Adobe mock 1

Directions : A solid cube of 4 inches has been painted red, green and black on the pairs of opposite faces. It has then been cut into one inch cubes. Following questions relate to the smaller one inch cubes.

Q1.How many cubes have only one face painted?
(1) 8 (2) 16 (3) 24 (4) 32

Q2. How many cubes have only two faces painted?
(1) 0 (2) 16 (3) 24 (4) 32

Q3. How many cubes have only four faces painted?
(1) 0 (2) 8 (3) 12 (4) 16

Q4. How many cubes have no faces painted?
(1) 0 (2) 8 (3) 16 (4) 24

Q5. \'Win\' is related to \'Competition\' in the same way as \'Invention\' is related to?
(1) Discovery (2) Experiment (3) Trial (4) Laboratory

Q6. In a certain code language,
i. \'Guda buka\' means \'Clear water\'
ii. \'Pin gola\' means \'Overcast sky\'
iii. \'Pin saf buka\' means \'Clear blue sky\'

Which word in that code language means \'Blue\'?
(1) Pin (2) Buka (3) Saf (4) Guda

Q7. I was born on August 11. Mohan is younger to me by 11 days. This year Independence Day falls on Monday. The day on which Mohan\'s birthday will fall this year will be
(1) Monday (2) Tuesday (3) Sunday (4) Thursday

Q8. The flowers in a basket become double after every minute. In one hour, the basket becomes full. After how many minutes, the basket would be half-filled?
1) 30 (2) 45 (3) 59 (4) 58

Q9. Which of the following will come in place of the question mark (?) in the following letter series?
BXF, DVI, FTL, HRO,?
1) JPL (2) KPL (3) JOL (4) None of these

Q10. If \'+\' means \'*\', \'-\' means \'/\' , \'/\' means \'+\' and \'*\' means \'-\' , then what will the value

of 20/ 40 ? 4 * 5 +6 ?

1) 60 (2) 1.67 (3) 150 (4) 0

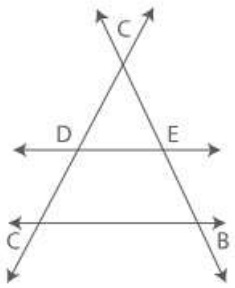
Q11. 7 cannibals of XYZ island, decide to throw a party. As you may be aware, cannibals are guys who eat human beings. The senior among them – Father Cannibal decides that any 6 of them will eat up one cannibal, then out of the remaining six – five of them will eat up one cannibal and so on till one is left. What is the time until one cannibal is left, if it takes one cannibal 3 hours to eat up one cannibal independently?

A. 7 hrs 11 min
B. 6 hrs 12 min
C. 7 hrs 21 min
D. 18 hrs 16 min

Q12. Three articles are purchased for Rs. 1050, each with a different cost. The first article was sold at a loss of 20%, the second at 1/3rd gain and the third at 60% gain. Later he found that their SPs were same. What was his net gain/loss?

A. 14.28% gain
B. 13% loss
C. 12% loss
D. 11.11% gain

Q13. In the figure below, line DE is parallel to line AB. If CD = 3 and AD = 6, which of the following must be true?



I. $\Delta CDE \approx \Delta CAB$
II. (area ΔCDE / area ΔCAB) = $(CD/CA)^2$
III. If AB = 4, then DE = 2

A. I and II only
B. I and III only
C. II and III only
D. I, II and III

Q14. In a game of tennis, A gives B 21 points and gives C 25 points. B gives C 10 points. How many points make the game?

A. 50
B. 45
C. 35
D. 30

Q15. What is the value of a if $x^3 + 3x^2 + ax + b$ leaves the same remainder when divided by (x – 2) and (x + 1)?

A. 18
B. 3
C. -6
D. Cannot be determined

Q16. A square, S_1, circumscribes the circum circle of an equilateral triangle of side 10 cm. A square, S_2, is inscribed in the in circle of the triangle. What is the ratio of the area of S_1 to the area of S_2?

A. 4:1
B. 32:1
C. 8:1
D. 2:1

Q17. Three casks of equal capacities contain three liquids A, B & C in the ratio 1 : 2 : 3, 3 : 4 : 5 & 5 : 6 : 7 respectively. The mixtures from these casks are taken in the ratio 1 : 2 : 3 and poured into a 4th cask with the same capacity as that of the three casks and the cask is completely filled. What is the ratio of the liquids A, B and C in the resulting mixture?

A. 25:36:47
B. 16:21:26
C. 3:4:5
D. 1:2:3

Q18. A trader sells two bullocks for Rs. 8,400 each, neither losing nor gaining in total. If he sold one of the bullocks at a gain of 20%, the other is sold at a loss of

A. 20 %
B. 18%
C. 14%
D. 21 %
E. None of these

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Q19. I. $x^2 + 11x + 30 = 0$,
II. $y^2 + 15y + 56 = 0$ to solve both the equations to find the values of x and y?

A. If x < y

B. If x > y

C. If x â‰¤ y

D. If x â‰¥ y

E. If x = y or the relationship between x and y cannot be established.

Q20. $(18^2 - 9^2 * 3) / (675 * ?) = 4$

A. 27

B. 12

C. 4.5

D. 6

E. None of these

Q21. 10 men and 15 women together can complete a work in 6 days. It takes 100 days for one man alone to complete the same work. How many days will be required for one woman alone to complete the same work?

A. 90

B. 125

C. 145

D. 150

E. None of these

Q22. A delegation of 5 members has to be formed from 3 ladies and 5 gentlemen. In how many ways the delegation can be formed, if 2 particular ladies are always included in the delegation?

A. 20

B. 54

C. 42

D. 60

E. 40

Q23. A boy goes to his school from his house at a speed of 3 km/hr and returns at a speed of 2 km/hr. If he takes 5 hours in going and coming. The distance between his house and school is?

A. 5 km

B. 5.5 km

C. 6 km

D. 6.5 km

Q24. Subtracting 10% from X is the same as multiplying X by what number?

A. 80%

B. 90%

C. 10%

D. 50%

Q25. Find the one which does not belong to that group ?

A. Thiruvananthapuram

B. Hyderabad

C. Calicut

D. Bangalore

E. Bhubaneswar

Q26. The speed at which a man can row a boat in still water is 15 kmph. If he rows downstream, where the speed of current is 3 kmph, what time will he take to cover 60 metres?

A. 10 seconds

B. 15 seconds

C. 20 seconds

D. 12 seconds

E. None of these

Q27. The number of sequences in which 7 players can throw a ball, so that the youngest player may not be the last is -.

A. 4000

B. 2160

C. 4320

D. 5300

E. 4160

Q28. In an examination, 47% failed in English and 54% failed in Mathematics. Find the pass percentage in both the subjects if 31% failed in both the subjects?

A. 70%

B. 37%

C. 53%

D. 30%

Q29. The average of 9 observations was 9, that of the 1st of 5 being 10 and that of the last 5 being 8. What was the 5th observation?

A. 9

B. 8

C. 7

D. 6

Q30. The ratio of the volumes of a cube to that of the sphere which will fit inside the cube is?

A. 4:3

B. 4:2

C. 4:4

D. 6: 1

Q31. The cost price of an article is 64% of the marked price. Calculate the gain percent after allowing a discount of 12%?

A. 37.5%

B. 48%

C. 50.5%

D. 52%

Q32. A work which could be finished in 9 days was finished 3 days earlier after 10 more men joined. The number of men employed was?

A. 18

B. 20

C. 22

D. 24

Q33. How many minimum number's of whole square slabs are required for paving the floor 12.96 meters long and 3.84 meters side?

A. 216

B. 192

C. 108

D. 256

Q34. Excluding stoppages, the average speed of a bus is 60 km/hr and including stoppages, the average speed of the bus is 40 km/hr. For how many minutes does the bus stop per hour?

A. 10

B. 12.5

C. 15

D. 20

E. Cannot be determined

Q35. Find the least square number which is divisible by 10, 12, 15 and 18?

A. 1600

B. 900

C. 3600

D. 2500

Q36. A vessel contains 20 liters of a mixture of milk and water in the ratio 3:2. 10 liters of the mixture are removed and replaced with an equal quantity of pure milk. If the process is repeated once more, find the ratio of milk and water in the final mixture obtained?

A. 9:1

B. 4:7

C. 7:1

D. 2:5

Q37. Tanya's grandfather was 8 times older to her 16 years ago. He would be 3 times of her age 8 years from now. Eight years ago, what was the ratio of Tanya's age to that of her grandfather?

A. 1:2

B. 1:5

C. 3:8

D. None of these

Q38. At what rate percent of simple interest will a sum of money double itself in 12 years?

A. 8.25 %

B. 8.33 %

C. 8.5 %

D. 9.5 %

Q39. Find the greatest number which divides 83, 125 and 209 leaving the same remainder in each case.

A. 19

B. 17

C. 42

D. 23

E. None of these

Q40. All the trees in the park are flowering trees.
Some of the trees in the park are dogwoods.
All dogwoods in the park are flowering trees.
If the first two statements are true, the third statement is

A. true

B. false

C. uncertain

Answer keys

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