



## **Assignment 2**

## <u>Set 1</u>

Six animals of the CAT family have to be accommodated in 9 cages, that are lined up in a row with the following conditions:

- I. Only one animal can be accommodated in one cage.
- II. The Tiger and the Lion must have no animal in the cage/s adjacent to theirs.
- III. The Tiger and the Panther have to be separated by one empty cage.
- IV. The Cougar has to have the Panther and the Puma as it's neighbours.
- V. None of the Tiger, Leopard or Panther must be in a cage at the end of the row.
- VI. The Leopard must be in a cage next to the end.
- 1. Who is in the middle cage?
- (1) Panther
- (2) Cougar
- (3) Tiger
- (4) Puma





- 2. Which animal has empty cages as both it's neigbours?
- (1) Tiger
- (2) Leopard
- (3) Lion
- (4) (1) & (3)





- **3.** How many pairs of animals are separated by 6 cages?
- (1) 3
- (2) 2
- (3) 1
- (4) 0





- **4.** Who is the neighbour to the immediate left of Leopard?
- (1) Vacant cage
- (2) Puma
- (3) Panther
- (4) Cannot be determined





## Set 2

At the new India School, six subjects viz. Mathematics, Physics, Chemistry, Biology, English and Moral Science are taught, 3 in the morning session and 3 in the noon session with the two sessions being separated by a launch break. The sequence of conducting the lectures, from 1, 2, ....., to 6, has to be decided based on the following conditions:

- I. Mathematics should be immediately before Physics and the two subjects should not be separated by any break.
- II. Moral Science must be the first lecture or the last lecture.
- **5.** How many of the subjects can never be third in the sequence of lectures?
- (1) One
- (2) Two
- (3) Three
- (4) Four





- **6.** If physics can never be the  $n^{th}$  in the sequence of lectures, how many values can n assume?
- (1) 0
- (2) 1
- (3) 2
- (4) 3





- **7.** Mathematics could be any of the following in the sequenc of lectures EXCEPT
- (1) First
- (2) Second
- (3) Third
- (4) Fourth





- **8.** In case English is immediately after Moral Science, Physics could be which of the following in the sequence?
- (1) Fifth
- (2) Fourth
- (3) Third
- (4) Second





- **9.** In case English and Biology are the fifth and sixth lectures respectively, then which of the following must be true?
- (1) Chemistry is first in the sequence
- (2) Chemistry is third in the sequence
- (3) Chemistry is fourth in the sequence
- (4) Mathematics is first in the sequence





### <u>Set 3</u>

John is undecided about which movie to watch. He is considering among four movies that were released this week. Each movie belonged to one of the following genres: Romance, Period, Action and Horror. Each of Salman, Hrithik, Aamir and Shah Rukh starred in exactly one of the movies. And the production houses that produced the movies were, Adlabs, Yash-raj Movies, Red-Chillies and Ramsay Brothers, each production house producing one movie. Further,

- I. The movies starring Shah Rukh is produced by Ramsay Brothers
- II. The romantic movies is produced by Red-Chillies
- III. Hrithik stars in the action movie and the movie is not produced by Yash-Raj Movies
- IV. The period movie stars Salman
- **10.** The movie produced by Adlabs falls in which genre?
- (1) Romance
- (2) Horror
- (3) Period
- (4) Action





- 11. The movie that stars Shah Rukh is a
- (1) Romance
- (2) Horror
- (3) Period
- (4) Action





- 12. Aamir stars in movie of which production house
- (1) Ramsay Brothers
- (2) Red-Chillies
- (3) Adlabs
- (4) Yash-Raj Movies





- 13. The romantic movie stars
- (1) Shah Rukh
- (2) Salman
- (3) Hrithik
- (4) Aamir





#### Set 4

Each of Mrs. Goyal, Mrs. Agarwal, Mrs. Gupta and Mrs. Bansal enter Big Bazar and exit the store independently i.e. none of them enter or leave simultaneously. Further all of them enter and leave only once. Both while entering and while exiting, Mrs. Agarwal is earlier than Mrs. Gupta. None of the ladies have the same position (first, second, third or fourth) for both – entry to the store an exit from the store.

- **14.** Which of the following could be the order, from first to last, in which the ladies exit the store on a day on which they enter it in the order: Mrs. Bansal, Mrs. Goyal, Mrs. Agarwal, Mrs. Gupta?
- (1) Mrs. Goyal, Mrs. Agarwal, Mrs. Gupta, Mrs. Bansal
- (2) Mrs. Goyal, Mrs. Agarwal, Mrs. Bansal, Mrs. Gupta
- (3) Mrs. Agarwal, Mrs. Goyal, Mrs. Gupta, Mrs. Bansal
- (4) Mrs. Gupta, Mrs. Bansal, Mrs. Goyal, Mrs. Agarwal,





- **15.** If, on a certain day, Mrs. Goyal and Mrs. Bansal enter the store second and third, respectively and Mrs. Goyal also leaves the building before Mrs. Bansal does, the order in which the ladies exit the store, from first to fourth, must be:
- (1) Mrs. Goyal, Mrs. Agarwal, Mrs. Gupta, Mrs. Bansal
- (2) Mrs. Goyal, Mrs. Agarwal, Mrs. Bansal, Mrs. Gupta
- (3) Mrs. Goyal, Mrs. Bansal, Mrs. Agarwal, Mrs. Gupta
- (4) Mrs. Agarwal, Mrs. Goyal, Mrs. Gupta, Mrs. Bansal





- **16.** One day on which the two ladies, who enter the store first, are also the two ladies who leaves it first, the last two ladies to enter the building could be:
- (1) Mrs. Goyal and Mrs. Bansal
- (2) Mrs. Agarwal and Mrs. Gupta
- (3) Mrs. Agarwal and Mrs. Bansal
- (4) Mrs. Gupta and Mrs. Bansal





- **17.** On a day on which Mrs. Agarwal enters the store second and Mrs. Bansal enters it third, which of the following must be true?
- (1) Mrs. Goyal leaves the store first
- (2) Mrs. Goyal leaves the store third
- (3) Mrs. Agarwal leaves the store first
- (4) Mrs. Gupta leaves the store third





# <u>Set 5</u>

All the six members of a family M, N, O, P, Q and R are travelling together. N is the son of O but O is not the mother of N, M and O are a married couple. Q is the brother of O. P is the daughter of M. R is the brother of N.

- **18.** How many male members are there in the family?
- (1) one
- (2) two
- (3) three
- (4) four





- **19.** Who is the mother of N?
- (1) P
- (2) R
- (3) Q
- (4) M





- **20.** How many children does M have?
- (1) one
- (2) two
- (3) three
- (4) four





- **21.** Who is the wife of Q
- (1) M
- (2) R
- (3) N
- (4) Cannot be determined





- **22.** Which of the following is a pair of females?
- (1) MQ
- (2) NP
- (3) PR
- (4) MP





- **23.** How is Q related to P?
- (1) Father
- (2) Brother
- (3) Uncle
- (4) Cannot be determined