CMAT 2018 Slot 2 Question Paper - January 20 Afternoon Session

---

Logical Reasoning

26. Looking at Sweety, Raj says to his friend, "Sweety is the grand-daughter of the elder brother of my father". How is Sweety related to Raj?

(1) Niece

(2) Sister

(3) Aunt

(4) Sister-in-law

---

27. Seven experts N, G, M, W, J, K and I give expert advice sessions to the XII class students. These sessions can take place either before the school, during lunch period or after the school. In scheduling these sessions the following conditions are followed.
At least two experts must hold the sessions before school.
At least three experts must hold their sessions after school.
M is not available after school and J is available only after school.
W always takes extra sessions during lunch.
G will take session before school only if N is also scheduled before school.
All the following statements could be true except:

(1) The same number of experts take sessions before school as after school

(2) The same number of experts take sessions before school as during lunch

(3) Twice as many experts take sessions after the school as before the school

(4) The same number of experts take sessions after school as during lunch

---

28. Six male friends A, B, C, D, E and F are married to R, S, U, V, T and W, not necessarily in the same order. Following facts are known about them:

R and S are A's sisters.

Neither R nor T are wives of C.

W is wife of E and V is wife of B.

D is not married to R, S or T.

Who is A's wife?

(1) R

(2) U

(3) T

(4) Cannot be determined

---

29. If southeast becomes east and northwest becomes west and all the other directions are changed in the same direction. Then what will be the direction for north?

(1) Northwest

(2) Southeast

(3) Southwest

(4) Northeast

---

30. Inspector arrested three persons - Kalia, Raza, Shera - on suspicion, in a theft case. It was found the one among these three was the thief. During the interrogation their replies were as follows:

Kalia: I am not the thief. Raza is the thief.

Raza: I am not the thief. Either Kalia or Shera is the thief.

Shera: I am not the thief. Raza is not the thief.

If exactly one person among them always speaks the truth, another always speaks lies and the third alternates between truth and lies, then who is the thief?

(1) Kalia

(2) Shera

(3) Raza

(4) Cannot be determined

---

31. A, B, C and D are four medical representatives of a company. Each of them must visit exactly two of the eight cities - Delhi, Chennai, Kolkata, Hyderabad, Bangalore, Mumbai, Lucknow and Patna - and each city is visited by only one person. C does not visit Mumbai and Delhi, while D does not visit Kolkata and Hyderabad. B does not visit Lucknow and Patna, whereas A does not visit Bangalore and Chennai. Patna and Bangalore are visited neither by B nor by C. If Delhi and Lucknow were visited by A, then which one of the following cities could B visit?

(1) Delhi

(2) Bangalore

(3) Lucknow

(4) Mumbai

---

32. Among the five numbers W, Y, C, D, M. W is greater than C but less than M, whereas Y is greater than D but not less than M. Which of the following can be the greatest of the five?

(1) D

(2) W

(3) C

(4) Y or M

---

33. A tutor has 10 students - A, B, C, D, E, F, G, H, I and J - to form four groups for tutorials. No group can have more than four students. No two groups can have the same number of students; and G must be in the same group. A and F must be in the same group. I should be alone and is in one group. B and E cannot be in the same group. F and E must be in different groups. If A, D, F and J form a group, then the other two groups can be -

(1) C, G and B, E, H

(2) C, H and B, E, G

(3) C, E, H and B, C, G

(4) None of these

---

34. A bookie has to inspect five horses A, B, C, D and E. If he inspects B, he cannot inspect C immediately. If he inspects A, he cannot go to E after that. Which of the following can be the correct order of his inspection?

(1) A, B, C, D, E

(2) D, B, C, E, A

(3) D, C, B, A, E

(4) D, C, B, E, A

---

35. Below given question contains six statements labelled A, B, C, D, E and F followed by four combinations of three statements. Choose the set in which the statements are logically related i.e. the third statement can be deduced from the first two statements together.

Read the information carefully and answer the question.

(A) All honest persons are good natured.

(B) Some good natured persons are not honest.

(C) Some honest persons are good natured.

(D) All honest person are obese.

(E) All obese person are good natured.

(F) Some good natured person are honest.

(1) ACD

(2) FAC

(3) BCF

(4) DEA

36. R1, R2, R3, R4, R5, R6, R7 are seven places on a map. The following places are connected by two-way roads: R1 and R2; R1 and R6; R3 and R6; R3 and R4; R6 and R7; R4 and R5; R2 and R3; R5 and R7. No other road exists. The shortest route (the route with the least number of intermediate places) from R1 to R7 is:

(1) R1 - R3 - R7

(2) R1 - R5 - R7

(3) R1 - R2 - R3 - R6 - R7

(4) R1 - R6 - R7

---

37. A, B, C, D and E are five rods. E is longer than A which is longer than C and lighter than C, which is lighter than D. B is shorter than D, and heavier than it. E is longer than D, and heavier than it. If B is the heaviest of all, then which of the following can be the lightest of all the five rods?

(1) E only

(2) A only

(3) E or A

(4) D or E

---

38. A, B and C are three films that are screened by three theatres PVR, DT and Regal in three consecutive slots. No film should be screened in the same slot by any two theatres. If DT screens film B in the first slot and PVR exhibits film C in the third slot, then which of these must be TRUE?

(1) PVR screens A in the second slot.

(2) DT exhibits C in the third slot.

(3) Regal exhibits A in the second slot.

(4) Regal exhibits C in third slot.

---

39. Five capitals A, B, C, D and E are connected by different modes of transport as follows:

A and B are connected by roads as well as by rail.

D and C are connected by bus and by boat.

B and E are connected only by air.

A and C are connected only by boat.

E and C are connected by rail and by bus.

Which of the following pair of capitals are connected by any of the routes directly (without going through any other capital)?

(1) A and E

(2) E and D

(3) B and C

(4) None of the pairs in the choices are directly connected

---

40. Insert the missing number.

EJO	80	TYE
DHL	84	PTX
CFI	?	LOR

(1) 63

(2) 82

(3) 88

(4) 45

---

41. P, Q, R, S and T are the five corners of a table with five sides. Chairs A, B, C, D and E are placed along the sides joining the angular corners. Neither P, Q, R, S, T nor A, B, C, D and E are necessarily in that order. Chair A is along the side joining the corner P and R. S is the immediate right of P, and R is between P and T. Chair B is along the side

of Q and T. Chairs D and E are next to B on either side. The corners that join the side where the chair C is placed are:

(1) P and R

(2) S and Q

(3) S and T

(4) P and S

---

42. Eight persons Jai, Kabir, Lakshaya, Mannu, Neetu, Om, Punita and Surbhi sit in two parallel rows with four seats in each row facing each other. Jai and Kabir are not in the same row. Neetu sits to the immediate left of Lakshaya in the same row but opposite to Om. Punita and Kabir have only two persons between them. Jai and Neetu have only one person between them. Which of these pairs of persons can sit diagonally opposite each other?

(1) Surbhi and Mannu or Om and Punita

(2) Neetu and Jai or Jai and Lakshaya

(3) Jai and Kabir or Punita and Lakshaya

(4) Either (1) or (2)

---

43. A, B, C, D, E, F, G, H and I are nine employees in a company, who go to meet two managers Ram and Deepak to talk to them about their project. Each manager has time for only three employees. D has a priority and must be given preference by Ram or Deepak. F and B do not wish to go to the same manager. G goes to Ram only and H goes to Deepak only. C comes back saying that neither of the two managers has time to see him. A does not go with F and I does not go with E. B and I do not go together. If E, F and G go together and are seen by one of the managers, then which manager sees whom, assuming that C has opted out of the talks?

(1) Deepak - D, I, H or D, B, H

(2) Deepak - D, E, H or D, B, H

(3) Ram - A, I, H or N, I, H

(4) Ram - D, I, H or A, I, H

---

44. There are three boxes of three different colours - Green, Blue and Red, and 6 toys of which 2 are of Green colour, 2 are of Blue colour and 2 are of Red colour. The toys are packed in the three boxes such that each box has 2 toys of different colours in it and also the colour of the box is different from the colour of the toys packed in it. Now, 10 chocolates are kept in these boxes in such a way that the Green box has the maximum possible chocolates in it whereas, the Red box has the least possible chocolates in it. Each box should have at least one chocolate and no two boxes have the same number of chocolates. Which of the following is true?

(1) The Green box, the Blue box and Red box have 6, 3 and 1 chocolates in them respectively

(2) The box which has the toys of Red and Blue colors has 8 chocolates in it.

(3) The box which has the toys of Blue and Green colors has 3 chocolates in it.

(4) The box which has the toys of Green and Red colors has 2 chocolates in it.

---

45. A, B, C are three girls who go to buy six items - P, Q, R, S, T and U. Each one of them buys two different items in such a way that if A buys R, then B buys neither P nor S. If B buys Q, then C buys neither U nor T. If A buys R and T, then B buys:

(1) P and S

(2) Q and U

(3) P and Q

(4) S and U

---

46. Below given question has a main statement followed by four statements labeled A, B, C and D. Choose the ordered pair of statements, where the first statement implies the second and the two statements are logically consistent with the main statement. You cannot catch the bus unless it is morning.

(A) This is morning.

(B) You can catch the bus.

(C) This is not morning.

(D) You cannot catch the bus.

(1) BD

(2) AC

(3) CB

(4) CD

---

47. If $m + n$ means m is sister of n,

$m - n$ means m is brother of n,

$m \times n$ means m is daughter of n, and

$m \div n$ means m is mother of n,

How many females can be shown by the given relationship?

$a + b - c + d - e \times f$

(1) 2

(2) 3

(3) 4

(4) Cannot be determined

---

48. Three coins are tossed in the air and two of the coins land with tails face upwards. What are the chances that on the next toss of the coins at least two of the coins will land with the tails facing upwards?

(1) 50%

(2) 25%

(3) 75%

(4) 100%

---

49. A family of three generation comprises of seven members - A, B, C, D, E, F and G. There are two married couples - one each of first and second generation respectively. They travel in three different cars - Audi, BMW and Honda so that now one has more than three members and there is at least one female in each car. C, who is a grand-daughter, does not travel with her grandfather and grandmother. B travels with his father E in BMW. F travels with her grand-daughter T in Audi. A travels with her daughter in Honda. Which of the following is one of the married couples?

(1) DB

(2) BC

(3) EF

(4) Cannot be determined

---

50. P, Q, R, S, T and U are six members of a family. R is not the mother of Q but Q is the son of R. P and R are a married couple. T is the brother of R. U is the brother of Q. S is the daughter of P. T is S's _____.

(1) Uncle

(2) Mother

(3) Brother

(4) Father
