

First Semester B.C.A. Degree Examinations
October / November 2018
(2016-17 - Syllabus)

BCA 420 : COMPUTER FUNDAMENTALS

Time : 3 Hours

Max. Marks : 80

I. Answer all the questions. 5X1=5

1. What is a Computer ?
2. ASCII stands for _____.
3. Define software.
4. What is an operating system ?
5. What is a computer network.

II. Answer any FIVE full questions. 5X15=75

1.
 - a) Briefly describe generations of computer.
 - b) With a neat block diagram, explain the functional units of a computer.
 - c) Explain Information Processing Cycle (IPC). **(5+6+4)**
2.
 - a) With a neat labelled diagram, explain the layout of the keyboard.
 - b) List any four input devices. Explain the working of mouse.
 - c) What is a monitor ? Explain various types of monitor. **(6+4+5)**
3.
 - a) What is a Printer ? Explain the working of dotmatrix printer.
 - b) Write a note on text codes.
 - c) With a neat diagram, explain the working of hard disk. **(5+4+6)**
4.
 - a) What is a programming language ? Explain the classification of programming languages.
 - b) List the functions of operating system. Explain any three of them.
 - c) What is GUI ? Explain any four components of GUI. **(5+5+5)**
5.
 - a) Mention the steps involved in problem solving technique. Explain any three of them.
 - b) What is an algorithm ? Explain the characteristics and notations of an algorithm.
 - c) What is flowchart ? Explain various symbols used in a flowchart. **(5+5+5)**
6.
 - a) Write an algorithm and a flowchart to calculate simple interest and compound interest.
 - b) Write an algorithm and a flow-chart to perform arithmetic operations.
 - c) Write an algorithm and a flowchart to find the reverse of a number. **(5+5+5)**
7.
 - a) Explain LAN, MAN and WAN.
 - b) What is network topology ? Explain any four types of network topology.
 - c) What is an internet ? Mention the applications of internet. Explain any one. **(5+5+5)**