Primrose Schools

ICSE Curriculum
(A Unit of Primrose Educational Trust, Chennai)
An ISO 9001:2015 Certified Institution

State Purpose of Worksheet – III Term Examination [2018 – 2019]

[KG Class work/Home Assignment/Alternate Class work/Internal Assessment/Continuous Assessment/Unit Test/Cycle Test/Revision Test/Mid Term Examination/<u>Term Examination</u>/Preboard]

Name:	Std: VII	Subject: Mathematics
Date:	Term: III	Topic: NA
Maximum Marks: 60	Time Duration: 2 hr	Type of Assessment (if internal assessment): NA

Answer to this paper must be written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this paper is the time allowed for writing the answers.

Attempt **all** the questions from **Section A** and **any three** questions from **Section B.**

All working, including rough work, must be clearly shown and must be done on the same sheet as the rest of the answer.

Omission of essential work will result in loss of marks.

The intended marks for questions or parts of questions are given in brackets [ ].

Section A [30 Marks]
Attempt **all** the questions

Question 1

   a) Find the selling price of an article for which cost price is ₹ 750 and gain is 8 % .   [3]

   b) Simplify and give the answer in exponent form: [3]

$$\frac{2^3 \times 3^4 \times 4}{3 \times 32}$$

   c) Divide: $6x^2 + 19x + 10 \; by \; 3x + 2$ [4]

Question 2

a) The runs scored in a cricket match by 12 players is as follows : [3]

8, 14, 50, 110, 70, 100, 15, 20, 18, 10, 5, 85

Find the median score.

b) i) Subtract p – 2q + r from the sum of 10p – r and 5p + 2q [2]

   ii) Given below are the ages (in years) of 25 persons in a small locality. Prepare a frequency [4]
   distribution table and also find the mode.

   40, 41, 41, 39, 42, 42, 41, 40, 40, 41, 41, 42, 40, 41, 41, 39, 41, 40, 39, 40, 41, 41, 40, 39 and 40

c) i) There are 2 aces in each of the given set of cards placed face down. From which set are you [1]
   certain to pick the two aces in the first go ?

Question 3

a) i) Identify the like terms: $x^2y,\ 3xy^2,\ -2x^2y,\ 4x^2y^2,\ 7x^2y$ [1]
   ii) Write the number of terms in the expression $4a^2 \div 2b + 8c + 7$ [1]
   iii) If a = 4, b = 3; find the value of $a^b + b^a$ [2]

b) A dice is thrown once. What is the probability of getting [4]

   i) a number 3 ?
   ii) an even number ?
   iii) an even number and a multiple of 3 ?

c) A shopkeeper buys a watch for ₹ 1600 and marks the price up by 20 % of its cost price. He allows 15 [2]
   % discount on marked price . Find the marked price of the watch.

Section – B [30 Marks]

Answer **any three** questions
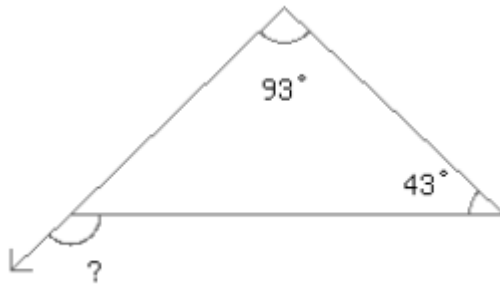
Question 4

a) Solve $7x + \dfrac{3}{4} - 8 = 2$ [3]

b) The temperature (in ^0c) in a city on 7 days of certain week was recorded as follows. [4]

Days	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Temperature (in ^0c)	31.4	32.1	32.2	30	31.5	34.5	31.6

i) Find the mean temperature for the week.

ii) On how many days was the temperature less than the mean temperature ?
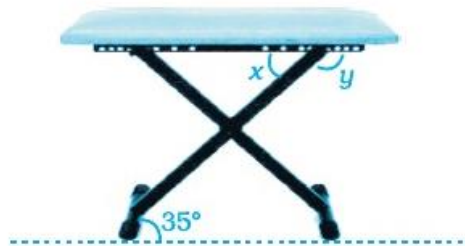
c) Find the unknown value. [3]

Question 5

[3]

a) i) Multiply $(3x - 4y)(6x + 4y)$

b) Construct a triangle ABC in which AB = 6 cm, BC = 4.5 cm, AC = 5.5 cm and draw the circumcircle of this triangle. [7]

Question 6

a) Evaluate: 8.2 − 4.56 − 0.7912 + 2.67   [3]

b) The legs of a stool make an angle of 35^0 with the floor as shown in below figure . Find the angles x and y.   [3]

c) Solve: $9 - 2(x - 5) = x + 10$ [2]

d) Divide   4.28 ÷ 0.02   [2]

Question 7

a) The vehicular traffic at a busy road crossing in a particular place was recorded on a particular day from 6 am to 2 pm and the data was rounded off the nearest tens. Draw a suitable bar graph.   [3]

Time in Hours	6 − 7	7 − 8	8 − 9	9 - 10	10 - 11	11 − 12	12 − 13	13 − 14
Number of vehicles	100	450	1250	1050	750	600	550	200

b)What should be subtracted from $- 7mn + 2m^2 + 3n^2$ to get $m^2 + 2mn + n^2$?   [3]

c) Simplify: $\left[\left(\frac{2}{3}\right)^3 \times \left(\frac{-3}{4}\right)^2 \right] \div \left(\frac{-2}{3}\right)^3$ [4]

Question 8

a) Write 420 in exponential form. [3]

b) In the given figure below, shows angles formed by the goalposts at different positions of a football player . The greater the angle, the better chance the player has of scoring a goal. In the given figure below, player A has a better chance of scoring a goal than Player B. [2]

i) Out of the 7 players shown in Fig (B). Which player has the best kicking angle ?
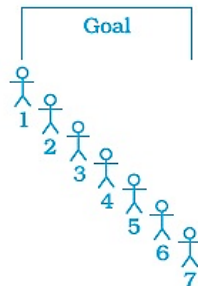

Fig (B)

c) i) The product of two numbers is 42.63. If one number is 2.1, find the other. [3]
   ii) What is the range 0 , -11, 20 , 6 , 15 , -17 and -4 ? [2]