(Class-10th : Subject: Mathematics)

MATHS LO BASED NAS QUESTIONS- 2021-22

(10 questions for BMs)

Q.1Let ΔABC ∽ ΔDEF, ar(ΔABC)= 64 cm² and ar(ΔDEF)=144 cm².If EF=6 cm, then BC is equal to (LO 1007)

1. 2cm 2.3cm 3.4 cm 4. 6cm

Q.2 The sum of first10terms of the A.P.: -5,-2,1,... is (LO 1005)

1.85 2. 82 3.79 4. 76

Q.3 Product of the roots of the equation (a-b)x²+(b-c)x+(c-a)=0is (LO 1004)

1. $\frac{c-a}{b-a}$ **2.** $\frac{b-c}{a-b}$ **3.** $\frac{c-a}{a-b}$ **4.** $\frac{b-c}{b-a}$

Q.4 Which of the following has terminating decimal expansion: (LO 1001)

1. $\frac{23}{2^2\times5^2}$

2. $\frac{23}{2^3\times3^2}$

3. $\frac{23}{3^2\times5^3}$

4. none of these

Q.5 If p and q are two prime numbers then their HCF is: (LO 1001)

1. pq 2. p+q 3.0 4.1

Q.6 What is the product of zeros of cubic polynomial px³+qx²+rx+s(LO 1002)

1. $\frac{s}{p}$ **2.** $\frac{-s}{p}$ **3.** $\frac{q}{s}$ **4.** $\frac{-q}{p}$

Q.7 If the system of linear equations have unique solution then (LO 1003)

1. $\frac{a_1}{a_2}=\frac{b_1}{b_2}\neq\frac{c_1}{c_2}$ **2.** $\frac{a_1}{a_2}=\frac{b_1}{b_2}=\frac{c_1}{c_2}$ **3.** $\frac{a_1}{a_2}\neq\frac{b_1}{b_2}\neq\frac{c_1}{c_2}$ **4.none of these**

Q.8 The graphs of equations 10x-30y=16 and 3x-9y=24/5 are two lines which are (LO 1003)

1. Coincident

2. Parallel

3. Intersecting exactly at one point

4. Perpendicular to each other

Q.9 A bag contains 5 red ,8 black and 7 white balls. One ball is chosen at random. What is the probability that the chosen Ball is not black? (LO 911)

1.1/2 2 . 4/5 3. 3/5 4. 4/20

Q.10 If each observation of a data is increased by 5 then their mean (LO 909)

1. Remains the same

2. Becomes five time the original mean

3. Is decreased by 5

4. Isincreased by 5