

**DAV PUBLIC SCHOOL, POKHARIPUT, BHUBANESWAR-20**  
**SAMPLE PAPER FOR HALF YEARLY EXAMINATION, 2022-23**

- Please check that this question paper contains 5 printed pages.
- Check that this question paper consists of 40 questions.
- Write down the Serial Number of the question in the left side of the margin before attempting it.
- 15 minutes time has been allotted to read the question paper. The question paper will be distributed 15 minutes prior to the commencement of the examination. The students will read the question paper only and will not write any answer on the answer script during this.

**CLASS-VI**

**SUBJECT-MATHEMATICS**

**Time:3 hours**

**Maximum Marks:80**

**GENERAL INSTRUCTIONS:**

- All the questions are compulsory.
- The question paper contains five sections - A, B, C, D, E.
- Section A contains 10 MCQ of 1 mark each, section B contains 10 questions of 1 mark each, section C contains 6 questions of 2 marks each, section D contains 8 questions of 3 marks each and section E contains 6 questions of 4 marks each.
- Check the answers thoroughly before submitting.

**SECTION-A (1×10=10)**

**CHOOSE THE CORRECT ANSWER FROM THE GIVEN OPTIONS.**

1. Successor of successor of 1000906 is \_\_\_\_\_  
a)1000907      b) 1000904      c)1000908      d)100905
2. Make the greatest four digit numbers by using the digits 4,6,7 by repeating any one digit  
a)7664      b) 7644      c)7764      d)4467
3. The HCF of two consecutive even numbers is \_\_\_\_\_  
a)1      b) 0      c) 2      d) 4
4. Number of factors of 48 is \_\_\_\_  
a)6      b)8      c) 10      d) 12
5. Sum of largest negative integer and smallest positive integer is \_\_\_\_\_  
a)-2      b) 0      c) -1      d) doesnot exist
6. Find :  $(-1)^3 \times 2^3 \times (-5)^2$   
a)-200      b) 200      c) 150      d) -60
7. The ratio of 14 days to one week is \_\_\_\_\_.

- a)14:7                      b) 1:2                      c) 2:1                      d) none of these
8. Number of diagonals of a pentagon is \_\_\_\_\_.
- a) 10                      b) 5                      c) 15                      d)20
9. If a bicycle wheel has 36 spokes, then the angle between a pair of adjacent spokes is \_\_\_\_\_.
- a) 18                      b) 10                      c) 12                      d) 36
10. The supplement of 30 degrees is \_\_\_\_\_ degrees.
- a) 60                      b)120                      c) 150                      d)300

**SECTION-A (1×10=10)**

**FILL IN THE BLANKS.**

11. Estimate:  $989 \times 253$  \_\_\_\_\_
12. The greatest two digit prime number is \_\_\_\_\_
13. Find the value of  $|-2-4 -5|$ = \_\_\_\_\_
14. The ratio of 250 ml to 2 litres is \_\_\_\_\_.
15. Which is greater? 7:6 and 24:9. \_\_\_\_\_

**ANSWER THE FOLLOWING QUESTIONS.**

16. Write 545 in Roman numeral.
17. Express 25 as the sum of three odd prime number.
18. HCF of two consecutive odd numbers is \_\_\_\_\_.
19. What power of (-4) is (-64)? \_\_\_\_\_
20. A boat is sailing S-W. A little later it turns anti-clockwise and is formed sailing towards north. Through what angle (in degree) has it turned?

**SECTION C (2X6=12)**

21. Rearrange and add: 2062,547,938,353
22. In  $2 * 135$ , replace \* by the smallest number to make it divisible by 9.

**OR**

Can two numbers have 14 as their HCF and 204 as their LCM. Give reasons in support of your answer.

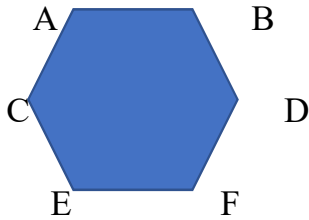
23. Subtract: -2768 from -287.

**OR**

Simplify :  $9 \times (-16) + (-12) \times (-16)$

24. Construct a line segment PQ of length 7.3cm. From this line segment, cut off a line segment of length 3.2cm. Measure the length of the remaining line segment CB.

25. A boat is sailing S-W. A little later it turns anti-clockwise and is formed sailing towards north. Through what angle (in degree) has it turned?
26. Identify the parallel line segments.



**SECTION D (3X8=24)**

**ANSWER THE FOLLOWING QUESTIONS.**

27. Find the least number that should be subtracted from the largest 5-digit number so that 45 can divide the difference exactly.

**OR**

25 sets containing a pencil and a ruler are made. The cost of each pencil is Rs.2 and that of a ruler is Rs.8. What is the total cost of 25 sets?(use distributive property)

28. Find the greatest number that will divide 445, 572, and 699 leaving remainder 4,5,6 respectively.

**OR**

The length, breadth and height of a room are 8m 25cm, 6m 75cm, and 4m 50cm respectively. Determine the longest tape which can measure the three dimensions of the room.

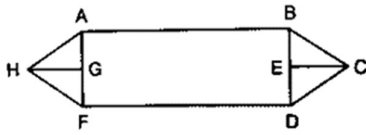
29. Subtract the sum of 38 and -49 from the sum of -100 and -1
30. Find the ratio of price of coffee to that of tea when coffee costs Rs.24 per 100g and tea costs Rs.180 per kg.
31. A car travels 165 km in 3 hours
- How long will it take to travel 440km?
  - How far will it travel in  $6\frac{1}{2}$  hour?

**OR**

The ratio of the story books in a library to other books is 1:7. The total number of story books is 800. Find the total number of story books in the library

32. A, B, C are any three points in a plane. Join them in pairs. How many lines can you get if –
- A, B, C are collinear?
  - A, B, C are non-collinear?
33. How many line segments are there in the given figure?

Name any six line segments.



34. Find the supplement of complement of twice of 20 degrees.

**SECTION E (4X6=24)**

35. Simplify and write the answer in Roman numeral:

$$250 - [70 \{60 - (30 + 20)\} - 10]$$

36. Find the smallest number which when increased by 20 is exactly divisible by 90 and 144.

37. a) verify:  $12^2 + 5^2 = 13^2$

b) subtract the cube of (-3) from  $4^2 + (-2)^2$

**OR**

In a quiz competition there were 40 questions. 3 marks are allotted to every correct answer and -2 for every wrong answer. Reema attempted 35 questions out of which 8 answers were wrong. Find the total marks secured by Reema.

38. The ratio of the length of a vertical pole and its shadow on the ground is 7:2. Find the length of the pole if the length of the shadow is 2.4m

**OR**

a) In the word 'DERMATOGLYPHICS', find the ratio of vowels to 'consonants.

b) Determine if the numbers 20,40,60,80 are in proportion.

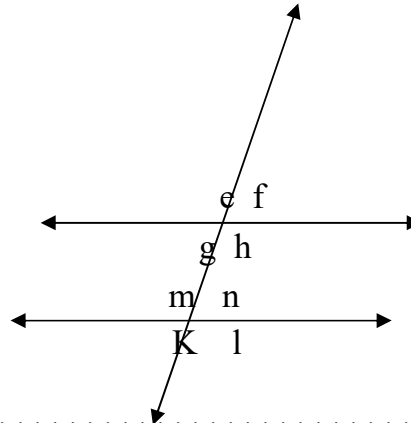
39. a) With the help of figure, find the maximum number of points of intersection using five lines in a plane.

b) Lines p, q and r are concurrent. Also lines p, s and t are concurrent. Is it always true that the lines q, r and s will be concurrent? Support your answer with a figure.

40.

Look at the figure and name the angles

- a. Corresponding to  $\angle g$
- b. Corresponding to  $\angle f$
- c. Alternate interior to  $\angle m$
- d. Alternate exterior to  $\angle k$



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