

ANNUAL EXAMINATION (2022-2023)

STD: VII

SUB: MATHS

MARKS:80

Section A (20m)

Q 1.A) Multiple choice questions (10m)

1. The sum of any two sides of a triangle is
I. less than the third side ii. Equal to the third side iii. Greater than third side iv. None of these

2. Simple interest is calculated by

$$I. SI = \frac{P \times T}{R \times 100} \quad ii. SI = \frac{P \times 100}{R \times T} \quad iii. SI = \frac{P \times R}{T \times 100} \quad iv. SI = \frac{P \times R \times T}{100}$$

3. If radius of circle is 21 cm then circumference of circle is

I. 133 ii. 123 iii. 132 iv. 130

4. $a^2 - 2ab$ is a

I. monomial ii. binomial iii. trinomial iv. None of these

5. The coefficient of X in $9 - x + y$ is

I. 0 ii. 9 iii. -1 iv. 1

6. The expression $[(5)^3]^2$ is equal to

I. $(-5)^5$ ii. $(5)^6$ iii. 5^5 iv. -5^6

7. Area of parallelogram is

I. Base \times height ii. $\frac{1}{2} \times$ base \times height iii. Length \times breadth

iv. Length \times breadth \times height

8. A triangle whose sides measure 6cm, 5cm and 8cm is

I. isosceles triangle ii. scalene triangle iii. Equilateral triangle iv.

None of these

9. What is the value of n in $3n + 7 = 25$

I. 7 ii. 6 iii. 5 iv. 8

10. The like term to $-6a^2bc$ is

I. $4a^2b^2c^2$ ii. $-\frac{1}{6}abc$ iii. $2a^2bc$ iv. a^2b^2c

B) Fill in the blanks (5m)

1. The total measure of three angles of a triangle is _____

2. The length of the boundary of the circle is called _____

3. The sum of -11 and 7 is _____

4. The price at which an article is purchased is called _____

5. The number 3^5 has base _____ and exponent _____.

C) I] Express the following in exponent form (2m)

I. $b \times b \times b \times b \times b$. ii. $2 \times 2 \times a \times a \times a$

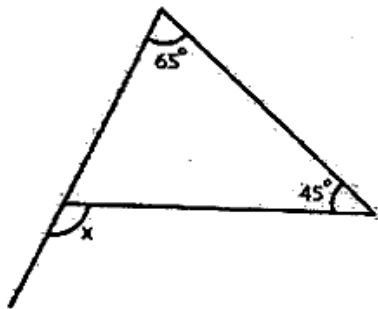
II] find the value of i. 3^7 ii 12^3

Section -B (2×10=20)

Q 2. A) solve the following

i. $y-4=16$ ii. $\frac{z}{3} = \frac{5}{4}$

B) Find the value of unknown exterior angle x



C) convert the given fraction number to percentage

I $\frac{5}{4}$ ii $\frac{3}{40}$ <https://www.cbseboardonline.com>

D) Find i. 15% of 250 ii. 20% of 2500

E) Find the missing values

Base = 20cm, height = ? Area of parallelogram = 246cm^2

F) find area of circle with radius 28 cm ($\pi = 22/7$)

G) Identify terms and factor

$5xy^2 + 7x^2y$

H) If $m = 2$, find the value of $3m^2 - 2m + 7$

I) Express product of power of their prime factors 540

J) simplify $6^{15} \div 6^{10}$

Section-C (3×8=24)

Q 3. A) solve the equation

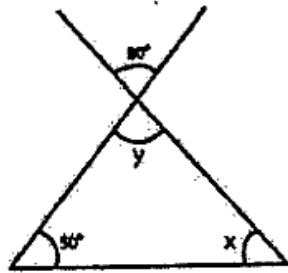
$3n - 2 = 46$

B) PQR is a triangle, right angled at P. If $PQ = 10\text{cm}$, and $PR = 24\text{cm}$ find QR

C) In a computer lab, there are 3 computer for every 6 students. how many computer will be needed for 24 students.

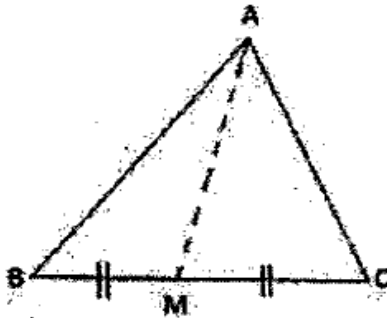
D) write expanded form of 2567198

E) Find the value of the unknown x and y



F) The population of a city decreased from 25000 to 24500. find the decreased percentage.

G) AM is a median of a triangle ABC. is $AB+BC+AC > 2AM$ (consider the sides of $\triangle ABM$ and $\triangle AMC$)



H) classify into monomial, binomial and trinomial

$4y-7z, y^2, x+y-xy, 7mn, y^2+x^2, a^2+b^2+c^2$

Section -4($4 \times 4 = 16$)

Q. A) Laxmi father is 49 year old. He is 4 year older than three times Laxmi's age. what is Laxmi's age?

B) ABCD is a quadrilateral. is $AB+BC+CD+DA > AC+BD$

C) Find the amount to be paid at the end of 3 years in case principle is 12000rs at 12%pa

D) solve the equation

i. $3(n-5)=21$ ii. $\frac{2}{5}q - 7 = 13$