CLASS : VI MAX. MARKS: 80

DATE : 25/09/2018 DURATION : 3 HRS

General Instructions:

All questions are compulsory. The question paper consists of 30 questions divided into four sections A, B, C & D. Section A comprises 6 questions each carries 1 mark, Section B comprises 6 questions of 2 marks, Section C comprises 10 questions of 3 marks & Section D comprises 8 questions of 4 marks.

Do the calculations in the working column. Give necessary formulae and steps wherever required.

SECTION A

- 1. Write the expression using brackets: "7 multiplied by the sum of 10 and 7".
- 2. Replace # by a digit so that 784#579 is divisible by 9.
- 3. A circle has radius 12 cm. What is the length of the longest stick that can be placed inside this circle such that the two ends of the stick lie of the circle ?
- 4. If the lines AB and PQ are perpendicular to each other, then what would be the angle formed between the two lines?
- 5. Which three dimensional shape does a football resemble?
- 6. In the following pairs of integers which integer is to the right of the other on a number line?
 - (a) -9 and -12
- (b) 7 and -7

SECTION B

- 7. Estimate the following product using general rule: 959×23
- 8. Find 7 4 using the number line.
- 9. Find the value using suitable property and write the name of the property used : 315×98
- 10. Check the divisibility of 145128 by 6.
- 11. Write the fraction of revolution and number of right angles will turn through if you:
 - (a) End up facing south starting from west anti-clockwise.
 - (b) End up facing north starting from east clockwise.
- 12. Write the opposite of the following statements:
 - (a) Gain of ₹ 1000 (b) 25 km east

SECTION C

13. Write the greatest and smallest 4-digit number using 4, 8, 0 and 5 without repetition. Hence find their sum and difference.

OR

Estimate 1084 + 935 – 26 by rounding off to the nearest tens. Write the answer in Roman numerals.

- 14. Using the test of divisibility check whether 1678039 is divisible by 11.
- 15. Name the type of triangles on the basis of its sides and angles.
 - (a) In \triangle XYZ, XY = 14 cm., YZ = 14 cm. and \angle Y = 160⁰
 - (b) In \triangle PQR, PQ = QR = PR = 6 cm.
 - (c) In \triangle DEF, DE = 5 cm., DF = 7 cm. and \angle D = 90°
- 16. Represent +2 and −3 on a number line.
- 17. Neha bought a painting for ₹ 360 and a photo frame for ₹ 239. How much money did she spend if she bought 3 paintings and 3 photo frames ?

OR

Find the value by suitable rearrangement.

- (a) 563 + 435 + 437 + 625
- (b) $25 \times 263 \times 8$
- 18. Answer the following:
 - (a) At how many points two line segments cut each other?
 - (b) How many lines can be drawn passing through one point?
 - (c) How many perpendicular bisectors can be drawn for a line segment?

OR

Write the number of faces, edges and vertices for the following:

- (a) Cuboid
- (b) Square pyramid
- 19. Write 3 properties of the following quadrilaterals:
 - (a) Rhombus (b) Rectangle.
- 20. Write the common factors of 35 and 50. Are they co-primes?
- 21. Draw any polygon and mark the following:
 - (a) Interior point P
- (b) Exterior point Q
- 22. Find the greatest number that divides 79, 115 and 163 leaving reminder 7 in each case.

OR

Find the least number which when divided by 12, 16, 24 leaves a reminder 7 in each case.

SECTION D

23. Find the HCF of 32, 24 and 96 using prime factorization.

OR

Find the LCM of 16, 32 and 40

24. A factory produces 2825 metres of a pipe in a day. How many metres of pipe will it produce in the month of December ?

OR

In a group of 17900 people, 4290 watch TV channel "Animal Planet", 3757 watch "Discovery" and the rest watch "National Geographic". How many people watch "National Geographic" Channel?

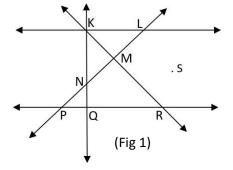
25. Given two numbers 45 and 99, find their HCF and LCM. And verify that HCF \times LCM = 45 \times 99

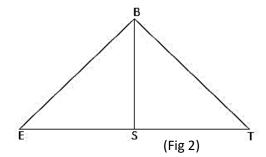
OR

There are two bells in a school. The bell for the middle school rings every 45 minutes, whereas the bell for the junior school rings every 60 minutes. If the school starts at 7:40 am., when will the bells ring together?

- 26. Draw a circle and mark the following in it.
 - (a) Centre
- (b) A radius
- (c) A chord
- (d) A sector
- (e) A segment
- (f) A diameter

- 27. Name the following from the figure (Fig. 1).
 - (a) A pair of parallel lines
 - (b) Which point lies in the interior of ∠LMR
 - (c) The intersecting lines with the meeting point M
 - (d) A pair of perpendicular lines.
- 28. Draw a rough sketch of a quadrilateral MATH. Write:
 - (a) 2 pairs of opposite angles.
 - (b) 2 pairs of adjacent angles.
 - (c) 2 diagonals.
- 29. Answer the following from the figure (Fig. 2).
 - (a) Write the name of 6 line segments.
 - (b) Which two triangles have ∠E as common?





30. Write the largest 7-digit number and its successor also. For each of the above 2 numbers, place commas for easy reading and write the number name in both Indian and International system of numeration.