

SUMMATIVE ASSESSMENT - III - 2016 - 2017

MATHEMATICS

(English Medium)

PART - A & B

Class : VIII]

(Max. Marks : 80)

[Time : 2-45 Hrs.

Instructions :

1. In the time duration of 2 hrs. 45 min. first 15 minutes is exclusively allotted to read and understand the Question Paper.
2. The Question Paper comprises of three sections I, II, III.
3. All Questions are compulsory.
4. There is no overall choice. However there is an internal choice to the Questions under section - III.
5. Part - A&B should be given at the beginning of the examination only.

Marks : 60]

PART - A

[Time : 2-00 Hrs.

Section - I

Note : 1. Answer all the Questions.

2. Each Question carries 2 Marks.

$$4 \times 2 = 8$$

1. Simplify $\frac{(-4)^{-5}}{(-4)^{-3} \times (-4)^{-2}}$

2. Write the standard form for 0.0000456 and 0.000437×10^{-3}

3. Draw a rough diagram of Square Pyramid.

4. Write any three two digit consecutive numbers. Find their arithmetic mean. Check whether the arithmetic mean is one of those numbers or not.

[Turn Over

Section - II

Note : 1. Answer all the Questions.

2. Each Question carries 4 Marks.

$5 \times 4 = 20$

5. Express $4.\bar{7}$ in $\frac{p}{q}$ form and find the value of $\frac{p-q}{p+q}$.
6. If the length of arc of a sector is $7\frac{1}{3}$ cm. and its radius is 7 cm. find the area of the sector.
7. What is an algebraic identity? Give two examples.
8. For a pyramid whose base is a pentagon. Write F, V, E and use Euler's relation.
9. Seven observations are given as 15, 12, 18, 15, 18. x, y (x, y are whole numbers)
 1. Write any two possible values of x, y if median of the data is x .
 2. Write any two possible values of x, y if the median is 15.

Section - III

Note : 1. Answer all the Questions.

2. Answer any one from internal choice of each Question.

3. Each Question carries 8 Marks.

$4 \times 8 = 32$

10. 30 workers can finish a work in 24 days by doing 6 hrs. per day. Find the number of workers to finish the same work in 20 days by doing 8 hrs. per day.

(OR)

The following details of field are noted in metres in the field book of a surveyor find the area of the field.

	To D	
	140	
50 to E ←	90	
	60	→ 50 to C
	30	→ 30 to B
From A		

[Contd on 3rd page...

11. The area of a square field is 5184 m^2 . Find the area of a rectangular field whose length is equals to the side of the square and breadth is 54m.

(OR)

Divide $42(a^4 - 13a^3 + 36a^2)$ by $7a(a-4)$.

12. Find the difference between compound and simple interests on amount of Rs.10,000/- at a rate of 10% per annum for 2 years and check the better one.

(OR)

There are two cuboids which have same shape and size. It length, breadth and height of cuboids 15cm, 12cm and 6cm respectively. Check in which way it means less paper for packing both cuboids.

1) By keeping one on another without changing the lengths.

2) By keeping side by side without changing the lengths.

13. Draw frequency Polygon by using mid values for the given data.

Class Interval	10-20	20-30	30-40	40-50	50-60
Frequency	5	9	16	11	3

(OR)

PQ = 4.5 cm, QR = 5.2 cm, RS = 5.5 cm, PS = 4 cm and $\angle PQR = 120^\circ$
construct the Quadrilateral PQRS.

