

Maveric Systems Model Placement Paper

Solve the following questions:

1. It was calculated that 75 men could complete a piece of work in 20 days. When work was scheduled to commence, it was found necessary to send 25 men to another project.
2. How much longer will it take to complete the work? A student divided a number by $\frac{2}{3}$ when he required to multiply by $\frac{3}{2}$.
3. Calculate the percentage of error in his result. A dishonest shopkeeper professes to sell pulses at the cost price, but he uses a false weight of 950gm. For a kg. His gain is? %.
4. A software engineer has the capability of thinking 100 lines of code in five minutes and can type 100 lines of code in 10 minutes. He takes a break for five minutes after every ten minutes. How many lines of codes will he complete typing after an hour?
5. A man was engaged on a job for 30 days on the condition that he would get a wage of Rs. 10 for the day he works, but he have to pay a fine of Rs. 2 for each day of his absence. If he gets Rs. 216 at the end, he was absent for work for Days.
6. A contractor agreeing to finish a work in 150 days, employed 75 men each working 8 hours daily. After 90 days, only $\frac{2}{7}$ of the work was completed. Increasing the number of men by _____ each working now for 10 hours daily, the work can be completed in time.
7. what is a percent of b divided by b percent of a?
 - a. a
 - b. b
 - c. 1
 - d. 100
8. A man bought a horse and a cart. If he sold the horse at 10 % loss and the cart at 20 % gain, he would not lose anything; but if he sold the horse at 5% loss and the cart at 5% gain, he would lose Rs. 10 in the bargain. The amount paid by him was Rs. _____ for the horse and Rs. _____ for the cart.
9. A tennis marker is trying to put together a team of four players for a tennis tournament out of seven available. Males-a, b and c; females m, n, o and p. All players are of equal ability and there must be at least two males in the team. For a team of four, all players must be able to play with each other under the following restrictions: b should not play with m, c should not play with p, and a should not play with o. Which of the following statements must be false? b and p cannot be selected together c and o cannot be selected together c and n cannot be selected together. The following figure depicts three views of a cube. Based on this, answer questions 10 -12.
10. The number on the face opposite to the face carrying 1 is _____.
11. The number on the faces adjacent to the face marked 5 are _____.
12. Which of the following pairs does not correctly give the numbers on the opposite faces.

- a. 6, 5
- b. 4, 1
- c. 1, 3
- d. 4, 2

13. Five farmers have 7, 9, 11, 13 & 14 apple trees, respectively in their orchards. Last year, each of them discovered that every tree in their own orchard bore exactly the same number of apples. Further, if the third farmer gives one apple to the first, and the fifth gives three to each of the second and the fourth, they would all have exactly the same number of apples. What were the yields per tree in the orchards of the third and fourth farmers?

14. Five boys were climbing a hill. J was following H. R was just ahead of G. K was between G & H. They were climbing up in a column. Who was the second? 15. John is undecided which of the four novels to buy. He is considering a spy thriller, a Murder mystery, a Gothic romance and a science fiction novel. The books are written by Rothko, Gorky, Burchfield and Hopper, not necessary in that order, and published by Heron, Piegon, Blueja and sparrow, not necessary in that order.

- a. The book by Rothko is published by Sparrow.
- b. The Spy thriller is published by Heron.
- c. The science fiction novel is by Burchfield and is not published by Blueja.
- d. The Gothic romance is by Hopper.

15. Pigeon publishes _____.

16. The novel by Gorky _____.

17. John purchases books by the authors whose names come first and third in alphabetical order. He does not buy the books _____.

18. On the basis of the first paragraph and statement (2) (3), and (4) only, it is possible to deduce that Rothko wrote the murder mystery or the spy thriller Sparrow published the murder mystery or the spy thriller The book by Burchfield is published by Sparrow.

19. If a light flashes every 6 seconds, how many times will it flash in $\frac{3}{4}$ of an hour?

20. If point P is on line segment AB, then which of the following is always true?

- a. $AP = PB$
- b. $AP > PB$
- c. $PB > AP$
- d. $AB > AP$
- e. $AB > AP + PB$