Course Code: 4MSCP1
Course: Computational Methods & Programming
Credit: 3
Last Submission Date: October 31 (for January Session)
April 30, (for July session)

Max. Marks:-30
Min. Marks:-11

Note:-attempt all questions.

Que.1   Explain the main features of array Discuss about limitations of array.

Que.2   Explain the following operators.

   (i)   Unary
   (ii)   Binary
   (iii)   Ternary

Que.3   What is interpolation? How the calculus of finite difference is used for

   interpolation?

Que.4   Give the derivation of iterative method starting with x= 0012, solve x= 0. 21 sin

   (.5+x) by using iteration method.

Que.5   Solve it by Jacobils method:

   X+10y+z=6

   10x+y+z=6

   X+y+z=6

Que.6   Explain and derive Newton cotes formulae give it geometrical interpretation.

Que.7   Explain Eular and Runga –Kutta method.

Que.8   Find y when x= 1.2 in steps of 0.1, given that $\frac{dy}{dx} = x^2+y^2$, y (1) = 1.5 by runga- Kutta

   method.

Que.9   Write short notes on:- (Any two)

   (i)   Predicator and corrector method
   (ii)   Function prototype
   (iii)   Matrix inversion