

Term-II Session Ending Examination (2017-18)

Class - VI

Subject - Mathematics

Time : 2.30 Hours

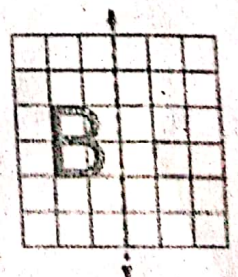
Max. Marks : 80

General Instructions :

- (1) All questions are compulsory.
- (2) The question paper consists of 30 questions divided into four sections A, B, C and D.
Section - A comprises of 6 questions of 1 mark each. Section - B comprises of 6 questions of 2 marks each. Section - C comprises of 10 questions of 3 marks each and Section - D comprises of 8 questions of 4 marks each.
- (3) There is no overall choice. However, internal choice has been provided in 3 questions of three marks each and 3 questions of four marks each. You have to attempt only one of the alternatives in all such questions.

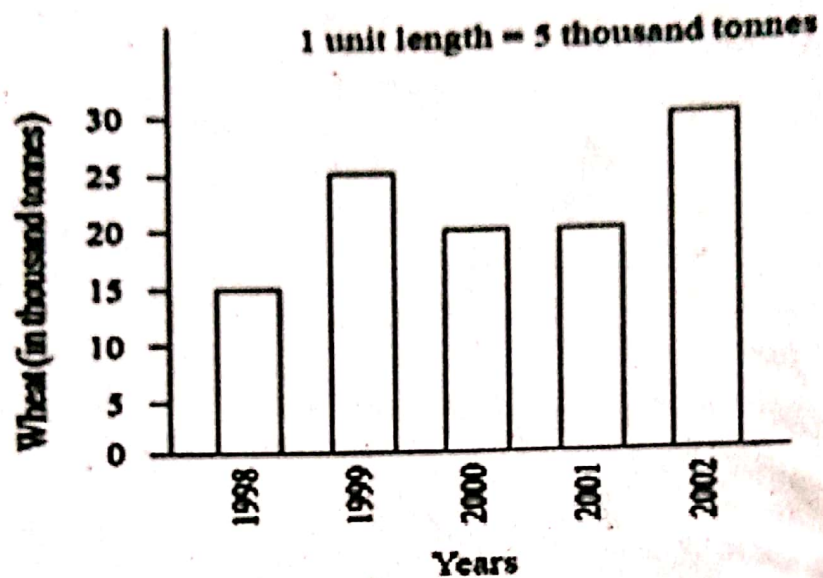
(SECTION - A)

- Q.1 How many lines can pass through two given points?
- Q.2 Represent six in tally marks symbol.
- Q.3 The side of an equilateral triangle is given by l . Express the perimeter of the equilateral triangle using l .
- Q.4 Find the ratio of 90 cm to 30 cm.
- Q.5 List any two symmetrical objects from your home or school.
- Q.6 Draw mirror image of the letter B.

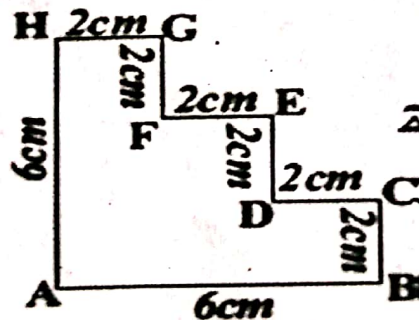


(SECTION - B)

- Q.7 The bar graph given alongside shows the amount of wheat purchased by government during the year 1998-2002. Read the bar graph and write down your observations. In which year was



- (a) the wheat production maximum?
(b) the wheat production minimum?
- Q.8 Find the perimeter of following figure.



- Q.9 Name the types of following triangles:
- (a) Triangle with lengths of sides 7 cm, 8 cm and 9 cm.
(b) ΔPQR such that $PQ = QR = PR = 5$ cm.
- Q.10 Using the number line write the integer which is:
- (a) 3 more than 5
(b) 5 more than - 5

Q.11 Fill in the following blanks. $\frac{15}{18} = \frac{\square}{6} = \frac{10}{\square}$

Q.12 There are 20 girls and 15 boys in a class.

- (a) What is the ratio of number of girls to the number of boys?
- (b) What is the ratio of number of girls to the total number of students in the class?

(SECTION - C)

Q.13 Total number of animals in five villages are as follows:

Village A : 80 , Villages B : 120 , Village C : 90 , Village D : 40 , Village E : 60 Prepare a pictograph of these animals using one symbol \odot to represent 10 animals.

Q.14 A piece of wire is 24 cm. long. What will be the length of each side, if the wire is used to form.

- (i) an equilateral triangle?
- (ii) a square?
- (ii) a regular hexagon?

Q.15 Find the area in square meter of a piece of cloth 1m 25cm wide and 2m long.

Q.16 Give expressions for the following cases.

- (a) 7 added to p
- (b) 7 subtracted from p
- (c) p multiplied by 7

Q.17 State which of the following are equations (with a variable). Give reasons for your answer and identify the variable from the equation with the variable.

- (a) $17 = x - 7$

(b) $(t - 7) > 5$

(c) $(7 \times 3) - 19 = 8$

Q.18 Cost of a dozen pens is Rs. 180 and cost of 8 ball pens is Rs 56. Find the ratio of the cost of a pen to the cost of a ball pen.

(OR)

Divide 20 pens between Sheela and Sangeeta in the ratio of 3 : 2.

Q.19 Are the ratios 25g : 30g and 40 kg : 48 kg in proportion?

Q.20 Find the number of lines of symmetry for each of the following shapes :

(a)



(b)



(c)



Q.21 Draw any circle and mark points A, B and C such that.

(a) is on the circle.

(b) is in the interior of the circle.

(c) is in the exterior of the circle.

(OR)

Draw a rough sketch of a quadrilateral PQRS state

(i) two pairs of opposite side

(ii) two pairs of opposite angles

Q.22 Raju bought a book for Rs 35.65 purpose for donation in his school library. He gave Rs 50 to the shopkeeper. How much money did he get back from the shopkeeper?

(OR)

Shubham painted $\frac{2}{3}$ of the wall space in his room. His sister Madhavi helped and painted $\frac{1}{3}$ of the wall space. How much did they paint together?

(SECTION - D)

Q.23 The following table shows the monthly expenditure of Aditya's family on various items:

Item	House Rent	Food	Education	Electricity	Transport	Misc
Expenditure (Rs.)	3000	4500	1000	500	750	1500

Draw a bar graph to represent the above information choosing the scale of your choice.

Q.24 The area of a rectangular plot 50 m long is 300 sq m. Find the width of the plot. Also find the cost of tiling the plot at the rate of Rs. 20 per sqm.

(OR)

How many tiles with dimensions 12 cm and 5 cm will be needed to fit a region whose length and breadth are 144 cm and 100 cm respectively.

Q.25 Answer the following: Take Sarita's present age to be y years.

(i) — What will be her age 5 years from now?

(ii) What was her age 3 years back?

(iii) Sarita's grandfather is 6 times her age. What is the age of her grandfather?

(iv) Grandmother is 2 years younger than grandfather. What is grandmother's age?

Q.26 If the cost of 7 m of cloth is Rs 294, find the cost of 5 m of cloth.

Q.27 (i) Draw \overline{AB} of length 7.3 cm and find its axis of symmetry.

(ii) Draw an angle of measure 147° and construct its bisector.

Q.28 Complete the table and by inspection of the table, find the solution to the equation $m + 10 = 16$.

P.T.O.

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m	1	2	3	4	5	6	7	8	9	10	...
$m + 10$	-	-	-	-	-	-	-	-	-	-	-

(OR)

Complete the table and by inspection of the table, find the solution to the equation $3m + 2 = 38$.

m	3	4	5	6	7	8	9	10
$3m + 2$	-	-	-	-	-	-	-	-	-	-

Q.29 Construct with ruler and compasses, angles of following measures:

(a) 30°

(b) 45°

(OR)

Draw a circle of radius 4cm. Draw any two of its chords. Construct the perpendicular bisector of these chords. Where do they meet?

Q.30 Split the following shapes into rectangles and find their areas. (The measures are given in centimeters)

