S.C.No.—2214101

B.C.A. EXAMINATION, 2023

(Main/Re-appear/Improvement)

(First Semester)

COMPUTER FUNDAMENTALS

22BCA101

Time : 3 Hours   *Maximum Marks : 80*

Note : *Attempt Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

1. Explain the following :   **8×2=16**

   (i) CPU

   (ii) RAM

   (iii) Software

   (iv) HLL

(v) Loader

(vi) Compiler

(vii) Problem Solving

(viii) Network Types.

Unit I

2. Explain computer with its block diagram. Also explain the components of computer. 16

3. (a) Differentiate between RAM and ROM. 8

   (b) Explain Cache memory and Flash Memory. 8

Unit II

4. (a) What is Operating System ? Explain the functions of operating system. 8

   (b) Explain Multiprocessing and Time Sharing. 8

5. What is Computer Virus ? Explain the types of viruses and characteristics of viruses. 16

Unit III

6. Define the following :   4×4=16

   (i)   Assembly Language

   (ii) Machine Language

   (iii) Compiler and Interpreter

   (iv) Linker and Loader.

7. (a) What is Program Design ? Explain types of errors in programming.   8

   (b) Explain Algorithms and Flowcharts.   8

Unit IV

8. (a) What is Networking ? Explain the types of networks.   8

   (b) Explain different network topologies with advantages and disadvantages of each topology.   8

9. What is Internet ? Write the applications of Internet.   16