# AMRITA VIDYALAYAM ANNUAL EXAMINATION 2019 - 20

#### Class : VI

Marks : 80 Time : 2½ hrs

# MATHEMATICS

### General Instructions:

1. All questions are compulsory.

2. This question paper is divided into four sections.

3. Section A (Q.1 to 20) carries 1 mark each. Section B (Q.21 to 26) carries 2 marks each. Section C (Q.27 to 34) carries 3 marks each. Section D (Q.35 to 40) carries 4 marks each.

4. Use of calculator is not permitted

## **SECTION - A**

- 1. Find the value of -27- (-23).
- 2. Draw a pentagon and draw any one diagonal.
- 3. Find the ratio of 200 grams to 4 kg.
- 4. Construct a line segment 7.3 cm using ruler and compass.
- 5. Write two equivalent fractions of  $\underline{3}$ .

#### 5

- 6. What is the shape of a road roller?
- 7. Name the instrument that is used to measure an angle.
- 8. Find the side of a square whose perimeter is 48 cm.
- 9. Name the polygon which has four sides.
- 10. How many degrees are there in 4 right angles?
- 11. Write the additive inverse of -3.
- 12. Find <u>3</u> of 12.

4

- 13. Write the expanded form of 3.07.
- 14. Write the number of lines that can pass through a given point.

- 15. What is the opposite of 3 km south?
- 16. Represent 2 on a number line.

5

- 17. Name the vertex and arms of  $\angle PQR$ ?
- 18. What fraction of an hour is 45 minutes?
- 19. Find the area of a square whose side is 12 cm.
- 20. Express <u>16</u> as a mixed fraction.

9

### **SECTION - B**

- 21. A car can travel 95 km with 5 litres of petrol. How far can it travel with 11 litres of petrol?
- 22. Find the value of 1 2 + 3 4 + 5 6 + 7 8 + 9 10 + 11 12 + 13 14 + 15 16 + 17 18 + 19 20.
- 23. The sides of a regular octagon are 4 cm. Find its perimeter.
- 24. Arrange the following fractions in descending order.
  - <u>3</u>, <u>5</u>, <u>2</u>, <u>1</u>, <u>6</u>
  - 8 6 4 3 8

25. Which direction will you face if you start facing

a) west and make <sup>3</sup>/<sub>4</sub> of a revolution anti-clockwise?

- b) east and make 11/2 of a revolution clock wise?
- 26. Find the value of 0.007 + 8.5 + 30.0

### **SECTION - C**

27. Raji bought a material of length 3  $\frac{2}{5}$  m and one more piece of 5

length 2  $\frac{7}{10}$  m. How much material did she purchase in all?

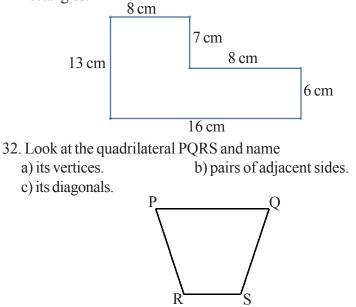
- 28. Subtract the sum of 998 and -486 from the sum of -290 and 732.
- 29. Mr. Rajan purchased 15.500 kg rice, 25.750 kg flour and 3.250 kg sugar. Find the total weight of his purchase. Is it more or less than 50 kg? By how much?

30. A die was thrown 25 times and the following scores were obtained.

| 1 | 5 | 2 | 4 | 3 |
|---|---|---|---|---|
| 6 | 1 | 4 | 2 | 5 |
| 1 | 6 | 2 | 6 | 3 |
| 5 | 4 | 1 | 2 | 3 |
| 3 | 6 | 1 | 5 | 2 |

Arrange these scores in a table using tally marks.

31. Find the area of the figure given below by splitting it into rectangles.



- 33. Draw an angle of 150 and divide it into four equal parts.
- 34. 15 men can reap a field in 25 days. In how many days can 20 men reap the same field?

## **SECTION - D**

35. In a foot ball tournament, the number of matches each day in a week are as shown below. Draw the bar graph.

|  | Friday |
|--|--------|
| Number         40         65         50         30         70           of | 20     |
| matches played   |        |

- 36. The teacher had ₹ 54 with her as balance to be given to Seeta and Meera. Seeta is a poor girl. So, Meera suggested to the teacher to divide the money in such a way so that Seeta would get more money. So the teacher divided the money in the ratio of 2:7. Find out how much Seeta will get more than Meera? Which quality of Meera is reflected?
- 37. Construct an angle of  $120^{\circ}$  and hence construct an angle of  $105^{\circ}$ .
- 38. Simplify.
  - a) (-15) + 32 7 1
  - b) 70 (-52) + 3 11
- 39. Write the following decimals in a place value table. a) 0.46 b) 2.079 c) 146.05
- 40. Maya works in a factory and earns ₹ 955 per month. She saves ₹ 185 per month from her earnings. Find the ratio of
  - a) her savings to her income.
  - b) her income to her expenditure.
  - c) her savings to her expenditure.