# 97661

## B.C.A. 1st Semester (New) Examination–November, 2014

### COMPUTER AND PROGRAMMING FUNDAMENTALS

#### Paper : BCA-101

*Time : 3 hours*                     *Max. Marks : 30*

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 in all. Question Number 1 will be **compulsory**. In addition to compulsory question, student will have to attempt **four** more questions selecting **one** question from each unit.

1. (a) What are multipurpose programming languages ? Name three such languages.

   (b) What are various types of high-level language ?

   (c) What are pseudo codes ?

(d) Explain the concept of debugging.

(e) Compare computer and human beings.

(f) What is the stored program concept ? Why is it important ?

(g) What do ENIAC, EDSAC, EDVAC and UNIVAC stand for ?

(h) What do you understand by data communication ?                    8 × 2 = 16

## UNIT – I

2. (a) Discuss the important features of various generations of computers. Also give some examples of computers belonging to each generation.                    8

   (b) How computers are useful in publishing and travelling ?                    8

3. (a) What is role of Cache Memory ? Also explain the terms 'hit' and 'miss'.                    8

   (b) In terms of physical size, how are PCs categorized ?                    8

## UNIT – II

**4.** (a) What are the different types of computer software ?                                        8

   (b) What are the main functions of operating system ?                                        8

**5.** (a) Write short note on Computer viruses.                                        8

   (b) Differentiate multiprogramming and multitasking operating system.            8

## UNIT – III

**6.** (a) What are the differences between high-level and low-level languages ?        8

   (b) What do you understand by documentation of program ?                8

**7.** Differentiate between assemblers, compilers and interpreters.                        16

## UNIT – IV

**8.** (a) What is message distribution system ? What are its functions ?            8

(b) What purpose do modems serve in data communication system. 8

9. (a) List and describe the various types of modem. 8

(b) What are the advantages of using fiber-optic as compared to copper wires for data communication ? 8

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