

# Mathematics

Date:  
Time: 3 hours

Class: VI  
M.M: 90

## General Instructions:

1. Read the question paper carefully and answer legibly.
2. All questions are compulsory.
3. The question paper consists of 31 questions divided into four sections A, B, C and D.
4. Section A comprises of 4 questions of 1 mark each, Section B comprises of 6 questions of 2 marks each, Section C comprises of 10 questions of 3 marks each, Section D comprises of 11 questions of 4 marks each.
5. Use of calculators is not permitted.

## Section-A

- 1 Find the smallest digit that should replace \* to make  $37*29$  divisible by 3. 1
- 2 How many whole numbers are there between 101 and 184? 1
- 3 Find the product of successor and predecessor of 99. 1
- 4 Write the number name for 34,765,009. 1

## Section-B

- 5 Using properties of whole numbers, find the value of  $13457 \times 105 - 13457 \times 5$ . 2
- 6 Arrange the integers in descending order: 24, -11, -1, 0, 15 2
- 7 Using the divisibility rules check whether 367218 is divisible by 6 or not? 2
- 8 Draw a 6-sided polygon. Name it and shade its interior. 2
- 9 Fill in the blanks:  
a) The largest negative integer is \_\_\_\_\_  
b) The predecessor of -421 is \_\_\_\_\_ 2  
c) Smallest whole number is \_\_\_\_\_  
d) A number which has more than two factors is called a \_\_\_\_\_
- 10 Reeta pays Rs 1500 to her piano teacher and Rs 750 to donation club every month. Find the total amount paid by her in one year. 2

## Section-C

- 11 a) Write the number of faces, edges and vertices of a triangular prism. (1.5+1.5)  
b) Name the type of triangle in two different ways:  $\triangle ABC$  with  $\angle B = 110^\circ$  and  $AB = AC$ .
- 12 Compare the following( show working also)  
a)  $(-46) - (-28)$  \_\_\_\_\_  $(-48) - (-26)$  3  
b)  $-41 - 98$  \_\_\_\_\_  $41 + 98$
- 13 a) Neha and Riya starts from a common point O. Neha moves in North direction and Riya moves in east direction. Draw their paths and name them as N and E respectively. What 2 +1

type of angle is formed between their paths?

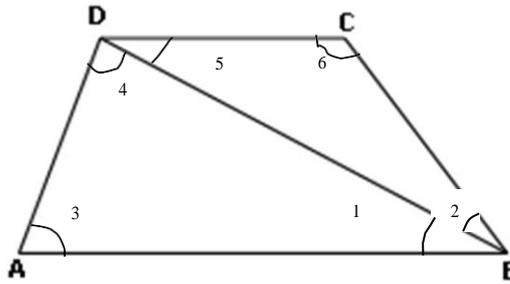
b) Write all the factors of 75.

- 14 A shopkeeper sold 20 stools for Rs 530 each and 20 tables for Rs 670 each. Find the total money received by the shopkeeper? (Use distributive property). 3
- 15 Find the smallest 3 digit number exactly divisible by 6, 8 and 12? 3
- 16 A merchant had Rs 61243 with him. He placed an order for purchasing 60 ceiling fans for Rs 900 each. How much money will remain with him after the purchase? 3
- 17 Simplify: 3
- a)  $45 + (-13) - (-9)$
- b)  $(-22) - (-18) + 15$
- 18 a) Find the number of right angles turned through by the hour of a clock when it goes from 1 to 7. 3
- b) How many degrees are there in 2 right angles?
- c) Write number of faces and edges in Square Pyramid.
- 19 a) The sum of two integers is -55. If one of them is 80, find the other? 3
- b) Write all the integers between 0 and -6 in the increasing order.
- 20 Use number line and add the integers:  $(-6) + 3 + (-4)$  3

### Section-D

- 21 Using divisibility test, determine whether the number 543908 is divisible by 11 or not? Is it divisible by 8? Give reason. 4
- 22 In a school, the members of Eco Club were taken for a trip to nearby nursery. As a part of a project children planted 102 saplings. The cost of each sapling is Rs 175. Find total amount spent on saplings (Using Distributive property). What is the benefit of conducting this activity in school? 4
- 23 Draw a rough sketch of a regular pentagon . Draw and write the number of the diagonals it has. 4
- 24 a) Estimate the sum  $3390 + 4986$  to nearest thousands. 4
- b) Estimate the product  $578 \times 617$  to nearest hundreds.
- 25 The traffic lights at three different road crossings change after every 48 seconds, 72 second and 108 seconds respectively. If they change simultaneously at 6 a.m., at what time will they change simultaneously again? (3+1)
- 26 In the figure given below: 4
- a)  $\angle 3$  can be renamed using three letters as  $\angle$  \_\_\_\_\_ or  $\angle$  \_\_\_\_\_.
- b) The common arm of  $\angle 1$  and  $\angle 2$  is \_\_\_\_\_.
- c) A pair of parallel line segments is \_\_\_\_\_.
- d) \_\_\_\_\_ is the diagonal of Figure.

e) Name  $\angle 6$  and  $\angle 5$ . \_\_\_\_\_.



- 27 Draw the rough sketch to represent the following: 4
- Point F lies on line segment CD.
  - Ray SP and Ray ST intersect at S.
  - Two angles having one ray in common.
  - Line m contain points T and L but not point C
- 28 Draw a rough sketch of a quadrilateral HOPE. State: 4
- A pair of opposite sides
  - A pair of opposite angles
  - A pair of adjacent sides
  - A pair of adjacent angles
- 29 Using suitable properties, find: 4
- a)  $4 \times 866 \times 25$  (b)  $998 \times 248$
- 30 Draw a circle with centre P and radius 6 cm. Mark and name the following: 4
- a) its diameter      b) its radius      c) a segment      d) an arc      e) a sector
- 31 From one sheet of thick wood 6 pages of paper can be made. How many pages can be made with 75000 sheets of wood? If in one book there are 150 pages, how many books can be made with the help of these pages? 4