## MENTAL ABILITY

Q.1) The missing number in the given figure is:

(1) 44
(2) 48
(3) 40
(4) 50
Q.2) What is $30 \%$ of 450 ?
(1) 150
(2) 135
(3) 180
(4) 1350
Q.3) Ten men can finish construction of a wall in eight days. How much men are needed to finish the work in half-a-day?
(1) 80
(2) 100
(3) 120
(4) 160
Q.4) Find the next number in the series.
$1,2,9,28,65$, $\qquad$ .
(1) 126
(2) 182
(3) 196
(4) 245
Q.5) A shop gives $10 \%$ discount on the purchase of an item. If paid for in cash immediately, a further discount of $12 \%$ is given. If the original price of the item is Rs. 250 , what is the price of the article if a cash purchase is made?
(1) Rs. 200
(2) Rs. 195
(3) Rs. 198
(4) Rs. 190
Q.6) It was Wednesday on July 15, 1964. What was the day on July 15, 1965?
(1) Thursday
(2) Tuesday
(3) Friday
(4) None of these
Q.7) The average of $x_{1} x_{2} x_{3}$ and $x_{4}$ is 16. Half the sum of $x_{2} x_{3} x_{4}$ is 23 . What is the value of $x_{1}$ ?
(1) 18
(2) 19
(3) 20
(4) 17
Q.8) What is the perimeter of the rectangle ABCD when $\mathrm{AD}=3$ and $\mathrm{BD}=5$ (Shown in figure)

Q.9) If March 1 of a leap year fell three days after Friday, what day of the week will dawn on November 22?
(1) Saturday
(2) Sunday
(3) Thursday
(4) None of these
Q.10) The radius of the pool in a South Delhi Club is twice the radius of the pool in a North Delhi Club. The area of the pool in South Delhi Club is how many times the area of pool in the North Delhi Club?
(1) $\frac{1}{4}$
(2) $\frac{1}{2}$
(3) 2
(4) 4
Q.11) How is $\frac{1}{2} \%$ expressed as a decimal fraction?
(1) 0.5
(2) 0.05
(3) 0.005
(4) 0.0005
Q.12) A circle is circumscribed around a square (shown in figure). The area of one of the four shaded portions is equal to $\frac{4}{7}$. The radius of the circle is:

(1) 3
(2) 2
(3) $\sqrt{2}$
(4) $\frac{1}{\sqrt{2}}$
Q.13) Find the next number in the series : 235, 346, 457......
(1) 578
(2) 568
(3) 468
(4) 558
Q.14) A sofaset carrying a sale-price ticket of Rs. 5,000 is sold at a discount of 4\%, thereby the trader earns a profit of $20 \%$. The trader's cost price of the sofaset is:
(1) Rs. 4,200
(2) Rs. 4,000
(3) Rs. 3,600
(4) Rs. 3,800
Q.15) A man was traveling on a motorcycle at the speed of $50 \mathrm{~km} / \mathrm{h}$ for $2 \frac{1}{2}$ hours. Then a car full of youngster overtake him at a speed of $80 \mathrm{~km} / \mathrm{h}$. To overtake them he increased his speed to $70 \mathrm{~km} / \mathrm{h}$, but he could not overtake the car even after $2 \frac{1}{2}$ hours. How far did he travel in the total time of 4 hours?
(1) 200 km
(2) 230 km
(3) 250 km
(4) 300 km
Q.16) How is $\frac{3}{4}$ expressed as percentage?
(1) $0.75 \%$
(2) $60 \%$
(3) $75 \%$
(4) $7.5 \%$
Q.17) There are two urns, one containing two white balls and four black balls, the other containing three white balls and nine black balls. One ball each is drawn out of the two urns. What is the probability of getting two balls of the same colour?
(1) $\frac{7}{12}$
(2) $\frac{1}{24}$
(3) $\frac{1}{12}$
(4) $\frac{1}{2}$
Q.18) The perimeter of a rectangle is 60 metres. If its length is twice its breadth, then its area is:
(1) $200 \mathrm{~m}^{2}$
(2) $180 \mathrm{~m}^{2}$
(3) $160 \mathrm{~m}^{2}$
(4) $220 \mathrm{~m}^{2}$
Q.19) In a class there are two sections A and B. If 10 students of section $B$ shift over to section $A$, the strength of A becomes three times the strength of B. But if 10 students shift over from A to B, both A and B become equal in strength. How many students are there in sections A and B?
(1) 50 and 30
(2) 45 and 15
(3) 90 and 40
(4) 80 and 40
Q.20) Which of the following is the smallest?
(1) $\frac{15}{16}$
(2) $\frac{16}{6}$
(3) $\frac{7}{8}$
(4) $\frac{11}{12}$
Q.21) A man spends a fixed amount per month on petrol. The trend with every hike in price of petrol is as follows:
Rs./litre : $1.5 \quad 2 \quad 34.56$
Litres : 60453020 ?
What will be consumption when there price is Rs. 6 a litre?
(1) 12
(2) 15
(3) 18
(4) 13.5
Q.22) The one rupee coin is placed on plain paper. How many coins of the same size can be placed round it so that each one touches the centre and adjacent coins?
(1) 4
(2) 3
(3) 7
(4) 6
Q.23) The smallest number of 5 digits beginning with 3 and ending with 5 will be:
(1) 31005
(2) 30015
(3) 30005
(4) 30025
Q.24) The first day of the year 1998 was Wednesday. If the birthday of Sucheta falls in 1998 was her birthday?
(1) Wednesday
(2) Thursday
(3) Monday
(4) Tuesday
(5) None of these
Q.25) Sukhbir is taller than Randhir but not as tall as Ajit. If Manoj is taller than Nitin, who is shorter than Ajit, then who among them is the shortest?
(1) Nitin
(2) Sukhbir
(3) Manoj
(4) Data inadequate
(5) None of these

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| ANSWERS |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
| 1. | $(1)$ | 6. | $(1)$ | 11. | $(3)$ | 16. | $(3)$ | 21. | $(2)$ |
| 2. | $(2)$ | 7. | $(1)$ | 12. | $(3)$ | 17. | $(1)$ | 22. | $(4)$ |
| 3. | $(4)$ | 8. | $(2)$ | 13. | $(2)$ | 18. | $(1)$ | 23. | $(3)$ |
| 4. | $(1)$ | 9. | $(4)$ | 14. | $(2)$ | 19. | $(1)$ | 24. | $(1)$ |
| 5. | $(3)$ | 10. | $(4)$ | 15. | $(2)$ | 20. | $(3)$ | 25. | $(4)$ |

