

Roll No.	
Name	
Class & Section	

**APEEJAY COMMON ANNUAL EXAMINATION, 2019-20**

**MATHEMATICS**

**Time Allowed : 3 Hrs.**

**Class – VI**

**Maximum Marks : 80**

**General Instructions :**

- All questions are compulsory.*
- Questions 1 to 6 carries 1 mark each.*
- Questions 7 to 12 carries 2 marks each.*
- Questions 13 to 22 carries 3 marks each.*
- Questions 23 to 30 carries 4 marks each.*

**Section-A**

**(6×1=6)**

- What fraction of a day is 12 hours?
- Express 175 paise as rupees using decimals.
- Find the ratio of 45 years to 55 years.
- Write the rule which gives the number of matchsticks required to make the pattern of letter Z.
- Find the perimeter of a regular hexagon with each side measuring 8 m.
- Give an expression for 5 times m to which 4 is added.

**Section-B**

**(6×2=12)**

- The marks (out of 10) obtained by 25 students of class VI in a class test are :  
4, 5, 2, 4, 8, 6, 5, 3, 4, 1, 5, 4, 3, 5, 2, 3, 4, 5, 2, 7, 6, 4, 5, 3, 6.  
Arrange these marks in a table using tally marks.
- Determine if the following numbers are in proportion :  
15, 45, 40, 120
- Find the equivalent fraction of  $\frac{5}{6}$  having numerator 25.

10. Represent  $\frac{2}{7}, \frac{4}{7}, \frac{6}{7}, \frac{5}{7}$  on the number line.
11. Using ruler and compasses construct an angle  $\angle ABC$  of measure  $120^\circ$ .
12. The length of a rectangular hall is 4 meters less than 3 times the breadth of the hall. What is the length, if the breadth is  $b$  meters?

**Section-C**

**(10×3=30)**

13. The following are the details of number of students present in a class of 30 during a week. Represent it by a pictograph.

Days	Number of Students
Monday	20
Tuesday	25
Wednesday	25
Thursday	30
Friday	15
Saturday	10

14. A piece of wire  $\frac{7}{8}$  m long broke into two pieces. One piece was  $\frac{1}{4}$  m long. How long is the other piece?
15. Mohan's monthly salary is Rs. 32,500. If his monthly expenditure is Rs. 25,000, find the ratio of
- his salary to his expenditure.
  - his savings to his expenditure.
  - his savings to his salary.
16. Find the cost of fencing a rectangular park of length 250 m and breadth 175 m at the rate of Rs 12 per metre.
17. Divide Rs. 60 in the ratio 1 : 2 between Kriti and Kiran.
18. (a) Find the sum :

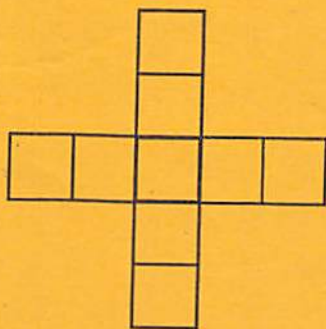
$$0.67 + 10.897 + 289.01$$



- (b) Find the value of :

$$19.6 - 6.793$$

19. Draw a line segment  $PQ$ . Mark a point  $R$  on it. Through  $R$ , construct a line perpendicular to  $PQ$ .
20. Avneet buys 9 square paving slabs, each with a side of length  $\frac{1}{2}$  m. He lays them in the given shape.



- (i) Find the perimeter of the given shape.
- (ii) Rearrange these slabs in a different way so that perimeter of the resultant is more than the given figure. Also, write its perimeter.
21. Consider the letters of English alphabets, A to Z. List any two letters which have
- (a) vertical line of symmetry
- (b) horizontal line of symmetry
- (c) no line of symmetry
22. Pick out the correct solution of the given equation from the values given in the bracket. Show that the other values do not satisfy the equation :

$$n + 12 = 20; (12, 8, 20)$$

**Section-D**

**(8×4=32)**

23. If the cost of a dozen soaps is Rs. 153.60, what will be the cost of 15 such soaps?
24. Urmila's school is at a distance of 5km 350 m from her house. She travels 1 km 70 m on foot and the rest by bus. How much distance does she travel by bus?
25. Draw the bar graph for the following table of values, with suitable scales on the axes.

Years	1998	1999	2000	2001	2002
Number of bicycles	800	600	900	1100	1200

- (a) In which year were the maximum number of bicycles manufactured?
- (b) In which year were the minimum number of bicycles manufactured?
26. Aakash bought vegetables weighing 10 kg. Out of this, 3 kg 500 g are onions, 2 kg 75 g are tomatoes and the rest are potatoes. What is the weight of the potatoes?
27. Bob wants to cover the floor of a room 3 m wide and 4 m long by squared tiles. If each square tile is of side length 0.5 m, then find the number of tiles required to cover the floor of the room.
28. Take Arun's present age to be  $y$  years.
- (i) what will be his age 6 years from now?
- (ii) what was his age 3 years back?
- (iii) Arun's grandfather is 6 times his age. What is the age of his grandfather?
- (iv) Arun's father's age is 5 years more than 3 times Arun's age. What is his Father's age?
29. Draw a circle of radius 4 cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do these perpendicular bisectors.
30. Draw a rough sketch of a triangle (if possible) which has
- (a) Exactly one line of symmetry.
- (b) Exactly two lines of symmetry.
- (c) Exactly three lines of symmetry.
- (d) No line of symmetry.

Also write the name of the triangles (on the basis of the sides) in each case.