

Class: VII

Subject: Maths (unsolved sample paper)

Summative Assessment -II

Time: 3 hours

MM: 80 Marks

Name: \_\_\_\_\_ class & section: \_\_\_\_\_ Roll.no. \_\_\_\_\_

Invigilator's Name & Signature \_\_\_\_\_

General instructions:

- (i) All questions are compulsory.
- (ii) The question paper consists of 34 questions divided in to 4 sections A, B, C and D.
- (iii) Section A contains 12 MCQ first 8 of 1 marks each and the next 4 of 2 marks each.
- (iv) Section B contains 7 questions of 2 marks each.
- (v) Section C contains 10 questions of 3 marks each.
- (vi) Section D contains 5 questions of 4 marks each.

SECTION A

Q1. Find the ratio of 50 paise to Rs 5.

- (a) 1:1      (b) 1:10      (c) 1:100      (d) 10:1

What will be the product of  $(a^2) \times (2a^{22}) \times (4a^{26})$

- (a)  $8a^{46}$       (b)  $8a^{48}$       (c)  $6a^{50}$       (d)  $8a^{50}$

Q2. Using Euler's formula, find the number of faces of polyhedron having 6 vertices & 12 edges.

- (a) 6      (b) 7      (c) 8      (d) 9

Q3. Area of a parallelogram having base 8 cm corresponding height 10 cm is-

- (a)  $40 \text{ cm}^2$    (b)  $80 \text{ cm}^2$    (c)  $60 \text{ cm}^2$       (d)  $120 \text{ cm}^2$

Q4. Formula for volume of cylinder is-

- (a)  $2\pi rh$    (b)  $\pi r^2h$    (c)  $2\pi r(r+h)$    (d)  $\pi r^3h$

Q5. Find the value of  $3^{-2}$

- (a) 9      (b)  $1/9$       (c) 6      (d) -6

Q6. Which of the following number is divisible by 3-?

- (a) 1234   (b) 153      (c) 154      (d) 155

Q7. The usual form of  $100 \times 7 + 10 \times 1 + 8$  is -

- (a) 187      (b) 871      (c) 178      (d) 817

SECTION B

Q8. Find the value of  $3x(4x-5) + 3$  for  $x=3$

- (a) 61      (b) 62      (c) 63      (d) 66

Q9.  $1 \text{ A}$

$\times \text{ A}$

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 $9 \text{ A}$ 

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- (a) 4      (b) 5      (c) 6      (d) 7

Q10. The point of intersection of x-axis & y-axis is called -

- (a) Origin   (b) zero point   (c) co-ordinate   (d) Starting point

Q11. The value of  $(a-b)^2$

(a)  $a^2-b^2$  (b)  $a^2+b^2+2ab$  (c)  $a^2-2ab+b^2$  (d)  $a^2-b^2+2ab$

Q12. Convert 3:4 into percentage.

Q13. Add:  $ab-bc$ ,  $bc-ca$ ,  $ca-ab$ .

Q14. What are polyhedrons?

Q15. The diagonals of rhombus are 7.5 cm & 12 cm. Find its area.

Q16. (i) Express 0.0000000000085 in standard form.

(ii) Express  $4.5 \times 10^4$  in usual form.

Q17. Which of the following are in inverse proportion?

(a) The number of workers on a job and the time to complete the job.

(b) Area of cultivated land and the crop harvested.

(c) Find the common factor of  $14pq$  &  $28p^2q^2$

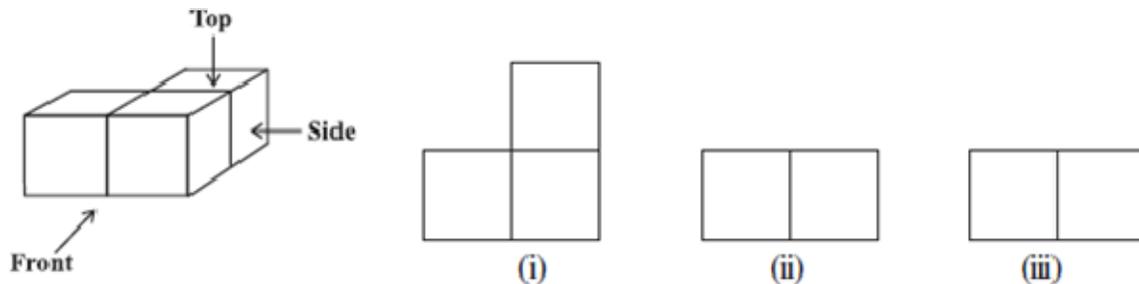
### SECTION C

Q18. I purchased a hair dryer for Rs 5400 including 8 VAT. Find the price before VAT was added.

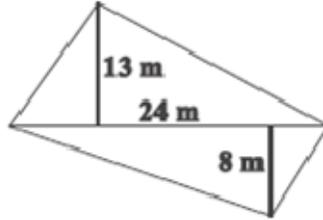
Q19. Using identity find the product of -

$$(4x+5)(4x+1)$$

Q20. For given solid, identify the top view, front view and side view



Q21. The diagonal of a quadrilateral shaped field is 24 m and the perpendiculars dropped on it from the remaining opposite vertices are 8 m and 13 m. Find the area of the field.



Q22. Find the value of  $m$  for which  $5^m \div 5^{-3} = 5^5$ .

Q23. If a box of sweets is divided among 24 children, they will get 5 sweets each.

How many would each get, if the number of the children is reduced by 4?

Q24. A machine in a soft drink factory fills 840 bottles in six hours. How many bottles will it fill in five hours?

Q25. Divide -

(i)  $(5x^2 - 6x) \div 3x$       (ii)  $5(2x + 1)(3x + 5) \div (2x + 1)$

Q26. Draw the line passing through (2, 3) and (3, 2). Find the coordinates of the points at which this line meets the  $x$ -axis and  $y$ -axis.

Q27. Find the values of the letters in each of the following and give reasons for the steps involved

$$\begin{array}{r} 4 \ A \\ + \ 9 \ 8 \\ \hline C \ B \ 3 \\ \hline \end{array}$$

OR

If  $31z5$  is a multiple of 9, where  $z$  is a digit, what is the value of  $z$ ?

### SECTION D

Q28. A VCR and TV were bought for Rs 8,000 each. The shopkeeper made a loss of 4% on the VCR and a profit of 8% on the TV. Find the gain or loss percent on the whole transaction.

OR

Q29. Arif took a loan of Rs 80,000 from a bank. If the rate of interest is 10% per annum, find the difference in amounts he would be paying after 1 ½ years if the interest is

(i) Compounded annually.                      (ii) compounded half yearly

Q30. The internal measures of a cuboidal room are 12 m × 8 m × 4 m. Find the total cost of whitewashing all four walls of a room, if the cost of white washing is Rs 5 per m<sup>2</sup>. What will be the cost of white washing if the ceiling of the room is also whitewashed?

OR

Q31. A closed cylindrical tank of radius 7 m and height 3 m is made from a sheet of metal. How much sheet of metal is required?

Q32. Find the value of - (i)  $(1/2)^{-2} + (1/3)^{-2} + (1/4)^{-2}$  (ii)  $(3^0 + 4^{-1}) \times 2^2$

Q33. Factorise -

(i)  $a^4 - b^4$     (ii)  $p^2 + 6p + 8$

Q34. Draw the graphs for the following tables of values, with suitable scales on the axes - Interest on deposits for a year

Deposit (in Rs)		2000	3000	4000	5000
Simple Interest(in Rs)		160	240	320	400

(i) Does the graph pass through the origin?

(ii) Use the graph to find the interest on Rs 2500 for a year.