

## Capgemini mock-2

Q1. Which of the following numbers will completely divide  $(4^{61} + 4^{62} + 4^{63} + 4^{64})$  ?

- (a) 3                      (b) 10                      (c) 11                      (d) 13

Q2. A 30% loss on cost price is what percent loss on selling price?

- (a) 30%                      (b) 20%                      (c) 15%                      (d) None of these

Q3. A, B and C hire a taxi for Rs. 2400 for one day. A, B and C used the car for 6 hours, 8 hours and 10 hours respectively. How much did C pay?

- (a) Rs. 800                      (b) Rs. 1000                      (c) Rs. 600                      (d) Rs. 1200

Q4. The ratio of investments of A and B is 8 : 7 and the ratio of their yearend profits is 20 : 21. If B invested for 12 months, then find the period of investment of A:

- (a) 6 months                      (b) 8 months                      (c) 10 months                      (d) 12 months

Q5. What percent is 2 minutes 24 seconds of an hour?

- (a) 6%                      (b) 2%                      (c) 4%                      (d) 8%

Q6.  $(\sin 30^\circ + \cos 60^\circ) - (\sin 60^\circ + \cos 30^\circ)$  is equal to:

- (a) 0                      (b)  $1+2\sqrt{3}$                       (c)  $1-\sqrt{3}$                       (d)  $1+\sqrt{3}$

Q7. The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

- (a) 23 years                      (b) 24 years                      (c) 25 years                      (d) None of these

Q8. The total cost of 8 buckets and 5 mugs is Rs. 92 and the total cost of 5 buckets and 8 mugs is Rs. 77. Find the cost of 2 mugs and 3 buckets.

- (a) Rs. 35                      (b) Rs. 70                      (c) Rs. 30                      (d) Rs. 38

Q9. If  $4x/3 + 2P = 12$  for what value of P,  $x = 6$ ?

- (a) 6                      (b) 4                      (c) 2                      (d) 1

Q10. What number must be added to the expression  $16a^2 - 12a$  to make it a perfect square?

- (a)  $9/4$                       (b)  $11/2$                       (c)  $13/2$                       (d) 16

Q11. The straight line  $2x + 3y = 12$  passes through:

- (a) 1st, 2nd and 3rd quadrant (b) 1st, 2nd and 4th quadrant  
(c) 2nd, 3rd and 4th quadrant (d) 1st, 3rd and 4th quadrant

Q.12 In  $\triangle ABC$ ,  $\angle A + \angle B = 65^\circ$ ,  $\angle B + \angle C = 140^\circ$ , then find  $\angle B$ .

- (a)  $40^\circ$  (b)  $25^\circ$  (c)  $35^\circ$  (d)  $20^\circ$

Q13. The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:

- (a) 35 years (b) 40 years (c) 50 years (d) None of these

Q14. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?

- (a) 3 (b) 4 (c) 9 (d) Cannot be determined (e) None of these

Q15. B is the only child of A. M and N are the children of B. D is the grandmother of N. How is A related to D?

- (a) Grandmother (b) Husband (c) Mother (d) Son

Q16. A man goes to the park and sees a girl who he recognized to be his relative. The girl was the daughter of his sister's husband-wife. How is the girl related to the man?

- (a) Niece (b) Sister-in-law (c) Sister (d) Aunt

Q17. There is a family of six-person P, Q, R, S, T, and U. They are Lawyers, Doctor, Teacher, Salesman, Engineer, and Accountant. There are two married couples in the family. S, the salesman is married to the Lady Teacher. The Doctor is married to the Lawyer U, The Accountant is the son of Q and brother of T. R, the Lawyer is the daughter-in-law of P. T is the unmarried Engineer. P is the Grandmother of U. Which is the profession of P?

- (a) Lawyer (b) Teacher (c) Doctor (d) Accountant

Q18. A lady runs 18km towards East and then 24km towards North how far is she from her starting point and in which direction?

- (a) 42 km North-east (b) 42 km East (c) 6 km East (d) 30 km North-east

Q19. Statements:

All red is black.

All black is pink.

Conclusions:

1. Some black are red
2. Some pink are red
3. Some red are not pink
4. All pink are black

(a) Only 1 and 2      (b) Only 1 and 3      (c) Only 1 and 4      (d) Only 2 and 4

Q20. The only people to attend a conference were four ship captains and the first mates of three of those captains. The captains were L, M, N, and O; the first mates were A, D and G Each person, in turn, delivered a report to the assembly as follows: Each of the first mates delivered their report exactly after his or her captain. The first captain to speak was M, and captain N spoke after him. 1. Among the following which is not an appropriate order of delivered reports?

- A. M, A, N, G, O, L, D
- B. M, D, N, G, L, O, A
- C. M, N, A, L, D, O, G
- D. M, N, A, O, D, L, G
- E. M, N, G, D, O, L, A

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

Q21. Statements:

All phones are computers.

All computers are calculators.

Conclusions:

1. All calculators are computers
2. All phones are calculators
3. All computers are phones
4. Some calculators are phones

(a) Only 1 and 4      (b) Only 3 and 4      (c) Only 2 and 4      (d) Only 1 and 2

Q22. O, T, T, F, F, S, S (what is the next)

(a) E      (b) F      (c) G      (d) H

Q23. The oar is to rowboat as the foot is to

(a) Running      (b) Sneaker      (c) Skateboard      (d) Jumping

Directions (24-28): Study the given information carefully and answer the given questions:

Eight people -A, B, C, D, E, F, G and H are sitting around a circular table facing the centre, not necessarily in the same order. Three people are sitting between A and D. B is sitting second to the right of A. C is to the immediate right of F. D is not an immediate neighbour of either F or E. H is not an immediate neighbour of B.

Q24. What is E's position with respect to G?

- (a) Third to the left                      (b) Second to the right                      (c) Third to the right  
(d) Second to the left                      (e) Fifth to the right

Q25. Four of the following five are alike in a certain way, based on their seating positions in the above arrangement and so form a group. Which one does not belong to the group?

- (a) GE                      (b) DC                      (c) AF                      (d) AB                      (e) DB

Q26. Who is sitting third to the right of the one who is sitting to the immediate right of H?

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

Q27. Which of the following is true regarding the given arrangement ?

- (a) E is second to the left of C                      (b) B is an immediate neighbour of G  
(c) H is an immediate neighbour of A                      (d) D is not an immediate neighbour of H  
(e) None Of these

Q28. How many people are sitting between H and A when counted from the right side of H?

- (a) Three                      (b) None                      (c) More than three                      (d) One                      (e) Two

Q29. A vendor bought toffees at 12 for two rupees. How many for a rupee must he sell to gain 20%?

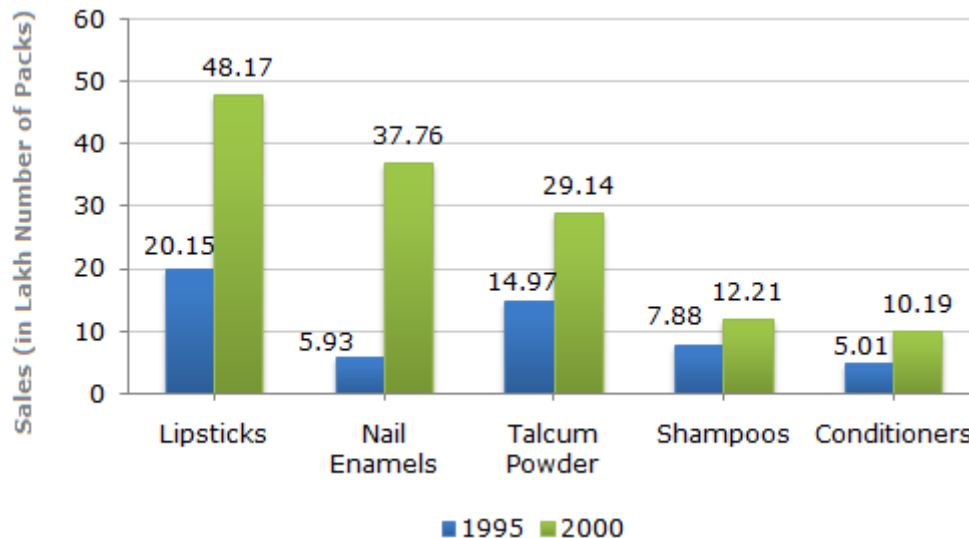
- (a) 3                      (b) 4                      (c) 5                      (d) 6

Q30. The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is:

- (a) 20                      (b) 30                      (c) 40                      (d) None of these

Directions (31-35) : A cosmetic company provides five different products. The sales of these five products (in lakh number of packs) during 1995 and 2000 are shown in the following bar graph.

**Sales (in lakh number of packs) of five different products of Cosmetic Company during 1995 and 2000**



Q31. The sales of lipsticks in 2000 was by what percent more than the sales of nail enamels in 2000? (rounded off to nearest integer)

- (a) 33%                      (b) 31%                      (c) 28%                      (d) 22%

Q32. During the period 1995-2000, the minimum rate of increase in sales is in the case of?

- (a) Shampoos              (b) Nail enamels              (c) Talcum powders              (d) Lipsticks

Q33. What is the approximate ratio of the sales of nail enamels in 2000 to the sales of Talcum powders in 1995?

- (a) 7:2                      (b) 5:2                      (c) 4:3                      (d) 2:1

Q34. The sales have increase by nearly 55% from 1995 to 2000 in the case of?

- (a) Lipsticks              (b) Nail enamels              (c) Talcum powders              (d) Shampoos

Q35. The sales of conditioners in 1995 was by what percent less than the sales of shampoos in 1995? (rounded off to nearest integer)

- (a) 57%                      (b) 36%                      (c) 29%                      (d) 25%

Q36. If  $X + Y$  means X is the daughter of Y;  $X - Y$  means X is the brother of Y;  $X \% Y$  means X is the father of Y and  $X \times Y$  means X is the sister of Y. Which of the following means I is the niece of J?

- (a)  $J - N \% C \times I$               (b)  $I \times C - N \% J$               (c)  $J + M \times C \% I$               (d)  $I \times C + N - J$

Q37. In the series 2, 6, 18, 54, ..... what will be the 8th term ?

- (a) 4370 (b) 4374 (c) 7443 (d) 7434

Q38. In a family, each daughter has the same number of brothers as she has sisters and each son has twice as many sisters as he has brothers. How many sons are there in the family ?

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

Q39. How many days are there in  $x$  weeks  $x$  days?

- (a)  $7x^2$  (b)  $8x$  (c)  $14x$  (d) 7

Q40. At what angle the hands of a clock are inclined at 15 minutes past 5?

- (a)  $55.5^\circ$  (b)  $64^\circ$  (c)  $67.5^\circ$  (d)  $72.5^\circ$

## Answer key

1	B	9	C	17	B	25	B	33	B
2	D	10	A	18	D	26	C	34	D
3	B	11	B	19	A	27	B	35	B
4	C	12	B	20	E	28	E	36	D
5	C	13	B	21	C	29	C	37	B
6	C	14	B	22	A	30	A	38	B
7	A	15	B	23	C	31	C	39	B
8	A	16	A	24	D	32	A	40	C