

MATHMATICS

1. The ratio of $x\%$ of y to $y\%$ of x is equal to –a) $1/xy$ b) 1 c) xy d) x/y ANS –(B)
2. There are two concentric circles of radii 13 cm and 12 cm. The length of the chord of the outer circle which touches the inner circle is ANS= 10
3. A bag contains 10 p and 25 p coins. If there are sixty coins in all and their value is Rs. 13.05, then total number of 10 p coins are ANS= 13
4. A boy was asked to multiply a certain number by 25. He multiplied it by 52 and got his answer more than the correct one by 324. The number to be multiplied was ANS= 12
6. The R.H. factor denotes – ANS= Rhesus Incompatibility
7. Apparently normal, healthy babies are sometimes the victims of sudden and unexpected death, called – crib death
8. which is known as ‘gregarious instinct’ – tendency to develop group
9. ‘Adolescence’ comes from a Greek word –adolescere
10. If x , y and z are three sums of money such that y is the simple interest of x and z is the simple interest on y for the same time and rate, then the relation between x , y and z is
answer= $y^2 = xz$
11. In case of a cuboid, N_0 denotes the number of vertices, N_1 the number of edges, and N_2 the number of faces, then
answer= $N_0 + N_2 = N_1 + 2$
12. There is a 2-digit number in which the digit in tens’ place is “t” and the digit in unit place is “U”. The digit “1” is placed to right of “U”. The value of new number is
ANSWER= $100t + 10U + 1$
13. The rank of the matrix
$$\begin{bmatrix} 0 & 0 & 2 & 2 & 0 \\ 1 & 3 & 2 & 4 & 1 \\ 2 & 6 & 2 & 6 & 2 \end{bmatrix}$$

answer= 2
14. The length, breadth and height of a cuboid are in the ratio 5:4:2 and the total surface area is 1216 cm^2 , then the volume of the cuboid is –a) 2660 cm^3 b) 2460 cm^3 c) 2560 cm^3 d) 2700 cm^3 ANS- (2560)
15. If $a+b+c = 0$, then $a^3 + b^3 + c^3 = ?$ –a) 0 b) $3a^3b^3c^3$ c) $3abc$ d) $3/abc$ ANS- (C)

REMAINING PART

1. Component of milk used for making plastic –casein
2. State animal of W.B. –Fishing cat
3. Dust bowl –soil erosion
4. Sundarban island submerged under water due to Global warming –Lohachara island
5. which disease is caused by passive smoking –COPD
6. which plant extract is used as insecticide –Rotenone
7. The Great Migration takes place –Masaimara and Serengeti
8. In which city geo thermal energy came first –Surat