

Time : 45 Mins

Class-VIII

Maximum Marks : 50

## General Instructions:

1. **All questions are mandatory.** Read the questions carefully before selecting an answer.
2. The question paper contains **25 MCQ**, each carrying **2 marks**.
3. No negative marking for unattempt questions; one mark will be deducted for each incorrect /overwriting or multiple answers. Illegible answers may not be evaluated.
4. Answers must be marked by writing the correct option (A/B/C/D) in the **Answer Sheet**.
5. **Use of calculators, smart watches, or any electronic devices is strictly prohibited.**
6. Rough work must be done **only in the A4 sheet provided by the invigilator**.
7. Ensure that your **Name, Roll Number, School Code, and other required details** are correctly filled in the Answer Sheet before submission.
8. The **final Answer Sheet along with the question paper must be submitted to the invigilator** before leaving the examination hall.
9. Any form of **unfair practice will lead to immediate disqualification**.

**Q.1. The square of an improper fraction is:**

- |                              |                               |
|------------------------------|-------------------------------|
| (a) Larger than the fraction | (b) Equal to the fraction     |
| (c) Double of the fraction   | (d) Smaller than the fraction |

**Q.2. If  $x4y5z$  is exactly divisible by 9, then the least value of  $(x + y + z)$  is:**

- |       |       |       |        |
|-------|-------|-------|--------|
| (a) 3 | (b) 9 | (c) 2 | (d) 10 |
|-------|-------|-------|--------|

**Q.3. The expression  $pq^2 + q(p-1) - 1$  is exactly divisible by:**

- |             |             |             |             |
|-------------|-------------|-------------|-------------|
| (a) $q - 1$ | (b) $q + 1$ | (c) $p - 1$ | (d) $p + 1$ |
|-------------|-------------|-------------|-------------|

**Q.4. One-third of 1206 is what percent of 134?**

- |        |         |         |          |
|--------|---------|---------|----------|
| (a) 3% | (b) 30% | (c) 20% | (d) 300% |
|--------|---------|---------|----------|

**Q.5. The marked price of an article is 10% more than the cost price and a discount of 10% is given on the marked price. The seller has:**

- |                     |                   |
|---------------------|-------------------|
| (a) No gain No loss | (b) 1% gain       |
| (c) 1% loss         | (d) None of these |

- Q.6.** A florist used 1895 flowers to decorate the entrance gate of a house. He then used  $\frac{3}{8}$  of the remaining flowers to make table decoration. With  $\frac{1}{5}$  of the remaining flowers, he made a garland. He is now left with 80 flowers. Find the number of flowers he had in the beginning.
- (a) 1975 (b) 2015 (c) 2055 (d) 2075
- Q.7.** If A varies directly as B and inversely as C and A = 6 when B = 2 and C = 3, then the value of A when B = 8 and C = 6 is:
- (a) 12 (b) 16 (c) 24 (d) None of these
- Q.8.** The sum of a two digit number and the number obtained by reversing the digit is always divisible by:
- (a) 9 (b) 11 (c) 7 (d) 10
- Q.9.** The area of a trapezium is 384 cm<sup>2</sup>. Its parallel sides are in the ratio 5:3 and distance between them is 12 cm. The length of the longer parallel side is \_\_\_\_\_
- (a) 24 (b) 40 (c) 32 (d) 36
- Q.10.** A and B do a piece of work in 12 days, C and D can do it in 15 days while C and A can finish it in 20 days. In how many days will A, B, C finish it working together? Also find in how many days will C finish it working alone?
- (a) 10 days, 20 days (b) 20 days, 60 days  
(c) 20 days, 30 days (d) 10 days, 60 days
- Q.11.** If  $y = a$  is represented graphically than it will form:
- (a) The  $x$ -axis (b) The  $y$ -axis  
(c) A line parallel to  $x$ -axis (d) A line parallel to  $y$ -axis
- Q.12.** The average wage of 50 workers is ₹ 1,000 and the average wage of 30 of them is ₹ 1,200. The average wage of the remaining workers is :
- (a) 700 (b) 850 (c) 800 (d) 750
- Q.13.** The perimeter of a rectangle and a square are equal and the ratio of two adjacent sides of the rectangle is 1 : 2, then the ratio of area of rectangle so that of square is:
- (a) 1 : 2 (b) 3 : 2 (c) 8 : 9 (d) 2 : 1
- Q.14.** The value of the expression  $\left(\frac{-a}{b} \times \frac{c}{a}\right) - \left(1 \times \frac{1}{c}\right) + \left(\frac{1}{a} \times \frac{1}{b}\right)$  is:
- (a)  $\frac{a}{b}$  (b)  $\frac{a(c^2 + b) - c}{abc}$   
(c)  $\frac{a(c^2 + b) - c}{abc}$  (d)  $\frac{-a(c^2 + b) + c}{abc}$

**Q.15. Which of the following statements is true?**

(a)  $\frac{9}{11} < \frac{7}{9} < \frac{5}{7} < \frac{3}{7}$

(b)  $\frac{3}{7} < \frac{9}{11} < \frac{7}{9} < \frac{5}{7}$

(c)  $\frac{5}{7} < \frac{3}{7} < \frac{7}{9} < \frac{9}{11}$

(d)  $\frac{3}{7} < \frac{5}{7} < \frac{7}{9} < \frac{9}{11}$

**(Q. 16-17)**

**Sonakshi bought a shop to start a Grocery store. The shop is 12m long, 4m wide and 3m high. She paid for it at the rate of ₹ 3,500 per sq. metre floor area and had to pay 8% of the total cost as stamp duty. To make the shop ready for use, she has to get it painted and the fabrication work done based on this information, answer the following questions:**

**Q.16. If Sonakshi utilizes one third of the shop to store dry fruit boxes of dimensions 12 cm × 8 cm × 4 cm, how many boxes can she store?**

(a) 37,500

(b) 75,000

(c) 1,05,000

(d) 1,25,000

**Q.17. If she gets the two side walls and the rear wall of the shop painted. How much did she pay for it at the rate of ₹ 96 per square metre?**

(a) ₹ 5760

(b) ₹ 9216

(c) ₹ 10368

(d) ₹ 13824

**(Q. 18-19)**

**ABC constructions is a private building company which build and sells flats. They undertake a project X, where in they are building 90 flats each costing ₹ 6,00,000. At the planning stage of preliminary analysis of the price break up was carried out and a pie-chart as shown below was drawn to depict the same.**

**Based on the above information, answer the following:**

**Q.18. The amount spent on labour exceeds the amount spent on supervision by:**

(a) ₹ 60,000

(b) ₹ 36,000

(c) ₹ 90,000

(d) ₹ 1,00,000

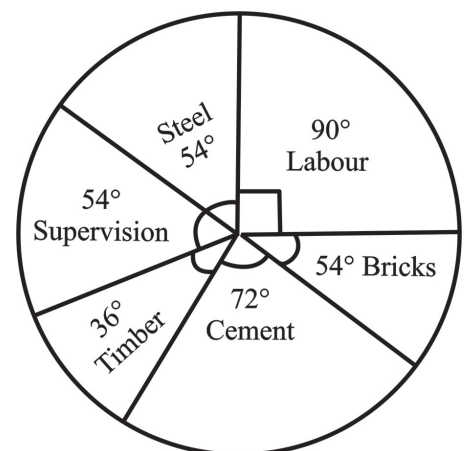
**Q.19. The percentage of the total amount spent on cement, steel and supervision in the construction is:**

(a) 50%

(b) 55%

(c) 60%

(d) 65%



**Q.20. Which of the following pairs are in direct proportion?**

(I) Time take Vs speed when distance is fixed

(II) No. of workers Vs Time taken for fixed work

**(III) Speed Vs Distance for fixed time**

**(IV) Side of Square Vs its perimeter**

- (a) I, II and IV  
(c) I, III and IV

- (b) III and IV only  
(d) All of the above statements

**Q.21. P, Q, R, S and T are five different objects. P and R together weigh 15 kg while S & T together weigh 10 kg. Q weighs 8 kg and R weighs twice as much as P. If Q and S together weigh 15 kg, whose weight is more than thrice of T?**

- (a) P  
(c) R  
(b) Q  
(d) None of these

**Q.22. The greatest prime factor of 91553 is:**

- (a) 29  
(b) 11  
(c) 41  
(d) 109

**Q.23.  $(729)^{0.31} \times (243)^{0.18} \times 9^{0.12} \times \left(\frac{1}{3}\right)^{-1}$  is:**

- (a) 27  
(b) 3  
(c) 81  
(d)  $\frac{1}{3}$

**Q.24. One of the factors of  $y^2 + \frac{1}{y^2} + 2 - 2y - \frac{2}{y}$  is:**

- (a)  $y + \frac{1}{y} + 2$   
(b)  $y + \frac{1}{y} - 2$   
(c)  $y - \frac{1}{y} + 2$   
(d)  $y - \frac{1}{y} - 2$

**Q.25. Myra's granny had as many sisters as she had brothers. Each of her brother had twice as many sisters as brothers. How many siblings were there?**

- (a) 1  
(b) 4  
(c) 7  
(d) 6