97661

B.C.A. 1st Semester (New Scheme) w.e.f. 2012 Examination— December, 2012

Computer and Programming Fundamentals

Paper BCA-101

Time: 3 hours

Max. Marks: 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

- **Note**: Attempt **five** questions. Question No. 1 is compulsory. Select **one** question from each Section.
- 1. (a) What is computer? How is it different from human being?
 - (b) Differentiate between Primary memory and Secondary Memory.
 - (c) What is time sharing operating system.

- (d) What is virus ? Name few anti-virus software.
- (e) What is debugging?
- (f) Differentiate between linker and loader.
- (g) What are the applications of internet?
- (h) What is network topologies?

Unit - I

- **2.** (a) Write short note on Generation of computers.
 - (b) Explain the various component of a digital computer system with a block diagram.
- **3.** (a) Explain the application of computer in the field of education and sports.
 - (b) What do you understand by memory of a computer? Describe the various types of memory.

Unit - II

4. (a) What is operating system ? Explain the various function of operating system.

97661-4800-(P-4)(Q-9)(12) (2)

- (b) Differentiate:
 - (i) Single user and multi user Operating System
 - (ii) Multiprogramming and multiprocessing operating System.
- **5.** (a) What are printers? What is their classification? Also explain the working of any one printer.
 - (b) What is software? Explain different type of software.

Unit - III

- **6.** (a) Explain in details the various characteristics of a good program.
 - (b) Describe what is meant by 4GL and it's important. How is it different from 3GL.
- 7. (a) What is structured programming?

 Explain the advantages and disadvantages of structure programming.

 97661-4800-(P-4)(Q-9)(12) (3) [Turn Over

(b) Explain different types of error in programming.

Unit - IV

- 8. (a) What is a computer network? What are the criteria for classification for computer network? How WAN is different from LAN and MAN.
 - (b) Describe different modes of data transmission.
- 9. (a) What are the hardware and software requirement for intranet? How is it different from internet? Describe the application of intranet.
 - (b) What do you understand by network topology? Explain the various network topologies indicating their respective pros and cons.