**Independent University, Bangladesh**



**Mathematics (Part-II)**



Max Marks: 35

Time Allowed: 3 hours

**SECTION-A**

Q.1. a) Transform the cartesian equation of ellipse to its polar form.

Q.2.Evaluate the integral where h = 0.05 using

i. Trapezoidal rule ii. Simpson’s rule and compare with exact value.

**SECTION B**

Q.3. a) Use the method of variation of parameters to solve

b) Use the method of undetermined coefficient to solve

Q.4 Let P =  q = and r =

Q.5 µ =

Q.6 *dx* =



Note: Attempt five questions. Selecting Two Questions from Section-A and three question from section B. all Question Carry equal marks.