

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

Term-End Examination

00716

June, 2016

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) What are the features available in fifth generation computers ? 5
- (b) What is a subroutine ? How is it different from a function ? 6
- (c) Draw a flow chart to input two numbers and print their arithmetic mean. 6
- (d) Describe the different kinds of computer monitors. 5
- (e) What is a DNS ? How can an address like www.xyz.ac.in be interpreted and accessed using web ? 6

(f) Convert the following decimal numbers to hexadecimal numbers as well as binary numbers : 6

(i) $(3203)_{10}$

(ii) $(4312)_{10}$

(g) A company has an office at Delhi and another at Mumbai. It has a good link that delivers 2 Mbps between them. It is required to transfer 8.5 GB of data urgently from Delhi to a computer at Mumbai. A courier can reach the airport and board a flight in 2 hours. The flight time to Mumbai is another 2 hours and he can reach the Mumbai office from the airport in another 2 hours. Which method would be faster — use the link or send a courier ? 6

2. (a) What is open-source software ? What is open-source software licensing ? Describe the open-source development model. 8

(b) List with reasons any six precautions you would take while browsing a website. 6

(c) Describe the constituents and functions of the Central Processing Unit of a computer. 6

3. (a) What is a search engine ? Describe how different actions allow you to conduct a search on any given topic. 8
- (b) What are the limitations of a computer ? 6
- (c) Describe three key distinguishing features of Object Oriented Languages. 6
4. (a) Explain, with the help of a diagram, the 7-layer OSI networking model. Indicate the function of each layer with an example. 8
- (b) Describe the functions and features of the following : 12
- (i) Linker
- (ii) Debugger
- (iii) Device Driver
5. Explain any *five* of the following with the help of diagrams and examples as appropriate : $5 \times 4 = 20$
- (a) Uniform Resource Locator
- (b) ROM
- (c) Memory Management in an Operating System
- (d) Client-Server Architecture
- (e) Analogue and Digital Signals
- (f) Disk Checkers
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