



DELHI PUBLIC SCHOOL

SAIL Township, Ranchi

ANNUAL EXAMINATION (SESSION-2016-17)

CLASS: – VI

SUBJECT: Mathematics

Time:- 3 Hrs.

Max. Mark:- 90

General Instructions

This question paper consists of four sections:

Section – A – each question carries 1 mark. Section – B – each question carries 2 marks.

Section – C – each question carries 3 marks. Section – D – each question carries 4 marks.

There are altogether 31 questions. All questions are compulsory. It is necessary to show the working.

Section – A

1. Find the value -

$$7459 \times 999 + 7459$$

2. What fraction of a clockwise revolution does the hour hand of the clock turn through when it goes from -

i) 3 to 9

ii) 6 to 3

3. Find the sum of -

$$(-10), (92), (84), \text{ and } (-15)$$

4. Express the following as decimal -

$$\frac{111}{250}$$

Section – B

5. Simplify -

$$4\frac{2}{3} - 3\frac{1}{4} + 2\frac{1}{6}$$

6. The cost of cultivating a rectangular field at `35 per square metre is `71400. If the width of the field is 40m, find its length. Also, find the cost of fencing the field at `50 per metre.

7. Find the value using distributive property -

$$5437 \times 1001$$

8. The following are the number of electric bulbs purchased for a hostel during the first four months:

<u>Months</u>	<u>No. of bulbs</u>
January	20
February	26
March	30
April	34

Represent the details by a pictograph.

9. Fill in the blanks by suitable integer:

$$\text{a) } -7 + \underline{\hspace{2cm}} = 0$$

$$\text{b) } -1257 + \underline{\hspace{2cm}} = -742$$

10. Find the common factors of –

75, 60, 210

Section – C

11. Complete the following -

Figures	Figures showing lines of symmetry	No. of lines of symmetry
i) Equilateral Triangle		
ii) Isosceles Triangle		
iii) Circle		

12. Shikha and Priya have bookshelves of the same size. Shikha's shelf is $\frac{5}{6}$ full of books and Priya's shelf is $\frac{2}{5}$ full. Whose bookshelf is more full ? By what fraction?

13. What will happen to the area of a rectangle if its –

- i) length and breadth are tripled.
- ii) length is doubled and breadth is same.
- iii) length is doubled and breadth is halved.

14. Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each case.

15. Give reasons -

- i) A square is also a parallelogram.
- ii) A square can be thought of as a special rhombus.

16. The sum of two integers is – 23. If one of them is 18, then which is the other.

17. Cost of 4 dozen bananas is ` 60. How many bananas can be purchased for ` 12.50?

18. Write the following using numbers, literals and signs of basic operations –

- i) 2 less than the quotient of x by y .
- ii) 4 times x taken away from one third of y .
- iii) Quotient of x by 3 is multiplied by y .

19. Evaluate -

- i) $2.5 + 3.05 - 4.005$
- ii) $0.35 - 0.035$

20. Draw any line segment \overline{PQ} . Take any point R not on it. Through R draw a perpendicular to \overline{PQ} .

(Write the steps of construction)

Section – D

21. Aakash bought vegetables weighing 10 kg. Out of this 3 kg 500 g is onion, 2 kg 75g is tomato and the rest is potato. What is the weight of potato?

22. Ravish wants to cover his room which is 3m wide and 4m long by squared tiles. If each square tile is of side 0.5m, then find the number of tiles required to cover the floor of the room.

23. Evaluate the following –

- i) $36.36 - 25.4237 - 9.78 + 7.7$
- ii) By how much should 27.354 be increased to get 52 ?

24. a) Ahmad starts from Delhi at 8 am to Jaipur. If his car is running at the speed of x km/hr and at 1 pm he observes that he is 20 km away from Jaipur. Find the distance between Delhi and Jaipur.
 b) The score of Ishita in Mathematics is 25 more than two third of her score in Science. If she scored x marks in Science, determine her score in Mathematics?

25. In a morning walk three persons step off together. Their steps measure 80 cm, 85cm and 90 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps?

26. Use the number line and add the following –

i) $(-1) + (-2) + (-3)$

ii) $(-2) + 8 + (-4)$

27. Determine the greatest 3 digit number exactly divisible by 8, 10 and 12.

28. a) A car travels 90 km in $2\frac{1}{2}$ hours –

- i) How much time is required to cover 30 km with the same speed?
 ii) Find the distance covered in 2 hours with the same speed.

b) Find the ratio of price of coffee to that of tea when coffee costs ₹24 per 100gm. and tea costs ₹180 per kilogram.

29. The length of a rectangular field is twice its breadth. A man jogged around it 5 times and covered a distance of 3km. What is the length of the field?

30. The following table shows the number of bicycles distributed to the girl child going to school in the given villages –

Names of Villages	No. of bicycles distributed
Rampur	800
Ramgarh	600
Gurdaspur	900
Sitapur	1100
Jainagar	1200

- i) In which village maximum number of bicycles were distributed to girl child?
 ii) List any two moral values which the villagers of Jainagar reflect.
 iii) Represent the above data in the form of a bar graph.

31. Rahim, Ravinder and Rohit bought 8.5 l , 7.25 l and 9.4 l milk respectively from a milk booth. How much milk did they buy in all? If there was 30 l of milk in booth, find the quantity of milk left?