



Class: VI

Date: 23/09/2024

Roll No. :

Subject: Mathematics

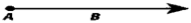
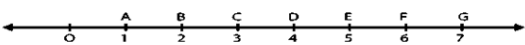
Max. Marks.: 80

Time: 3 Hrs.

General Instructions:

- i) This Question Paper has 5 Sections A, B, C, D and E.
ii) Section A has 20 MCQs carrying 1 mark each.
iii) Section B has 5 questions carrying 02 marks each.
iv) Section C has 6 questions carrying 03 marks each.
v) Section D has 4 questions carrying 05 marks each.
vi) Section E has 3 case based integrated units of assessment (04 marks each) with sub- parts of the values of 1, 1 and 2 marks each respectively.
vii) All Questions are compulsory. However, an internal choice in 2 Questions of 5 marks, 2 Questions of 3 marks and 2 Questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E.

SECTION A		
Sr. No.	Section A consists of 20 questions of 1 mark each.	Marks
Tick the correct answer.		
Q.1)	Make the smallest four digit number by using any one digit twice : 3, 8, 7. (a) 3378 (b) 3387 (c) 8873 (d) 8378	1
Q.2)	Which number will occur when one will be added to the greatest four-digit number. (a) greatest 4-digit no (b) smallest 5-digit no (c) greatest 5-digit no (d) smallest 5-digit no	1
Q.3)	A machine, on an average, manufactures 2825 screws a day. How many screws did it produce in the month of January? (a) 84750 (b) 81925 (c) 87575 (d) 79100	1
Q.4)	A box contains 500,000 medicine tablets each weighing 10 mg . What is the total weight of all the tablets in the box in kilograms? (a) 50,000 kg (b) 5,00,000 kg (c) 500 kg (d) 5 kg	1
Q.5)	Insert commas suitably according to international system of numeration in 99985102. (a) 99,985,102 (b) 99985,102 (c) 999,85102 (d) 9,99,85,102	1
Q.6)	How many millimeters make one kilometer? (a) 100000 (b) 1000000 (c) 10000 (d) 1000	1
Q.7)	What is the difference between the greatest and the least number that can be written using the digits 6, 2, 7, 4, 3 each only once? (a) 50000 (b) 52865 (c) 52965 (d) 51965	1
Q.8)	The natural number that has no predecessor is _____. (a) 1000 (b) 100 (c) 10 (d) 1	1
Q.9)	The smallest whole number is _____. (a) 0 (b) 1 (c) -1 (d) none of these.	1
Q.10)	Which of the following statements is true? (a) There is no smallest whole number. (b) All natural numbers are also whole numbers. (c) All whole numbers are also natural numbers. (d) The greatest whole number is 100.	1

Q.11)	Which of the following statements is true? (a) 1 is the smallest whole number. (b) 50 is the predecessor of 49. (c) 1 is the smallest natural number. (d) 599 is the successor of 600.	1
Q.12)	The population of a village is 1500. If 489 are men and 472 are women, find the number of children. (a) 559 (b) 439 (c) 549 (d) 539.	1
Q.13)	The product of the successor and predecessor of 99 is _____. (a) 9800 (b) 9900 (c) 1099 (d) 9700	1
Q.14)	The natural numbers along with zero form the collection of _____. (a) Integers (b) Whole numbers (c) Rational Numbers (d) Real numbers.	1
Q.15)	1 is _____. (a) a prime number (b) a composite number (c) an even number (d) neither even nor prime	1
Q.16)	How many lines can pass through one given point? (a) 1 (b) 2 (c) 3 (d) countless.	1
Q.17)	Two distinct lines meeting at a point are called _____. (a) Intersecting lines (b) Parallel lines (c) perpendicular lines (d) ray	1
Q.18)	How many lines can pass through two given points? (a) 0 (b) 1 (c) 2 (d) countless.	1
	DIRECTION: In the question number 19 and 20, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct option.	1
Q.19)	Assertion (A): A ray image : Reason (R) : A ray is a portion of a line. It starts at one point and goes endlessly in a direction. (a) Both A and R are true, and R is the correct explanation of A. (b) Both A and R are true, but R is not the correct explanation of A. (c) A is true but R is false. (d) A is false but R is true.	
Q.20)	Assertion (A): The successor of -1 is 0. Reason (R) : Successor is the number which comes after a number. (a) Both A and R are true, and R is the correct explanation of A. (b) Both A and R are true, but R is not the correct explanation of A. (c) A is true but R is false. (d) A is false but R is true.	1
SECTION B		
Section B consists of 5 questions of 2 marks each.		
Q.21)	Write seven consecutive composite numbers less than 100 so that there is no prime number between them. OR Find the HCF of the numbers : (a) 18, 60.	2
Q.22)	How many diagonals does a quadrilateral have? Draw and show them.	2
Q.23)	Verify that, whether D is the midpoint of \overline{AG} . 	2
Q.24)	a) Write four negative integers greater than (-20) (b) Write four integers less than (-10) OR Find the sum : (a) $(-7) + (-9) + 4 + 16$.	2
Q.25)	Find the sum of : (a) $-50, -200$ and 300 .	2

SECTION C

Section C consists of 6 questions of 3 marks each

Q.26) The number of sheets of paper available for making notebooks is 75,000. Each sheet makes 8 pages of a notebook. Each notebook contains 200 pages. How many notebooks can be made from the paper available?

3

Q.27) The digits 5 and 4 of the number 42536 are interchanged. Find the difference between the original number and the new number.

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Q.28) Write the smallest 5-digit number and express it in the form of its prime factors.

OR

Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

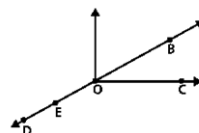
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Q.29) Use the figure to name:

a) Five points.

b) Four rays.

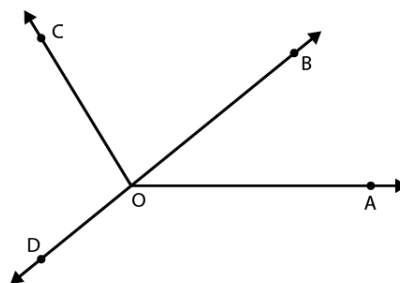
c) Five-line segments.



3

Q.30) Measure and classify each angle. (Draw table in answer sheet)

Angle	Measure	Type
$\angle AOB$		
$\angle AOC$		
$\angle BOC$		
$\angle DOC$		
$\angle DOA$		
$\angle DOB$		



3

OR

Match the following:

Measure of Triangle

i) 3 sides of equal length

ii) 2 sides of equal length

iii) All sides of different length

iv) 3 acute angles

v) 1 right angle

vi) 1 obtuse angle

Type of Triangle

a) Scalene

b) Obtuse angled

c) Right angled

d) Equilateral

e) Acute angled

f) Isosceles

Q.31) Find : (a) $(-13) + 32 - 8 - 1$.

3

SECTION D

Section D consists of 4 questions of 5 marks each.

Q.32) The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the longest tape which can measure the three dimensions of the room.

5

OR

Three tankers contain 403 liters, 434 liters and 465 liters of diesel respectively. Find the maximum capacity of a container that can measure the diesel of the three containers exact number of times.

Q.33) Use the figure to name :

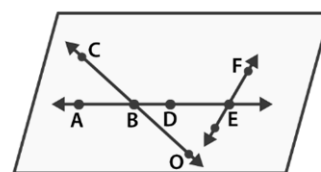
a) Line containing point E.

d) Two pairs of intersecting lines.

b) Line passing through A.

e) Four rays.

c) Line on which O lies.



5

Q.34)	Match the following. (Draw table and answer)	<table><tr><td>i) Straight angle</td><td>a) less than one-fourth of a revolution.</td></tr><tr><td>ii) Right angle</td><td>b) More than half a revolution.</td></tr><tr><td>iii) Acute angle</td><td>c) Half of a revolution.</td></tr><tr><td>iv) Obtuse angle</td><td>d) One-fourth of a revolution.</td></tr><tr><td>v) Reflex angle</td><td>e) Between $\frac{1}{4}$ and $\frac{1}{2}$ of a revolution.</td></tr><tr><td></td><td>f) One complete revolution.</td></tr></table> <p style="text-align: center;">OR</p> <p>Give reasons for the following: a) A square can be thought of as a special rectangle . b) A rectangle can be thought of as a special parallelogram. c) A square can be thought of as a special rhombus. d) Squares, rectangles, parallelograms are all quadrilaterals. e) Square is also a parallelogram.</p>	i) Straight angle	a) less than one-fourth of a revolution.	ii) Right angle	b) More than half a revolution.	iii) Acute angle	c) Half of a revolution.	iv) Obtuse angle	d) One-fourth of a revolution.	v) Reflex angle	e) Between $\frac{1}{4}$ and $\frac{1}{2}$ of a revolution.		f) One complete revolution.	5
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	f) One complete revolution.														
Q.35)	Find : (a) $50 - (-40) - (-2)$. (b) $(-250) + (+150)$.		5												
SECTION E															
Q.36)	Observe the figure and answer the following. i) Write the lines whose point of intersection is D. ii) Write the lines whose point of intersection is J. iii) Write all pairs of parallel lines. OR iii) Write all pairs of perpendicular lines.		1 1 2												
Q.37)	The figure shows a square pyramid. Suppose the faces are equilateral triangles. i) What are the different types of geometrical shapes you find in the figure? Name all of them. ii) How many angles are there ? Name all of them. iii) How many different measures of angles are there? OR iii) How many different sides are there. Name all of them.		1 1 2												
Q.38)	A child was given 5 quiz tests and the score of his were recorded as follows : (-3) , $(+7)$, (0) , (-2) , (6) . i) What is the lowest score of the child got? ii) Which integer lies to the extreme left on the number line of the score? iii) What is the difference between the highest and the lowest score? OR iii) Find the sum of (-3) , $(+7)$, (0) , (-2) , (6) .		1 1 2												