

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College under University of Calcutta)

SECOND YEAR

B.A./B.SC. FOURTH SEMESTER (January – June) 2014

Mid-Semester Examination, March 2014

Date : 24/03/2014

COMPUTER SCIENCE (General)

Time : 11 am – 12 noon

Paper : IV

Full Marks : 25

[Use a separate Answer Book for each group]

Group - A

1. Answer **any one** question : [1×2½]
a) Explain protocols and standards in context of computer networking.
b) Explain differences between OSI and TCP/IP.

Answer **any one** question : [1×10]

2. a) Discuss advantages and disadvantages of Star and Mesh topology. [4]
b) Explain transmission impairments in brief. [4]
c) What do you mean by time domain representation and frequency domain representation of composite signal? [2]
3. a) Compare IP address, Port address and Physical address. [3]
b) Briefly discuss the role of Network layer in TCP/IP. [2]
c) Describe the concept of classful IP addressing. [3]
d) What is HTTP? [2]

Group - B

4. Answer **any one** question : [1×2½]
a) “The software engineer must design the modules with the goal of low coupling and high cohesion”—analyze the statement.
b) “Spiral model is called meta model”—describe.
5. Answer **any one** question :
a) Describe Waterfall model. What are the disadvantages of this model? [8+2]
b) What are the goals for testing? Briefly discuss about Black box testing and white box testing. [4+(3+3)]

