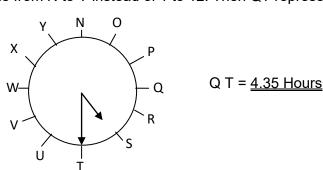
-2 -2 -2 -2

- 35. If FIRE is coded as DGPC. What will be the <u>third letter</u> from the left of the word in the same code for SHOT = ? = M
- 36. If QUD, CUI, HEER means BOY is GOOD

LAI QUD MEA means MEENA is FAIR

<u>RUOLEVMEA</u> mean ALL ARE FAIR, <u>SIHAICUI</u> means DOG WAS GOOD. Then Boy stands for? = HEER

- 37. If BOMBAY is written as my my my. How will TAMILNADU be written in that code? (3, 6 & 9 letters) = MNU MNUMNU
- 38. If PALAM could be given the code no. 43. What code no. can be given to $\stackrel{19}{S}$ A $\stackrel{11}{N}$ T A $\stackrel{20}{C}$ R U Z ? = $\frac{123}{123}$
- 39. ROPE = 6821, CHAIR = 73456, CRAPE = ? = 76421
- 40. A clock represents its time from N to Y instead of 1 to 12. Then QT represents for?





41. At what time minute hand and hour hand coincide each other between 4 'o' clock and 5 'o' clock?

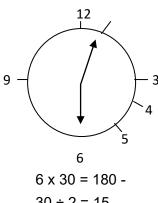
$$\frac{60 \text{ a}}{11} = \frac{60 \text{ x 4}}{11} = \frac{240}{11} = 21\frac{9}{11}, \text{ i.e., } \frac{4 \text{Hrs } \frac{9}{11} \text{ Minute}}{11} = 6 - 7 = 6 & 32\frac{8}{11}$$

42. At what time minute hand and hour hand comes opposite direction between 4 Hrs and 5Hrs?

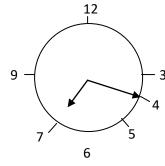
$$\frac{60(a \pm 6)}{11} = \frac{60(4+6)}{11} = \frac{600}{11} = 54\frac{6}{11} \text{ i.e., } 4\text{Hrs and } \frac{6}{11} \text{ Minutes}$$

If less than 6 = +ve, If more than 6 = -ve. $3 \& 4 = 49 \frac{1}{11}$, $9-10=16 \frac{4}{11}$

43. Time is 12:30. What will be the angle distance between minutes hand and hour hand?







7:20

 $3 \times 30 = 90 +$ $20 \div 2 = 10$ 100°

44. Time is 7:35. What will be its mirror image?

45. Shoot is to gun as Eat is to =? (Action Object Relationship)

(Hunger, Thirst, Dinner, Fruit) <u>Fruit</u>

46. Glamour is to Stardom as Colour is to =? (Association Relationship)

(Rainbow, Shades, Art, Painting) **Painting**

47. INTROVERY: EXTROVERY,? (Antonym Relationship)

(Angle: Tangent, Extreme: Interim, Against: Favour, Action: Law) = Against: Favour



- 48. Mt. Everest: Nepal,?) = Ahmedabad : Gujarat (Obvious Relationship) (Mexico : South America, k₂ : China, Big ben : Russia, Ahmedabad : Gujarat)
- 49. 1:11::2:? = 22 (20, 22, 24, 44)
- 50. FATHER, MOTHER, FRIEND, BROTHER, SISTER = FRIEND
- 51. <u>Ice Cream</u> is as Cold as <u>snow</u>. <u>Ice</u> is not as Cold as <u>hail</u>. <u>Flakes</u> is not as cold as <u>Ice</u> but colder than <u>Ice Cream</u>. What is the coldest?

(Ice Cream / Snow < Flakes < Ice < Hail) = <u>HAIL</u>

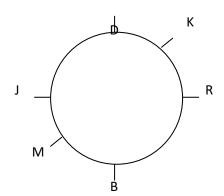
52. Five men Heavy, Fat, thin, Short and Tall are running one behind and other. Of the Heavy and the Tall man one is an <u>Artist</u> and the other is <u>Talkative</u>. Thin man who is <u>Genius</u> is in the Centre. Short man is <u>Not dark</u> and the one who is fair is ahead of Thin man. The Heavy man, who is not an Artist, is in front of the Fat man.

(Heavy man – Talkative, Fatman – Fair, Thinman – Genius, Short man – Not Dark, Tall Man – Artist)

- (a) Who is fair? = FATMAN
- (b) What is the Tall Man? = ARTIST
- 53. 5 persons are walking in a line one behind the other. Of the first and the last person in the line, one is intelligent and the other is a fool. One strong man is behind the short man. The weak man is in front of the fool. Short man is in between the intelligent man and the strong man. Who is in the centre?

/ NT → SHORT → STRONG → WEAK → FOOL = <u>STRONG MAN</u>

54. 6 friends are sitting in a circle and playing cards. <u>Kenny</u> is to the left of <u>Danny</u>. Micheal is in between Bob and John. Roger is in between Kenny and Bob. Who is sitting to the right of Micheal? = <u>Bob</u>



55. Pointing a photograph, a woman said, "This man's son's sister is my mother-in-law". How is the woman's husband related to the man in the photograph?

(Son, Grandson, Nephew, Son-in-law) = <u>Grandson</u>

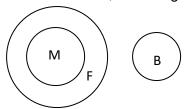


Man's son's sister is man's daughter, man's daughter is mother-in-law of speaker. i.e. daughter's son's wife. Daughter's son is grandson of the man.

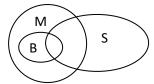
56. X is the wife of Y and Y is the brother of Z. Z is the son of P. How is P related to X?

(Sister, Aunt, Brother, Father) = Father

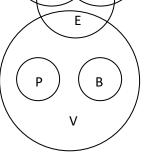
57. All mangoes are fruits, but neither fruits, nor mangoes are birds



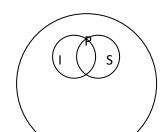
58. All bachelors are men and some men and bachelors can be swimmers.



- 59. Some women are smart and some women are engineers. Some engineers are women and some engineers are smart and vice-versa.
- 60. Potatoes and brinjals are vegetables but they have nothing in common. Some vegetables are potatoes and some are brinjals.



61. Some Indians are scholars and some scholars are Indians. All scholars and Indians are people.



In each question below is given a statement followed by two assumptions (a) and (b). An assumption is something supposed or taken for granted. You have to consider the statement and the following



assumptions and decide which of the assumption is implicit in the statement. Give answer (A) If only assumption (a) is implicit (B) If only answer (b) is implicit (C) If either (a) or (b) is implicit (D) If neither (a) nor (b) is implicit (E) If both (a) and (b) are implicit.

62. Statement: - If you do not reward good workers, they would soon become demotivated.

Assumption: - (a) Reward leads to improvement (b) some people do better than others (A), (B), (C), (D), (E)

63. Statement: - Inspite of the heavy rains train services were not disrupted this year.

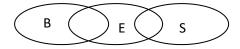
Assumption:- (a) Train services are disrupted in rainy season only.

- (b) Heavy rain usually affects train services (A), (B), (C), (D), (E)
- 64. Statement: Since I want you approval urgently, inform me over the phone.

Assumptions: (a) the message over the phone is more clear (b) details information should be given over the phone.

In each questions below are given two statements followed by 2 conclusions (a) and (b). You have to take the two statements to be true even if they see to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the two statements, disregarding commonly known facts. Give answer (A) If only conclusion (a) follows (B) If only conclusion (b) follows (C) If either (a) and (b) follows (D) If neither (a) nor (b) follows (E) If both (a) and (b) follows:

65. Statements (i) Some birds are elephants (ii) Some elephants are stones.

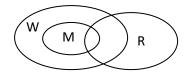


Conclusions (a) Some stones are birds

(b) Some elephants are birds

$$(A, B, C, D, E) = \underline{D}$$

66. Statements (i) All men are women (ii) Some women are robots



Conclusions (a) Some women are men



- (b) Some men are robots
- (A, B, C, D, E)
- = <u>B</u>
- 67. Statements (i) Some rats are cats (ii) All cats are cows



- Conclusions
- (a) Some rats are cows
 - (b) Some cows are rats

<u>A</u>

- (A, B, C, D, E)
- =



68. Statements: (i) No singer is an actor (ii) Some actors are producers

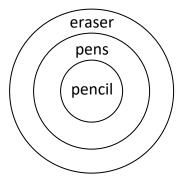


Conclusions: (a) Some producers are actors

(b) Some singers are producers

 $(A, B, C, D, E) = \underline{D}$

69. Statements: (i) All pencils are pens (ii) All pens are erasers.



Conclusions: (a) All erasers are pens

(b) All pens are pencils

 $(A, B, C, D, E) = \underline{D}$

70. In a telephone director which of the following names will appear in the middle?

(A) RAJRATHNAM (B) RAJRATHANAM (C) RAJRATNAM (D) RAJRATANAM (E) RAAJRATHNAM = \underline{B}

71. If A * B means A is the mother of B and A x B means A is the husband of B, which of the following shows P is the father of Q?

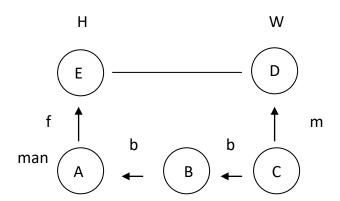
- (A) P * Q (B) Q * M x P (C) Q * P (D) P x M * Q (E) None of these = $\underline{\underline{D}}$
- 72. How many 7s are have in the following sequence which are proceeded by 4 but not immediately followed by 2?

4727235974752479478471 = 4



- 73. A is the brother of B and C. D is C's mother. E is A's father. Which of the following statements cannot be said to be definitely true?
 - (A) E is D's husband (B) E is B's father
- (C) A is D's son
- (D) B is E's son
- (E) D is A's

mother D



74. Assuming that the sentence "Every school has pupils" is true, which one of the following sentence is true?

<u>B</u>

- (A) Schools are meant for Pupils only
- (B) No school is without pupil

- (C) Pupils are only in school
- (D) Some schools do not have teacher
- (E) None of the give statements is true.
- 75. What is related to "blood" as Physics is to 'motion?
 - (A) Veins
- (B) Temperature
- (C) Body
- (D) Physiology
- (E) Circulation

<u>C</u>

- 76. 'Head is related to 'Cap' as 'finger' is to?
 - (A) Helmet
- (B) Nail
- (C) Ring
- (D) Thimble
- (E) Thumb
- D

Thimble – a hard cap worn to protect the end of the finger in sewing.

- 77. Two letters in the word 'TROUBLE' have as many letters between them in the word as in the alphabet. Which one of those two comes earlier in the alphabet?
 - (A) T
- (B) L (C) O (D) R (E) U
- <u>B</u>

The word 'TROUBLE' has 7 letters, while between L and E, there are 7 letters.

78. What will come in place of question mark in the following series? A, CD, GHI, ? UVWXY



(a) MNO (b) LMNO (c) MNOP = \underline{C}

79. Directions: In making decisions about important questions, it is desirable to be able to distinguish between "strong" arguments and "weak" arguments so far as they related to the question. 'Strong' arguments must be both important and directly related to the question. 'Weak' argument may not be directly related to the question and may be of minor importance or may be related to the trivial aspects of the questions. Each question below is followed by two arguments (a) and (b). You have to decide which of the arguments is a "strong" arguments. Give answer (A) if only argument (a) is strong (B) If only argument (b) is strong (C) If either (a) or (b) is strong (D) If neither (a) nor (b) is strong and (E) If both (a) and (b) are strong.

Should English be the medium of instruction for higher education in India?

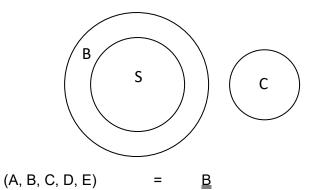
(a) Yes, even in advanced countries like England and USA, the medium of instruction is English for higher education (b) Yes, English is much widely spoken language in the world today.

$$(A, B, C, D, E) = \underline{B}$$

80. In each of these questions, there are two statements followed by two conclusions (a) and (b). You have to take the two statements to be true even if they seems to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Mark answer (A) If only conclusions (a) follows (B) If only conclusion (b) follows (C) If either (a) or (b) follows (D) If neither (a) nor (b) follows (E) If both (a) and (b) follows.

Statements: (i) All shops are books (ii) No book is costly

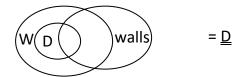
Conclusions: (a) All books are shops (b) No shop is costly





81. Statements: (i) All doors are windows (ii) Some windows are walls.

Conclusions: (a) All doors are walls (b) All walls are windows.



If 'x' means '÷', '-' means 'x', '÷' means '+', and '+' means '-' then 82.

$$(3-15 \div 11) \times 8 - 7 = ? = (3 \times 15 + 11) \div 8 \times 7 = 56 \div 56 = 1$$

- (A) 4 (B) 1 (C) 0 (D) 8 (E) None of these <u>B</u>
- 83. In the problem below instead of conventions +, -, x and ÷ symbols, some other are used. However, all lead to the same final answer. Find the correct final answer assessing the new symbols.
 - (i) 10 * 6 * 7 = x
- (ii) 3 * 10 * 10 = x
- (iii) 8 * 5 * 10 = x (iv) 4 * 8 * 11 = x

- (A) -15 (B) 352
- (C) 420
- (D) 23 =
- D i.e. <u>* = +</u>
- If \Box stands for +, Δ stands for -, \Box stands for x, \circ stands for \div , \Diamond stands for =, \triangle stands for >. State 84. which of the following expressions is true
 - (A) 5 ∏ 4 □ 1 ◊ 26 ∆ 2 □ 1
- (B) $15 \circ 3 \triangle 5 \triangle 10 \square 1 \triangle 2$

 - $5 \times 4 + 1 = 26 2 + 1$ $15 \div 3 5 > 10 \times 1 2$

 - (C) $5 \square 3 \square 5 \lozenge 5 \square 15 \triangle 55$ (D) $10 \square 2 \triangle 1 \lozenge 8 \square 2 \triangle 10$

$$5 \times 3 + 5 = 5 \times 15 - 55 = 20$$
 $10 \times 2 - 1 = 8 \times 2 - 10$

$$10 \times 2 - 1 = 8 \times 2 - 10$$

- <u>C</u>
- 85. In the following sequence how many 3s are there which are preceded by 7 but not followed by 9.

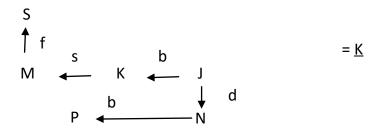
$$24739657385436735419387396452397354 = \underline{3}$$

86. How many Es are there in the following sequence, which are not preceded by A but followed by I?

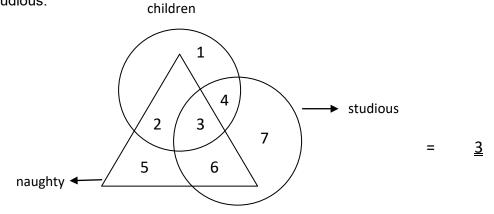
$$AEIOEIOAIEUEIAEIA = 3$$



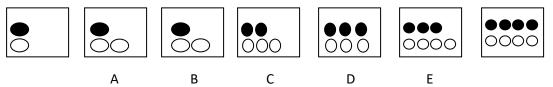
87 (a) K is brother of J (b) M is the sister of K (c) P is the brother N (d) N is the daughter of J (e) S is the father of M. Who is the uncle of P?



88. Study the following diagram and specify the region representing children who are naughty as well as studious.



89. In each of the following, a series begins with unnumbered figures on the extreme left. Only one of the five numbered figures in the series does not fit into the series. The two unnumbered figures, one each on the extreme left and the extreme right, fit into the series. You have to take as many aspects into account as possible of the figures in the series and find out the five numbered figures which do not fit into the series. The number of that figure is the answer.



The black dots as well as the 'ring' increase in number alternately by one beginning with black dot, so that the black dots should be as 1-1, 2-2, 3-3, 4-4..... and the ring should be as 1-2, 2-3, 3-4, 4-5..... B is misfit. = \underline{B}



90.	The number of vertical line increases by one every time. Fig © and (D) should interchange places $= \underline{C}$
	A B C D E
91.	Figures (c) and (D) should interchange places, joined lines become separated.
	A B C D E
	becomes, should become and becomes . <u>C</u>
92.	4 are straight lines, where as one is a circle. The 4 lines belong to one class. And the circle is not belong to this class. Therefore answer is $\underline{\underline{A}}$.
	A B C D E
93.	The first figure is one square and the second figure is two squares. The third and fourth figures should
	have the same relationship as the first and second have. That means the fourth figure should be the
	double of the third figure i.e. E.
	PROBLEM FIGURES ANSWER FIGURES
94.	A mirror always:- = $\underline{\underline{D}}$
	(A) Refracts (B) Reveals the truth (C) Distorts (D) Reflects (E) Distracts
95.	While riding a horse downhill, a person must: = $\underline{\underline{C}}$
	(A) Sit straight (B) Bend to his left (C) Bend his body backwards (E) Bend to right
96.	I am walking towards North. I will see the sun rising on? = \underline{B}
	(A) My left (B) Right (C) In front of me (D) None of above
07	Desert always have? - D



(A) Camel

(A) Slower than

- (B) Oasis
- (C) Storms

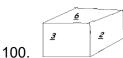
<u>A</u>

(D) Sand

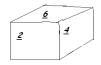
- 98.
 - Sound travels light. =
 - (B) As slow as
- (C) Faster than
- (D) As fast as

- 99. The pitch of the voice of women in general is?
 - (A) Higher than that of men
- (B) Lower than men (C) Same as men
- (D) Can not compared







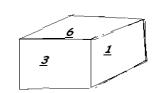


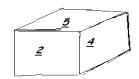


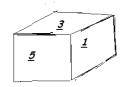
Which number is on the face opposite to 6?

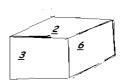
(A) 1 (B) 2 (C) 3 (D)4

6=3,2,4,5= <u>1</u>







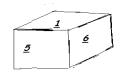


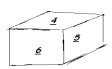
101.

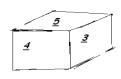
Which number is on the face opposite to 3? (A)2 (B) 3 (C)4 (D)6

3=6,1,5,2= <u>4</u>





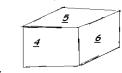


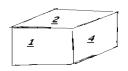


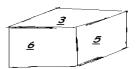
102.

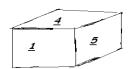
Which number is on the opposite to 4? (A)1 (B)2 (C)3 (D)5

4=6,5,2,3= <u>1</u>









103.

Which number is opposite to 3?

(A)2 (B) 1 (C)4 (D)6

3=6,5 1=2,4 4=5,6,1,2=3

So opposite of 3=4