Mathematics - ICS Part 2 Mathematics Full Book Short Questions Preparation

Q1. Define vertex of the cone.

Ans 1: The surface generated consists of two parts of a right circular cone meeting in the fixed point say then A, is called vertex or apex of the cone.

Q2.

Ans 1:

Q3.

Ans 1:

Q4.

Ans 1:

Q5. Define conics.

Ans 1: The curves obtained by cutting a (double) right circular cone by a plane are called conics.

Q6. Define a normal line to a curve.

Ans 1: A line through a point say P perpendicular to the tangent to the curve at P is called a normal line to the curve.

Q7. What is slope or gradient of a line ?

Ans 1:

Q8. The xy-coordinate axes are translated through the point O' (4, 6). The coordinates of the point P are (2, -3) referred to new axes. Find the coordinates of P referred to the original axes.

Ans 1:

Q9.

Ans 1:

Q10.

Ans 1:

Q11.

Ans 1:

Q12. Define indefinite integral.

Ans 1: An integral in which the value of the constant of integration is unknown is called indefinite integral.

Q13.

Ans 1:

Q14. Define ortho-centre of a triangle.

Ans 1: The ortho-centre of a triangle is the point of intersection of the lines through the vertices and perpendicular to the opposite sides (altitudes) of the triangle.

Q15.

Ans 1:

Q16.

Ans 1:

Q17. What are initial value conditions ?

Ans 1: The arbitrary constants involving in the solution of differential equations can be determined by the given conditions. Such conditions are called initial value conditions.

Q18. Define a corner point.

Ans 1: A point of a solution region where two of its boundary lines intersect is called a corner point or a vertex of the solution region.

Q19.

Ans 1:

Q20.

Ans 1: