

CMC Sample Question Paper Pattern

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

Mr. B is a step next to Mr. D

Only one step is vacant (No one 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) A person Mr. E, could be on the third step
- (d) Mr. D is on higher step than Mr. C.

Ans : (d)

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
- (e) step 6

Ans : (a)

3. If Mr. B was on step 1, which step could A be on?

- (a) 2&e only
- (b) 3&5 only
- (c) 3&4 only
- (d) 4&5 only
- (e) 2&4 only

Ans : (c)

4. If there were two steps between the step that A was standing and the step that B was standing on, and A was on a higher step than D , A must be on step

- (a) 2
- (b) 3
- (c) 4
- (d) 5
- (e) 6

Ans : (c)

5. Which of the following is false

- i. B&D can be both on odd-numbered steps in one configuration
 - ii. In a particular configuration A and C must either both an odd numbered steps or both an even-numbered steps
 - iii. A person E can be on a step next to the vacant step.
- (a) i only
 - (b) ii only
 - (c) iii only
 - (d) both i and iii

Ans : (c)

Directions for questions 6-9: The questions are based on the information given below

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 a head of D

6. Who stood fifth in the race ?

- (a) A
- (b) B
- (c) C
- (d) D
- (e) E

Ans : (e)

7. How many swimmers separate A and F ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) cannot be determined

Ans : (d)

8. The swimmer between C & E is

- (a) none
- (b) F
- (c) D
- (d) B
- (e) A

Ans : (a)

9. If 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
- (e) 5

Ans : (b)

Directions for questions 10-14: The questions are based on the information given below

Five houses lettered A,B,C,D, & E are built in a row next to each other. The houses are lined up in the order A,B,C,D, & E. Each of the five houses has a colored chimney. The roof and chimney of each house must be painted as follows.

- i. The roof must be painted either green, red, or yellow.
- ii. The chimney must be painted either white, black, or red.
- iii. No house may have the same color chimney as the color of roof.
- iv. No house may use any of the same colors that the every next house uses.
- v. House E has a green roof.
- vi. House B has a red roof and a black chimney

10. Which of the following is true ?

- (a) At least two houses have black chimney.
- (b) At least two houses have red roofs.
- (c) At least two houses have white chimneys
- (d) At least two houses have green roofs
- (e) At least two houses have yellow roofs

Ans : (c)

11. Which must be false ?

- (a) House A has a yellow roof

- (b) House A & C have different color chimney
- (c) House D has a black chimney
- (d) House E has a white chimney
- (e) House B&D have the same color roof.

Ans : (b)

12. If house C has a yellow roof. Which must be true.

- (a) House E has a white chimney
- (b) House E has a black chimney
- (c) House E has a red chimney
- (d) House D has a red chimney
- (e) House C has a black chimney

Ans : (a)

13. Which possible combinations of roof & chimney can house

- I. A red roof & a black chimney
 - II. A yellow roof & a red chimney
 - III. A yellow roof & a black chimney
- (a) I only
 - (b) II only
 - (c) III only
 - (d) I & II only
 - (e) I&II&III

Ans : (e)

14. What is the maximum total number of green roofs for houses

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) 5

Note: The questions from 15-27 are multiple choice in the paper

15. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe

Ans $\frac{5}{9}$

16. What is the selling price of a car? If the cost of the car is Rs.60 and a profit of 10% over selling price is earned

Ans : Rs 66/-

17. $\frac{1}{3}$ of girls , $\frac{1}{2}$ of boys go to canteen .What factor and total number of classmates go to canteen.

Ans : Cannot be determined.

18. The price of a product is reduced by 30% . By what percentage should it be increased to make it 100%

Ans : 42.857%

19. There is a square of side 6cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.

Ans : $\frac{11}{14}$

20. There are two candles of equal lengths and of different thickness. The thicker one lasts of six hours. The thinner 2 hours less than the thicker one. Ramesh lights the two candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. How long ago did Ramesh light the two candles .

Ans : 3 hours.

21. If $\frac{M}{N} = \frac{6}{5}$, then $3M+2N = ?$

22. If $\frac{p}{q} = \frac{5}{4}$, then $2p+q= ?$

23. If PQRS is a parallelogram what is the ratio of triangle PQS & parallelogram PQRS .

Ans : 1:2

24. The cost of an item is Rs 12.60. If the profit is 10% over selling price what is the selling price ?

Ans : Rs 13.86/-

25. There are 6 red shoes & 4 green shoes . If two of red shoes are drawn what is the probability of getting red shoes

Ans : $\frac{6c2}{10c2}$

26. To 15 lts of water containing 20% alcohol, we add 5 lts of pure water. What is % alcohol.

Ans : 15%

27. A worker is paid Rs.20/- for a full days work. He works $1\frac{1}{3}, 2\frac{2}{3}, 1\frac{3}{8}, \frac{3}{4}$ days in a week. What is the total amount paid for that worker ?

Ans : 57.50

28. If the value of x lies between 0 & 1 which of the following is the largest?

- (a) x
- (b) x^2
- (c) $-x$
- (d) $1/x$

Ans : (d)