

15) The Civil Disobedience Movement was different from the Non-Cooperation Movement :  
Non-Cooperation Movement : (a) The people were asked not to cooperate with the government

## Half Yearly Exam, 2019-20

Class - VIII

GMT-II/100

Subject - Mathematics

Time : 2:30 Hrs.

M.M. : 80

- Note:**(i) All questions are compulsory.  
(ii) This question paper consists of 30 questions divided in Sections-A, B, C, D and E.  
(iii) Section - A consists of 10 questions of 1 mark each, Section - B consists of 5 questions of 2 mark each, Section - C consists of 5 questions of 3 marks each, Section - d consists of 5 questions of 4 marks each and Section-E consists of 5 questions of 5 mark each.

### SECTION - A

1. The addition inverse of  $\frac{2}{5}$  is .....
2. The multiplicative inverse of  $-\frac{2}{7}$  is .....
3. If  $3x = -5$  then the value of  $x$  is .....
4. The sum of angles of a quadrilateral is .....
5. The opposite sides of a parallelogram is parallel and .....
6. 25% of  $360^\circ$  is .....
7. The square root of 121 is .....
8. The cube root of 216 is .....
9. The ratio of 50 paise to 5 rupees is .....
10. A coin is tossed once the probability of getting head is .....

### SECTION - B

11. Multiply  $\frac{6}{13}$  by the reciprocal of  $\frac{-7}{16}$ .
12. Solve the equation  $\frac{3}{7} + x = \frac{17}{7}$ .
13. If three interior angles of a quadrilateral are  $75^\circ$ ,  $100^\circ$ ,  $169^\circ$  respectively find the measure of fourth angle.
14. Is 90 is a perfect square? Clarify by prime factorisation.

15. 72% of 25 student are interested in mathematics. How many are not interested in mathematics.

Or

An item marked at Rs. 840 is sold for Rs. 714. What is discount and discount percent?

### SECTION - C

16. Find 3 rational numbers between  $\frac{1}{4}$  and  $\frac{1}{2}$ .
17. Two numbers are in the ratio 5 : 3. If they are differ by 18, What are the numbers?
18. Solve the equation  $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$ .

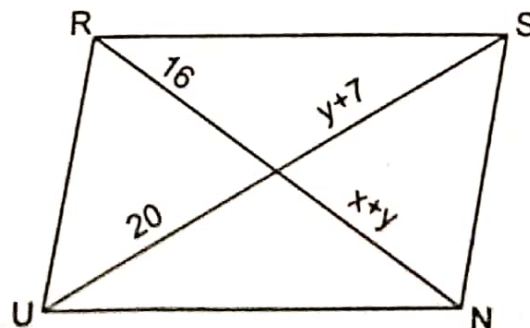
Or

Solve the equation  $m - \frac{m-1}{2} = 1 - \frac{m-2}{3}$ .

19. A die is thrown, list the outcomes of an event of getting :
- (a) a prime number
  - (b) not a prime number
  - (c) a number not greater than 5-
20. Construct a quadrilateral ABCD given that BC = 4.5 cm., AD = 5.5 cm., CD = 5 cm. and diagonal BD = 7 cm.

### SECTION - D

21. The ages of Hari and Mohan are in the ratio 5 : 7- Four years from now the ratio of their ages will be 3 : 4- Find their present ages-
22. In the given figure, RUNS is a parallelogram, find the values of x and y.



23. Find the least number which must be subtracted from 1989 to get a perfect square. Also find the square root of the perfect square so obtained.

Or

Find the length of the sides of a square whose area is 441 metre square.

24. Find the cube roots of following numbers :

(i) 512000

(ii) 27000

25. A shopkeeper buys 80 articles for Rs. 2400 and sells them for a profit of 16%. Find the selling price of one article-

### SECTION - E

26. The sum of the digit of a two digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two digit numbers?

27. On a particular day, the sale in rupees of different items of a baker's shop is given below :

Ordinary bread	=	320
Fruit bread	=	80
Cakes	=	160
Bicuit	=	120
Others	=	40
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Total	=	720

Draw a Pie chart for this data.

28. A milkman sold two of his buffaloes for ₹ 20,000 each. On-one he made a gain of 5% and on the other a loss of 10%. Find the overall gain or loss.

29. Calculate the amount and compound interest on Rs. 10,000 for one year at 8% per annum compounded half yearly.

Or

Vasudevan invested Rs. 60,000 at an interest, rate of 12% per annum compounded half yearly.

What amount would he get :

(i) After 6 months

(ii) after one year.

30. Half of a heard of Deer are grazing in the field and three fourth of the remaining are playing nearby. The rest nine are drinking water from the pond. Find the number of Deer in the herd.

Section - A (10)

one mark for each correct answer of the questions.

Section - B (2x5)

Q.11 Finding reciprocal of  $-\frac{7}{16}$  1-mark

Finding correct answer  $-\frac{16}{7}$  1-mark.

Q.12. For transferring term 1-mark

For finding correct answer  $x=2$ , 1-mark.

Q.13. Adding 3 angles =  $344^\circ$ , 1 mark

Finding correct answer  $160$  1 mark.

Q.14 Finding yes or no, 1 mark

Finding prime factorisation - 1 mark

Q.15. Finding 72% of 25, 1 mark.

Finding correct answer 28% 1 mark.

writing formula OR 1 mark

Finding correct answer 15% 1 mark.

Section - C (3x5)

Q.16. finding all three rational numbers one mark for each, - 3 mark

Q.17. Assuming numbers  $5x$  and  $3x$  1 mark

Finding correct numbers 15 and 27, - 2 mark.

Q.18. Transferring similar terms on one side 1 mark

For calculation 1 mark

Finding correct answer  $x=10$  1 mark.

OR  
Transferring terms - 1 mark  
calculating correct ans.  $\frac{7}{15}$   
2 marks.

Q.19 one mark for correct answer of each part 1x3

(a) 2, 3, 5 (b) 1, 4, 6 (c) 1, 2, 3, 4, 5

Q.20 constructing correct quadrilateral ABCD 3 mark.

Section - D (4x5)

Q.21 Assuming ages of Hari and Mohan  $5x$  and  $7x$  1 mark

Finding their ages 4-years from now  $5x+4$  &  $7x+4$  1 mark

Finding correct ages Hari = 20 years & Mohan = 28 years - 2 marks.

Q.22. Equation  $x+y=16$  and  $y+7=20$  2 mark

Finding  $y=13$  1 mark.

Finding  $x=3$  1 mark

Q. 23 Finding least numbers after prime factorisation 2 mark  
Finding correct answer 53 & 44 - 2 marks

OR Part - Writing correct formula 1 mark  
Finding correct length of side 21 m by factorisation 3 marks

Q. 24. Finding correct answers 80 and 30, for each part  
2 marks.

Q. 25 Finding CP of 1 article Rs. 30, - 1 mark.  
Finding 16% profit & S.P. - 1 mark.  
Finding the correct answer Rs. 34.80 - 2 marks.

### Section - E (5x5)

Q. 26. Arranging number according to place values 1 mark  
Writing number after interchanging digit 1 mark.  
making linear equation - 1 mark.  
Finding correct digit 36. 2 marks.

Q. 27 Preparing table ~~assuming~~ for each item - 2 1/2 marks.  
showing central angles  $160^\circ$ ,  $40^\circ$ ,  $80^\circ$ ,  $60^\circ$  and  $20^\circ$  correct answer  
in circle. 2 1/2 marks.

Q. 28. Finding CP of each Buffalo  $2 + 2 = 4$  marks.  
Finding overall gain or loss correct answer Rs. 1269.04  
(Loss) - 1 mark.

Q. 29. Writing correct formula - 1 mark.  
Finding ~~the~~ correct amount Rs. 10816 - 3 marks.  
Finding correct C.I. Rs. 816 - 1 mark.

OR  
writing correct formula - 1 mark  
Finding correct amount Rs. 63600 for I part 2 marks  
finding correct amount Rs. 67416 for II part 2 marks.

Q. 30 Assuming total number of deer in herd - 1 mark  
Finding half of the deer, grazing - 1 mark  
Finding three fourth of remaining - 1 mark  
Finding total number correct answer = 72 Deers. 2 marks.

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