BACHELOR IN COMPUTER APPLICATIONS (BCA Revised)

Term-End Examination

December, 2011

BCS-011 : COMPUTER BASICS AND P C SOFTWARE

Time: 3 hours Maximum Marks: 100

Weightage: 75%

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Note: Question number 1 is compulsory and carries 40 marks.

Attempt any three questions from the rest.

- 1. (a) Convert the following decimal numbers to binary and hexadecimal numbers.
 - (i) 75
 - (ii) 0.125
 - (b) What will be the storage capacity of a 2.5 inch diameter disk pack having 4 plates, 200 sectors per track, 1024 tracks per surface with each sector capable of storing 1024 Bytes?
 - (c) What is Von Neumann Architecture?

 Explain with the help of a diagram.
 - (d) List any four different types of software that are required for programming. Explain the purpose of each one of these.

- What is the need to draw a flow chart? (e) Draw a flow chart for finding sum of first 10 odd numbers. That is, it should add 1+3+5+7+9+11+13+15+17+19. (f) Which of the following is valid IP address/ 3 addresses? You must give reason in support of your answer: (i) 192.168.5.512 (ii) 1.1.1.0 (iii) 172. -1.1.1 (iv) 77.77.100 (g) What are the advantages of using Local 7 Area Networks? List the characteristics of LANs. How are WAN different than LAN? (h) What is a Wiki? How is it useful to us? 3 What is memory hierarchy? Explain with 7
- 2. (a) What is memory hierarchy? Explain with the help of a diagram. Why is memory hierarchy created in a computer system?
 - (b) Explain any three main activities that you can perform using a spreadsheet software.

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(c) What is a Web browser? Write the sequence of activities that take place when you request for a webpage, till it is displayed in your browser window.

- 3. (a) Given the three storage devices (i) Hard disk (ii) Pen drive (iii) Magnetic tape, what will be their primary uses? Give advantage and disadvantage of each of these secondary memories.
 - (b) What is an operating system? Explain the five main services provided by the operating system.
- 4. (a) Explain the purpose of each of the following 10 network devices:
 - (i) Network interface card
 - (ii) Modem
 - (iii) Repeater
 - (iv) Bridge
 - (v) Hub
 - (b) What is the need of a port in a computer? 5 List any four ports that may be used in a computer also give the name of one device that may use that port.
 - (c) What is meant by project management software? Explain any four activities that you can perform using project management software.

- 5. Explain *any five* of the following terms with the help of an example/diagram, if needed:
 - (a) Security threats on Internet.
 - (b) The activities performed by search engines...
 - (c) Tools for collaboration on Internet.
 - (d) Diagnostic tools in a computer.
 - (e) Use of subroutines and functions.
 - (f) Purpose of "my computer' and "Recycle Bin".
 - (g) Main frame computers and Super computers.