Roll No. ....

97661

BCA 1st Semester (New)
Examination – November, 2018

COMPUTER & PROGRAMMING FUNDAMENTALS

Paper : BCA-101

Time : Three Hours]   *[Maximum 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 examination.

Note : Examiner will be required to set *nine* questions in all. Question No. **1** will consist of total **8** parts (short answer type questions) covering the entire syllabus and will carry **16** marks. In addition to the compulsory question there will be *four* Units i.e. Unit-I to unit-IV. Examiner will set *two* questions from each unit of the syllabus and each question compulsory. In addition to *compulsory* question, student will have to attempt *four* more questions selecting *one* question from each Unit.

1. (a) What are the limitations of human of processing ? How these can be removed ?   8 × 2 = 16

     (b) What are the major secondary storage devices ?

     (c) Explain the various types of transmission media.

     (d) Differentiate between a bit, byte and a word.

(e) What are the advantages and disadvantages of semi-conductor memories ?

(f) Name *four* computers belonging to each generation.

(g) Compare desktop, Laptop and Palmtop.

(h) What is CPU and explain how it works ?

UNIT – I

2. Explain the classification of computers according with : 16

(a) data representation
(b) purpose
(c) use
(d) size, cost and speed
(e) generation of computers

3. (a) What are high level languages ? Why are they known as problem oriented languages ? Name some high level languages. 8

(b) What is meant by Memory Hierarchy ? State it's important. 8

UNIT – II

4. (a) Define multiprogramming. Explain how multiprogramming ensures effective utilization of main memory and CPU. 8

(b) What is the difference between a source program and an object program ? 8

5. (a) What is an operating system ? Why is it necessary for a computer system ? 8

(b) List out the various functions normally performed by an operating system. 8

UNIT – III

6. (a) Explain the concept of structured programming. How does it differ from the conventional programming techniques ? 8

(b) What is meant by programming language ? 8

7. (a) State the basic control structures which serve as building blocks for structured programming. 8

(b) Explain the difference between compiler and Interpreter. 8

UNIT – IV

8. (a) What do you meant by computer technology ? Explain any *three* topologies ? 8

(b) Describe client-server concept. What are its benefits ? 8

9. (a) Describe various internet applications. 8

(b) Explain the minimal hardware and software required for internet connection. 8