

**Atomic Energy Education Society
Annual Examination-2018-19**

**Class: VI
Subject: MATHEMATICS**

**Time : 3 hrs
Marks : 80**

To be filled by the student

Student's Name: _____

Name of the School: _____

Class /Sec. : _____ Roll No.: _____

Date of Examination: _____

General Instructions:

- i) The question paper consists of four sections A, B, C and D*
- ii) Section A consists of 6 questions of 1 mark each.*
- iii) Section B consists of 6 questions of 2 mark each.*
- iv) Section C consists of 10 questions of 3 marks each.*
- v) Section D consists of 8 questions of 4 marks each.*
- vi) Use of calculator is not allowed.*

SECTION-A

(Each question carries 1 mark)

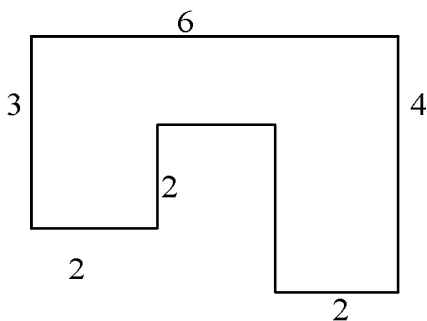
- 1) Name two quadrilaterals with exactly two lines of symmetry. 1
- 2) The side of a regular pentagon is 8cm. Find its perimeter. 1
- 3) Find the value of 'm' in the equation $3m=27$. 1
- 4) Write $3 + \frac{7}{10} + \frac{5}{100}$ in decimal form. 1
- 5) Find the ratio of 20 minutes to 1 hour. 1
- 6) Fill in the missing number $\frac{14}{21} = \frac{\square}{3}$ 1

SECTION-B
(Each question carries 2 marks)

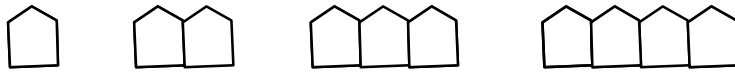
- 7) The names of flowers liked by 24 students in a class are given below. Prepare a table using tally marks for this data. 2
- | | | | | | |
|-------|----------|-----------|----------|-----------|-----------|
| Rose | Marigold | Sunflower | Aster | Marigold | Rose |
| Rose | Marigold | Aster | Marigold | Sunflower | Rose |
| Aster | Rose | Marigold | Marigold | Marigold | Marigold |
| Rose | Rose | Aster | Marigold | Sunflower | Sunflower |
- 8) Draw a line segment $PQ = 7.5$ cm and construct the perpendicular bisector of PQ . 2
- 9) Write in decimal form: 2
- a) Three hundred six and seven hundredths.
 - b) Nine hundred twenty and five tenths.
- 10) Write 0.04 as fraction in the lowest form. 2
- 11) Put $>$, $<$ or $=$ symbols 2
- a) $0.07 \square 0.03$
 - b) $0.2 \square 0.02$
 - c) $1.11 \square 1.111$
 - d) $5.64 \square 5.603$
- 12) Give algebraic expressions for the following statements 2
- a) 11 added to twice y
 - b) 7 subtracted from half of x

SECTION-C
(Each question carries 3 marks)

- 13) Determine whether the four numbers 25, 30, 40 and 48 are in proportion or not. 3
- 14) The weight of 72 books is 9 kg. What is the weight of 40 such books. 3
- 15) Find the area of the figure given below : (The measures are given in centimeters) 3



16) Observe the pattern given below and do as directed 3



- a) Write the rule for finding out the number of matchsticks to make the above pattern with 'n' pentagons.
- b) How many matchsticks are required to make a pattern with 10 pentagons?

17) Construct an Angle $PQR = 150^\circ$. 3

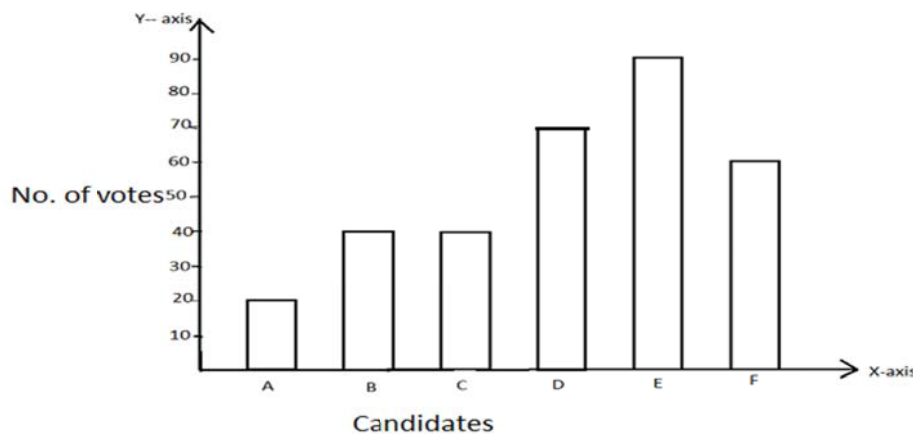
18) Mention the type of triangle and draw its rough sketch to show the lines of symmetry in the following cases 3

- a) A triangle with exactly one line of symmetry.
- b) A triangle with exactly three lines of symmetry.

19) The area of a rectangle is 360sqcm. If its length is 15cm , find the perimeter. 3

20) Construct a circle of radius 4cm. Draw a chord AB and construct the perpendicular bisector of AB. Does it pass through the centre of the circle? 3

21) In a school election, candidates A,B,C,D,E and F contested for the post of school captain. Read the bar graph showing the result of the election and answer the questions that follow : 3



- i) Find the total number of votes.
- ii) Which candidate was selected as the school captain?
- iii) Which two candidates got equal number of votes?
- iv) What is the difference between the number of votes of candidates D and E?

- 22) Convert the following 3
 a) 88mm = ____ cm b) 1.25kg = ____ g c) 525 paise = ____ rupees.

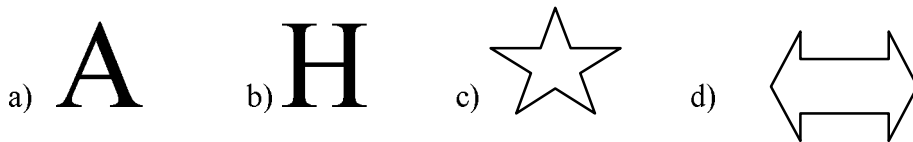
SECTION-D
(Each question carries 4 marks)

- 23) The number of vehicles passing through a toll plaza on a day is given below. 4
 Prepare a bar graph to represent this data taking the scale as 1 unit = 100 vehicles.

Type of Vehicle	No. of Vehicles
Cars	1100
Buses	550
Trucks	700
Two Wheelers	1000
Auto rickshaws	300
Vans	250

- 24) Construct angle $ABC = 90^\circ$ using ruler and compasses. Also construct its angle bisector 4

- 25) Copy the figures given below and draw the lines of symmetry. 4



- 26) Pick out the solution for the equation $x+4 = 10$ from the values given in brackets. 4
 Also show that the other values do not satisfy the equation.

$x + 4 = 10$ (-2, 2, 6, 8)

- 27) Ruby had 10kg 750g of vegetables in her shop. Out of this she sold 1kg 200g to Mala, 2kg 100g to Sita and 3kg 500g to Rani. Calculate the quantity of vegetables left with Ruby. 4

- 28) In a year Rajeev earned Rs.3,60,000 and saved Rs.60,000 . Find the ratio of 4
 (a) The amount he earned to the amount he saved
 (b) Amount he saved to the amount he spent

- 29) A rectangular room of width 6m and length 8m is to be covered with square tiles each of side 50cm. Find the number of tiles required to cover the floor of the room. 4

30) A survey was conducted to find the number of people visiting Taj Mahal in a week.
The following data was recorded.

4

Prepare a Pictograph using the symbol $\square = 100$ people.

Days	Number of visitors
Monday	200
Tuesday	150
Wednesday	300
Thursday	500
Friday	450
Saturday	600
