Section-III
LOGIC / REASONING

Read the passage carefully and answer the following questions.

"There are six steps that lead from the first to the second floor. No two people can be on the same step. Mr. A is two steps below Mr. C and Mr. B is a step next to Mr. D. Only one step is vacant (No one is standing on that step). Denote the first step by step 1 and second step by step 2 etc."

1. If Mr. A is on the first step, which of the following is true?
   (a) Mr. B is on the second step
   (b) Mr. C is on the fourth step
   (c) Mr. E, could be on the third step
   (d) Mr. D is on higher step than Mr. C.

2. If Mr. E was on the third step & Mr. B was on a higher step than Mr. E, which step must be vacant?
   (a) step 1   (b) step 2   (c) step 4   (d) step 5

3. If Mr. B was on step 1, which step could A be on?
   (a) 2 & 3 only   (b) 3 & 4 only   (c) 3 & 5 only   (d) 4 & 5 only.

4. If there were two steps between the step that A was standing and the step that B was standing or, and A was on a higher step than D, A must be on step __.
   (a) 2   (b) 3   (c) 4   (d) 5

5. In A language, if intelligent is coded as hosfkmhhdos, how is 'suspect' coded?
   (a) ttofdu   (b) tttofbu   (c) rvrqdds   (d) rvrqbds

6. In a class composed of x girls and y boys, what part of class is composed of girls?
   (a) y/(x + y)   (b) x/xy   (c) x/(x + y)   (d) y/xy

7. There are 200 questions on a 3 hr examination. Among these questions, 50 are maths problems. It is suggested that twice as much time be spent on each maths problem as for each other question. How many minutes should be spent on mathematics problems?
   (a) 36   (b) 72   (c) 60   (d) 100

Read the passage carefully and answer the following questions.

"All G's are H's. All G's are J's or K's.
All J's and K's are G's.
All L's are K's.
All N's are M's.
No M's are G's."

8. If no P's are K's, which of the following must be true?
   (a) All P's are J's
   (b) No P is a G
   (c) No P is an H
   (d) If any P is an H it is a G

9. Which of the following can be logically deduced from the conditions stated?
   (a) No M's are H's
   (b) No M's that are not N's are H
   (c) Both a and b are correct
   (d) None of the above is correct

10. Which of the following inconsistent with one or more of the conditions?
    (a) All H's are G's
    (b) All H's that are not G's are M's
    (c) Some H's are both M's and G's
    (d) No M's are H's

Read the passage carefully and answer the following questions.

"Six swimmers A, B, C, D, E, F compete in a race. The outcome is as follows.
i.   B does not win.
ii.   Only two swimmers separate E & D.
iii. A is behind D & E
iv.   B is ahead of E, with one swimmer intervening
v.   F is ahead of D
vi.   F is ahead of D"

11. Who stood fifth in the race?
    (a) A   (b) B   (c) C   (d) E

12. How many swimmers separate A and F?
    (a) 1   (b) 2   (c) 4   (d) cannot be determined

13. The swimmer between C & E is __.
    (a) None   b) F   (c) D   (b) B

14. If at the end of the race, swimmer D is disqualified by the judges then swimmer B finishes in which place?
    (a) 1   (b) 2   (c) 3   (d) 4

15. If "PROMPT" is coded as QSPLOS, then "PLAYER" should be
    (a) QMBZFS   (b) QWMFDW   (c) QUREXM   (d) URESTI

The questions 130-135 are based on the following pattern.The problems below contain a question and two statements giving certain data. You have to decide whether the data given in the statements are sufficient for answering the questions. The correct answer is
    (A) If statement (I) alone is sufficient but statement (II) alone is not sufficient.
    (B) If statement (II) alone is sufficient but statement(I) alone is not sufficient.
    (C) If both statements together are sufficient but neither of statements alone is sufficient.
    (D) If both together are not sufficient.
15. What is John's age?
    (I) In 15 years John will be twice as old as Dias would be   (II) Dias was born 5 years ago

16. What is the distance from city A to city C in kms?
    (I) City A is 90 kms from City B   (II) City B is 30 kms from City C

17. If A=C. A, B, C are real numbers, then -
    (I) A-B=B-C   (II) A-2C = C-2B

18. What is the 30th term of a given sequence?
    (I) The first two terms of the sequence are 1, ½   (II) The common difference is -1/2

19. Was Avinash early, on time or late for work?
    (I) He thought his watch was 10 minutes fast   (II) Actually his watch was 5 minutes slow

20. What is the value of A if A is an integer?
    (I) $A^4 = 1$ (II) $A^3 + 1 = 0$