

Placement Demo Questions with Answers

Q.1 Intersection of sets.  $A = \{a, b, c, d\}$  &  $B = \{d, e, f, g, h\}$  is

- a)  $\emptyset$
- b)  $\{a, b, c, d\}$
- c)  $\{d, e, c, g, h\}$
- d)  $\{d\}$  Answer

Q.2 Solving  $2 + 3(9 - 4)^2$  gives

- a) 75
- b) 25
- c) 10
- d) 77 Answer

Q.3 In a given school, there are 240 boys and 260 girls, the ratio of the number of girls to the number of boys?

- a) 13 : 12 Answer
- b) 12 : 13
- c) 26 : 10
- d) 13 : 20

Q. 4 Mr. Waseem went downtown by bus and the journey was 2300 m. When he came back, he took a taxi and the journey was 2800 m. The total distance he travelled is

- a) 100 km and 5m
- b) 1km and 5m
- c) 5km and 100m Answer
- d) 5m and 500km

Q.5 Simplified fraction for  $\frac{21}{16} \div \frac{28}{8}$  is

- a)  $\frac{24}{64}$
- b)  $\frac{8}{3}$
- c)  $\frac{3}{8}$  Answer
- d)  $\frac{4}{3}$

Q.6 The inequality.  $|x + 5| > 3$  represents the interval

- a)  $(-\infty, -8) \cup (-2, \infty)$  Answer
- b)  $(-\infty, 8) \cup (-2, \infty)$
- c)  $(-\infty, 8) \cup (-2, \infty)$
- d)  $(-\infty, 8) \cup (2, \infty)$

Q.7 Find discriminant of  $x^2 + 3x + 2 = 0$

- a) -1
- b) 1 Answer
- c) 9
- d) -9

Q.8 At a restaurant, Talal and his three friends Bilal, Ahmed and Abdullah decided to divide the bill evenly. If each person's part is \$13, what was the total bill?

- a) 52
- b) 26
- c) 13
- d) 39 Answer

Q.9 The factors of  $m^2 + 5m + 6$

- a)  $(m + 2)(m - 3)$
- b)  $(m - 2)(m - 3)$
- c)  $(m + 2)(m + 3)$  Answer
- d)  $(m + 2)(m + 6)$

Q10. The equation  $4x - 7(2 - x) = 3x + 2$  satisfies for  $x =$  \_\_\_\_\_

- a) -2
- b) 8
- c) 16
- d) 2 Answer

Q.11 Simplify with help of exponents and write the answer with help positive exponents.

$$\frac{\left(\frac{1}{3}\right)^2 \times \left(\frac{1}{3}\right)^{-4}}{\left(\frac{1}{3}\right)^{-2} \times \left(\frac{1}{3}\right)^5}$$

- a)  $(3)^5$
- b)  $\left(\frac{1}{3}\right)^{-5}$
- c)  $(3)^{-5}$
- d)  $\left(\frac{1}{3}\right)^5$  Answer

Q12. The *Median* of the following data is 3, 5, 5, 5, 7, 9 and 11

- a) 3
- b) 6
- c) 5
- d) 11

Q13. Rationalize the denominator.  $\frac{1}{4-3\sqrt{7}}$

- a)  $\frac{4+3\sqrt{7}}{47}$  Answer
- b)  $\frac{-4-3\sqrt{7}}{47}$
- c)  $\frac{3\sqrt{7}}{47}$
- d)  $-\frac{1}{47}$

Q14. For the given line  $y = 3x + 6$ , the x-intercept is given by\_\_\_\_\_

- a) -2 answer
- b) +2
- c) 6
- d) -6

Q.15The equation of circle with radius r and centre at (h, k) is given by

- a)  $(x - h)^2 + (y - k)^2 = r$
- b)  $(x + h)^2 + (y + k)^2 = r^2$
- c)  $(x - h)^2 - (y - k)^2 = r$
- d)  $(x - h)^2 + (y - k)^2 = r^2$  answer

Q.16 The basic trigonometric identity is  $\cos^2\theta + \sin^2\theta =$

- A. 0
- B. 6
- C. 1
- D. 3

Q17. Convert  $\frac{\pi}{3}$  radians in degrees.

- a)  $80^\circ$
- b)  $60^\circ$  Answer
- c)  $90^\circ$
- d)  $120^\circ$

Q18. 120degrees in radians.

- a)  $\frac{4\pi}{3}$
- b)  $\frac{6\pi}{5}$
- c)  $\frac{\pi}{3}$
- d)  $\frac{2\pi}{3}$  Answer

Q.19 Write the rule to find area of sector of circle.

a)  $A = \frac{C}{\pi} \times \pi r^2$

b)  $A = \frac{n}{360} \times \pi r^2$  Answer

c)  $A = \frac{C}{\pi r^2} \times \pi$

d)  $A = \frac{n}{380} \times \pi r^2$

Q.20 Write sine  $\theta$  function of a right angle triangle.

a)  $\frac{\text{Opposite}}{\text{Hypotenuse}}$

b)  $\frac{\text{Perpendicular}}{\text{Hypotenuse}}$  Answer

c)  $\frac{\text{Perpendicular}}{\text{Opposite}}$

d)  $\frac{\text{Hypotenuse}}{\text{Perpendicular}}$

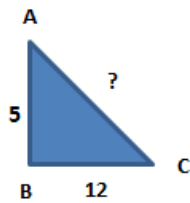
Q21. Find length of AC by Pythagorean Theorem.

a) 10

b) 15

c) 169

d) 13 Answer



Q.22 angle of measure between  $0$  and  $\frac{\pi}{2}$  radians (Between  $0^0$  and  $90^0$ ) is called an.

A. acute angle

B. absolute angle

C. right angle

D. straight angle

Q.23 Equations that involve the logarithm of a variable or variable expression.

- A. Logarithmic equations
- B. Function equations
- C. Linear equations
- D. Non Linear equations

Q.24 If  $\log_a x = y \Rightarrow x =$

- A.  $y^a$
- B.  $x^y$
- C.  $a^y$  answer
- D.  $y^x$

Q.25 This equation  $ax^2 + bx + c = 0$  is called

- A. standard linear equation
- B. standard Nonlinear equation
- C. standard equation
- D. standard quadratic equation

Q26. Curve  $x = y^2$  is symmetric about

- a) Origin
- b) X-axis
- c) Y-axis
- d) None of above

Q27.  $f(x) = f(-x)$  is \_\_\_\_\_ function.

- a) Increasing
- b) Decreasing
- c) Even
- d) Odd