Question1: If (2,-3) is solution of eqn 3x-ky=2 then the value of K is

- a) -2
- b) -2/3
- c) -4
- d) -4/3

Question2: If the slant height of a cone is 10 cm and its radius is 6cm, then height of cone is

- a) 9cm
- b) 13cm
- c) 16cm
- d) 8cm

Question3: If the lateral surface area of cube is 1600cm2 then its edge is

- a) 15cm
- b) 18cm
- c) 25cm
- d) 20cm

Question4: Which one is solution of eqn x-3y=2

- a) (4,1)
- b) (6,2)
- c) (5,1)
- d) (0,2)

Question5: A die is thrown once. The probability of getting an even no. is

- a) 1/2
- b) 1/3
- c) 1/5
- d) 2

Question6: Class mark of class interval 90-110 is

- a) 90
- b) 110
- c) 100
- d) None

Question7: Three angle of a quadrilateral is 60°, 110° and 86°. The fourth angle of quadrilateral is

- a) 104°
- b) 124°
- c) 94°
- d) 84°

Question8: In a cylinder, radius is doubled and height is halved, curved surface area will be

- a) halved
- b) doubled
- c) same
- d) four times

Question9: Which was the Tabled city of gold?

- a) Peru
- b) Mexico
- c) El Doeodo
- d) Spain

Question10: Which of the following is an irrational number?

- a) 3.14
- b) 3.141
- c) 3.1411
- d) 3.141141114

Question11: The zeros of the polynomial $p(x)=x^2+x-6$ are

- a) 2,3
- b) -2, 3
- c) 2,-3
- d) -2, -3

Question12: The value of k, for which the polynomial x^3-3x^2+3x+k has 3 as its zero, is

- a) -3
- b) 9
- c) -9
- d) 12

Question13: When $(x^{31}+31)$ is divided by $(x+1)$ the remainder is

- a) 0
- b) 1
- c) 30
- d) 31

Question14: Simplify $(32)^{-2/5} \div (125)^{-2/3}$

- a) 25/4
- b) 5/2
- c) 2/5
- d) 4/25

Question15: The value of $x + x(x^x)$ when $x = 2$ is

- a) 10
- b) 18
- c) 16
- d) 36

Question16: In a

- a) $60cm^2$
- b) $30cm^2$
- c) $15\sqrt{3}cm^2$
- d) $45cm^2$

Question17: The perimeter of an equilateral triangle is 60m. The area is

- a) $100\sqrt{3}\ m^2$
- b) $10\sqrt{3}\ m^2$
- c) $15\sqrt{4}\ m^2$
- d) $20\sqrt{3}\ m^2$

Question18: The number of planks of dimensions (4 m × 50 cm × 20 cm) that can be stored in a pit which is 16 m long, 12m wide and 4 m deep is

- a) 1900
- b) 1920
- c) 1800
- d) 1840

Question19: In a cylinder, radius is doubled and height is halved, curved surface area will be

- a) halved
- b) doubled
- c) same
- d) four times

Question20: The marks obtained by 17 students in a mathematics test (out of 100) are given below : 91, 82, 100, 100, 96, 65, 82, 76, 79, 90, 46, 64, 72, 68, 66, 48, 49. The range of the data is :

- a) 46
- b) 54
- c) 90
- d) 100

Question21: The equation 2x + 5y = 7 has a unique solution, if x, y are :

- a) Natural numbers
- b) Positive real numbers
- c) Real numbers
- d) Rational numbers

Question22: AD is a diameter of a circle and AB is a chord. If AD = 34 cm, AB = 30 cm, the distance of AB from the centre of the circle is :

- a) 17 cm
- b) 15 cm
- c) 4 cm
- d) 8 cm

Question23: In Δ ABC, BC = AB and $\angle B = 80°$. Then $\angle A$ is equal to

- a) 80°
- b) 40°
- c) 50°
- d) 100°

Question24: Abscissa of all the points on the x-axis is

- a) 0
- b) 1
- c) 2
- d) any number

Question25: When simplified, $(x^{-1} + y^{-1})-1$ is equal to

- a) xy/x+y
- b) x+y
- c) xy
- d) None of these

Question26: Point (– 10, 0) lies

- a) on the negative direction of the x-axis
- b) on the negative direction of the y-axis
- c) in the third quadrant
- d) in the fourth quadrant

Question27: In Δ ABC, AB = AC and ∠B = 50°. Then ∠C is equal to

- a) 40°
- b) 50°
- c) 80°
- d) 130°

Question28: ABCD is a cyclic quadrilateral such that AB is a diameter of the circle circumscribing it and ∠ADC = 140º, then ∠BAC is equal to:

- a) 80°
- b) 50°
- c) 40°
- d) 30°

Question29: The linear equation 2x – 5y = 7 has

- a) A unique solution
- b) Two solutions
- c) Infinitely many solutions
- d) No solution

Question30: The class-mark of the class 130-150 is :

- a) 130
- b) 135
- c) 140
- d) 145

Question31: The radii of two cylinders are in the ratio of 2:3 and their heights are in the ratio of 5:3. The ratio of their volumes is:

- a) 10 : 17
- b) 20 : 27
- c) 17 : 27
- d) 20 : 37

Question32: The radius of a circle is 2.5 cm. AB and CD are two parallel chores 2.7 m apart. If AB = 4.8 cm then CD is equal to

- a) 3 cm
- b) 4.8 cm
- c) 2.4 cm
- d) 4 cm

Question33: The diameter is

- a) greatest chord of a circle
- b) none of the foregoing
- c) smallest chord of a circle
- d) three times radius of circle

Question34: Which of the following is a cyclic quadrilateral?

- a) Rectangle
- b) Parallelogram
- c) Trapezium
- d) Rhombus

Question35: The circumference of a circle is 60 cm. The length of an arc of 90° is

- a) 15 cm
- b) None
- c) 10 cm
- d) 20 cm

Question36: A circle is divided into 12 equal parts. The number of degrees in each arc is

- a) 60°
- b) 45°
- c) 30°
- d) None

Question37: The radius of the cylinder whose lateral surface area is 704 cm^2 and height 8 cm is

- a) 4 cm
- b) 14 cm
- c) 6 cm
- d) 8 cm

Question38: The radius of cylinder is doubled but its lateral surface area is unchanged. Then its height must be

- a) halved
- b) constant
- c) doubled
- d) tribled

Question39: The ratio of the volume and surface area of a sphere of unit radius

- a) 1 : 3
- b) 4 : 3
- c) 3 : 4
- d) 3 : 1

Question40: A cylindrical rod whose height is 8 times of its radius is melted and recast into spherical balls of same radius. The number of balls will be

- a) 8
- b) 4
- c) 3
- d) 6

Question41: Signs of the abscissa and ordinate of a point in the second quadrant are respectively

- a) +,+
- b) -,-
- c) -,+
- d) +,-

Question42: Which of the following is not a criterion for congruence of triangles?

- a) SAS
- b) ASA
- c) SSA
- d) SSS

Question43: If AB = 12 cm, BC = 16 cm and AB is perpendicular to BC, then the radius of the circle passing through the points A, B and C is :

- a) 10
- b) 8
- c) 15
- d) 12

Question44: Any point on the y-axis is of the form

- a) (x, 0)
- b) (x, y)
- c) (0, y)
- d) (y, y)

Question45: The range of the data : 25, 18, 20, 22, 16, 6, 17, 15, 12, 30, 32, 10, 19, 8, 11, 20 is

- a) 26
- b) 15
- c) 18
- d) 16

Answer:

1.d	2.d	3.d	4.c	5.a	6.c	7.a
	8.b	9.c	10.d	11.c	12.c	13.c
	14.a	15.a	16.b	17.a	18.b	19.b
	20.b	21.a	22.b	23.c	24.d	25.a
	26.a	27.b	28.c	29.c	30.c	31.b
	32.a	33.a	34.a	35.a	36.c	37.b
	38.a	39.a	40.d	41.c	42.c	43.a
	44.c	45.a				