

Roll No.

Total Pages : 3

204101

Dec., 2018
BCA, Ist Semester
COMPUTER AND PROGRAMMING
FUNDAMENTALS
(BCA-17-101)

Time : 3 Hours]

[Max. Marks : 75

Instructions :

- (i) *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
- (ii) *Answer any four questions from Part-B in detail.*
- (iii) *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) Draw the complete block diagram of a computer system. (1.5)
- (b) Name any *two* input and *two* output devices of a computer. (1.5)
- (c) What is WWW? (1.5)
- (d) Differentiate between Application Software and System Software. (1.5)
- (e) Give the full form of the following : CD-ROM, USB, ASCII. (1.5)

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[P.T.O.]

- (f) A sine wave completes one cycle in 50 micro seconds. What is its frequency? (1.5)
- (g) What are the attributes of a good program design? (1.5)
- (h) What is data highway? What are various modes of data transmission? (1.5)
- (i) Differentiate between High-level Languages and Low-level Languages. (1.5)
- (j) Define Frequency and Bandwidth. (1.5)

PART-B

2. (a) Draw the complete diagram of memory hierarchy in a computer system explaining each type of memory in detail. (10)
- (b) Explain the following :
Multitasking, Multiprogramming. (5)
3. (a) Define an Operating System? What are various functions performed by an Operating System? Define each function in brief. (10)
- (b) What are secondary storage devices? Explain with proper diagram. (5)
4. (a) Differentiate between Algorithm and Flow chart. Draw a flow chart to find out the largest of three numbers. (10)
- (b) What is a Protocol? Name and Explain any four protocols. (5)

5. (a) Define Computer Network? What are the basic components of a data communication system? (10)
- (b) Write note on Network Topology. Explain any *two* types of topologies in detail. (5)
6. (a) What is an OSI model? Explain its seven layers in brief. (10)
- (b) Write an explanatory note on modular approach of programming. (5)
7. Define the following (any *three*) :
- (i) Compiler, Interpreter.
 - (ii) Virus type.
 - (iii) Network types (LAN, WAN, MAN).
 - (iv) Intranet and its applications. (15)
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