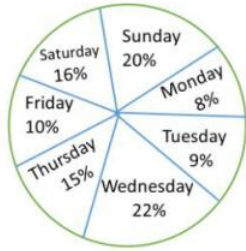**Q.1** Study the given pie chart and answer the question that follows.

The given chart represents the percentage-wise distribution of the total number of vanilla cakes and chocolate cakes sold on each day of the week. The total number of cakes sold in a week = 10500.

If the ratio of vanilla cakes sold to chocolate cakes sold on Wednesday is 13 : 8, then how many vanilla cakes are sold on that day?

Ans
✗ 1. 1450
✗ 2. 1340
✗ 3. 1420
✔ 4. 1430

Question ID : **65497815271**
Chosen Option : **4**

Q.2 If the ratio of the mean and median of a certain data is 4 : 5, then the ratio of its mode and mean is:

Ans
✗ 1. 7 : 5
✗ 2. 6 : 5
✗ 3. 8 : 5
✔ 4. 7 : 4

Question ID : **65497815264**
Chosen Option : **4**

Q.3 An article was bought for ₹14,000 and sold at $\frac{4}{7}$ of its cost price. The loss percentage is:

Ans
✗ 1. $42\frac{3}{7}\%$

✗ 2. $42\frac{5}{7}\%$

✔ 3. $42\frac{6}{7}\%$

✗ 4. $41\frac{6}{7}\%$

Question ID : **65497815257**
Chosen Option : **3**

Q.4 The average of four consecutive even numbers is 27. The smallest number is:

Ans
✗ 1. 20
✗ 2. 26
✓ 3. 24
✗ 4. 22

Question ID : **65497815253**
Chosen Option : **3**

Q.5 A can do a work in $7\frac{1}{2}$ days, whereas B can do the same work in $10\frac{1}{2}$ days. If they worked together, then the same work would be completed in:

Ans
✓ 1. $4\frac{3}{8}$ days

✗ 2. 4 days

✗ 3. $4\frac{1}{2}$ days

✗ 4. $4\frac{1}{8}$ days

Question ID : **65497815249**
Chosen Option : **1**

Q.6 If a certain sum amounts to ₹27,450 in 5 years at simple interest at the rate of $10\frac{1}{2}\%$ p.a., then the sum is:

Ans
✓ 1. ₹18,000
✗ 2. ₹16,500
✗ 3. ₹16,000
✗ 4. ₹17,000

Question ID : **65497815263**
Chosen Option : **1**

Q.7 The value of $5 - 5 \div 5 \times 5 + (7 \div 7 \text{ of } 6) \times 6 - \left(3\frac{2}{3} \div \frac{11}{30} \text{ of } \frac{2}{3}\right) \div 5$ is:

Ans
✗ 1. −1
✗ 2. 0
✗ 3. 1
✓ 4. −2

Question ID : **65497816886**
Chosen Option : **4**

Q.8 A loss of $12\frac{1}{2}\%$ gets converted into a profit of $11\frac{1}{5}\%$ when the selling price is increased by ₹118.5. The cost price of the article is:

Ans
✗ 1. ₹550
✗ 2. ₹600
✗ 3. ₹800
✔ 4. ₹500

Question ID : **65497815258**
Chosen Option : **4**

Q.9 Vineeth is younger than Vinoth by 8 years. If 4 years ago, their ages were in the ratio of 1 : 2, then the present age of Vinoth is:

Ans
✗ 1. 28 years
✗ 2. 22 years
✔ 3. 20 years
✗ 4. 25 years

Question ID : **65497815259**
Chosen Option : **3**

Q.10 The average speed of a train is 160% of the average speed of a car. The car covers a distance of 880 km in 16 hours. The time taken by the train to cover a distance of 484 km is:

Ans
✗ 1. $7\frac{1}{2}$ hours

✗ 2. $4\frac{1}{2}$ hours

✔ 3. $5\frac{1}{2}$ hours

✗ 4. 5 hours

Question ID : **65497815252**
Chosen Option : **3**

Q.11 If the side of a square is increased by 40%, then its area will be increased by:

Ans
✗ 1. 90%
✔ 2. 96%
✗ 3. 92%
✗ 4. 86%

Question ID : **65497815267**
Chosen Option : **2**

Q.12 The ratio of the curved surface area and total surface area of a cylinder is 4 : 7. If its volume is 4851 cm^3, then its radius is:

(Take $\pi = \frac{22}{7}$)

Ans
- ✗ 1. 10 cm
- ✗ 2. 7 cm
- ✗ 3. 9.5 cm
- ✔ 4. 10.5 cm

Question ID : **65497815266**
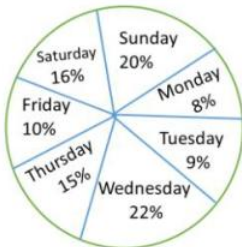Chosen Option : **4**

Q.13 The ratio of A's and B's salary is 6 : 7. If A's salary is increased by $5\frac{1}{2}\%$, then his total salary becomes ₹1,26,600. Find the salary of B.

Ans
- ✗ 1. ₹1,45,000
- ✗ 2. ₹1,20,000
- ✗ 3. ₹1,30,000
- ✔ 4. ₹1,40,000

Question ID : **65497815260**
Chosen Option : **4**

Q.14 Study the given pie chart and answer the question that follows.

The given chart represents the percentage-wise distribution of the total number of vanilla cakes and chocolate cakes sold on each day of the week. The total number of cakes sold in a week = 10500.

The ratio of vanilla cakes sold to chocolate cakes sold on Friday is 4 : 3. If the price of one vanilla cake is ₹8 and that of one chocolate cake is ₹7, then the total amount earned by selling all vanilla cakes and chocolate cakes on Friday is:

Ans
- ✗ 1. ₹6,950
- ✔ 2. ₹7,950
- ✗ 3. ₹8,000
- ✗ 4. ₹7,500

Question ID : **65497815272**
Chosen Option : **2**

Q.15 The LCM and HCF of two positive numbers are 96 and 8, respectively. If the sum of the numbers is 56, then the difference between the numbers is:

Ans ✗ 1. 12

✔ 2. 8

✗ 3. 10

✗ 4. 9

Question ID : **65497815268**

Chosen Option : **2**

Q.16 A and B can do a work in 12 days and 18 days, respectively. They worked together for 4 days, after which B was replaced by C and the remaining work was completed by A and C in the next 4 days. In how many days will C alone complete the same work?

Ans ✗ 1. 42

✗ 2. 32

✗ 3. 30

✔ 4. 36

Question ID : **65497815250**
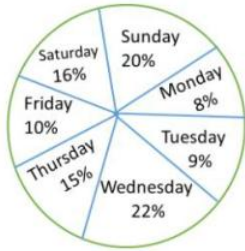
Chosen Option : **4**

Q.17 A car covers a distance of 300 km with uniform speed. The time taken for the journey is one-third of the speed in km/h. The time taken to cover the distance of 300 km is:

Ans ✔ 1. 10 hours

✗ 2. 8 hours

✗ 3. 9 hours

✗ 4. 12 hours

Question ID : **65497815251**

Chosen Option : **1**

Q.18 Study the given pie chart and answer the question that follows.

The given chart represents the percentage-wise distribution of the total number of vanilla cakes and chocolate cakes sold on each day of the week. The total number of cakes sold in a week = 10500.

If the average number of vanilla cakes sold on Thursday and Sunday is 1020, and the number of chocolate cakes sold on Thursday is 245 more than the number of chocolate cakes sold on Sunday, then the number of chocolate cakes sold on Thursday is:

Ans   ✗ 1. 950

   ✗ 2. 840

   ✓ 3. 940

   ✗ 4. 850

Question ID : **65497815273**
Chosen Option : **3**

Q.19 The curved surface area of a cone is $\frac{3432}{7}$ cm² and its radius is 12 cm. What is the radius of a sphere whose volume is 1.2 times the volume of the cone? (Take $\pi = \frac{22}{7}$)

Ans   ✗ 1. 8 cm

   ✓ 2. 6 cm

   ✗ 3. 5 cm

   ✗ 4. 4 cm

Question ID : **65497814764**
Chosen Option : **2**

Q.20 The average monthly expenditure of a family is ₹12,000 for the first 4 months, ₹15,000 for the next 3 months, and ₹17,000 for the last 5 months. If the family saves ₹1,52,000 throughout the year, then the average monthly income of the family is:

Ans   ✗ 1. ₹27,000

   ✗ 2. ₹25,700

   ✗ 3. ₹26,500

   ✓ 4. ₹27,500

Question ID : **65497815254**
Chosen Option : **4**

Q.21 At what percent per annum will ₹12,500 amount to ₹14,045 in 2 years if the interest is compounded annually?

Ans   ✗ 1. 7%

     ✗ 2. 9%

     ✔ 3. 6%

     ✗ 4. 8%

Question ID : **65497815262**
Chosen Option : **3**

Q.22 A reduction of $12\frac{1}{2}\%$ in the price of an item enables a person to buy 2.5 kg more for ₹280. The reduced price of the item per kg is:

Ans   ✗ 1. ₹13

     ✗ 2. ₹15

     ✗ 3. ₹12

     ✔ 4. ₹14

Question ID : **65497815255**
Chosen Option : **4**

Q.23 $\frac{11}{5}$ of a number A is 22% of a number B. The number B is equal to 2.5% of a third number, C. If the value of number C is 5500, then the sum of 40% of A and 20% of B is:

Ans   ✗ 1. 30

     ✔ 2. 33

     ✗ 3. 32

     ✗ 4. 36

Question ID : **65497815256**
Chosen Option : **2**

Q.24 A circular wire of diameter 56 cm is folded in the shape of a rectangle whose sides are in the ratio of 7 : 4. The area enclosed by the rectangle is:

(Take $\pi = \frac{22}{7}$)

Ans   ✗ 1. 1842 cm^2

     ✔ 2. 1792 cm^2

     ✗ 3. 1684 cm^2

     ✗ 4. 1782 cm^2

Question ID : **65497815265**
Chosen Option : **2**

Q.25 A sum of ₹ x amounts to ₹27,900 in 3 years and to ₹41,850 in 6 years at a certain rate per cent per annum when the interest is compounded yearly. The value of x is:

Ans

✗ 1. 18,400

✗ 2. 17,600

✗ 3. 17,800

✓ 4. 18,600

Question ID : **65497815261**

Chosen Option : **4**