

BCM SCHOOL ,BASANT AVENUE,DUGRI ROAD,LUDHIANA
CLASS IX
SUBJECT: MATHEMATICS
ASSIGNMENT -1 (APRIL 2023-24)
CH:1 (NUMBER SYSTEM) AND CH:2 (POLYNOMIALS)

MCQ

Q1 Express 10.3434..... in the form of p/q

- a) $\frac{1044}{99}$ b) $\frac{1034}{99}$ c) $\frac{1024}{99}$ d) $\frac{1044}{100}$

Q2 Which of the following is a rational number

- a) $\sqrt{25} - 5$ b) $1+\sqrt{3}$ c) $\sqrt{24}$ d) $9\sqrt{2}$

Q3 Find the value of m if x+4 is factor of polynomial x^2+3x+m

- a) 2 b) 4 c) -4 d) 5

ASSERTION/REASONING

Q4 Assertion: The constant polynomial 0 is called zero polynomial.

Reason : $\sqrt{x} + 3$ is a polynomial

- (a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
(c) Assertion (A) is true but reason (R) is false.
(d) Assertion (A) is false but reason (R) is true

Q5 Find the value of a and b if $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a - b\sqrt{3}$

Q 6 If $a + b = 10$ and $a^2 + b^2 = 58$, find the value of $a^3 + b^3$

Q 7 If $x = 2 + \sqrt{3}$ find the value of $x^2 + \frac{1}{x^2}$

CASE STUDY

Q 8 Two friends Vicky and Love start a business together. They decided to share their capitals depending upon the variable expenditure. The capital of the two partners together is given by polynomial $6x^2+11x-35$, which is the product of their individual share factors.

On the basis of the above information,

Answer the following questions.

- (i) What is the total expenditure of Vicky and Love when $x = 10$
(ii) What is the share of the Vicky and love individually
(iii) The value of x, when their shares are equal

