

**BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Revised)**

Term-End Examination

June, 2015

03323

BCS-011 : COMPUTER BASICS AND PC SOFTWARE

Time : 3 hours

Maximum Marks : 100

(Weightage 75%)

Note : Question number 1 is **compulsory** and carries 40 marks. Attempt any **three** questions from the rest.

1. (a) Convert the following hexadecimal numbers to equivalent binary and decimal : 4
- (i) $(F4)_{16}$
- (ii) $(AC)_{16}$
- (b) A 3 inch diameter disk per track has 8 plates (16 recording surfaces), 256 sectors per track, 4096 tracks per surface, 512 bytes per sector. Calculate the disk capacity in GB. 6
- (c) What is a flow chart ? Draw a flow chart to find the maximum of three given natural numbers. 6

- (d) What is a laser printer ? Compare its features with an ink-jet printer. 6
- (e) What is a desktop computer ? Give a generic configuration of a desktop computer. 5
- (f) What is E-mail ? Explain how an E-mail account is created. Also list the folders available in an E-mail account. 7
- (g) What is E-learning ? What are its advantages and disadvantages ? List the steps of the process of creating of E-learning content. 6
2. (a) What is data communication ? Explain data communication process with the help of a diagram. 7
- (b) What is a device driver ? Are device drivers hardware dependent ? Justify your answer. List four devices which require device drivers. 6
- (c) What is a subroutine ? Explain the steps of subroutine execution. Write a subroutine to find the sum of two given positive integers. 7
3. (a) Explain OSI reference model of computer network. 7
- (b) What is a search engine ? Explain three categories of search engines. 8
- (c) Explain any five major areas of application of computer systems. 5

4. (a) What is main memory ? Differentiate among RAM, Semiconductor memories and Cache memory. 7
- (b) What is application software ? How is application software different from system software ? List the names of two application and two system softwares. 6
- (c) What is wiki ? Explain the characteristics of wiki. Explain the uses of wiki for a university. 7
5. Explain any *five* of the following with the help of an/a example/diagram, if needed : $5 \times 4 = 20$
- (i) Collaborations with the context of Internet
 - (ii) LAN and WAN
 - (iii) Basic Storage Devices
 - (iv) Disk Management
 - (v) Computer Virus
 - (vi) Software Licensing
 - (vii) Object Oriented Language
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