

B.C.A. 1st Semester Examination,
February-2022
**COMPUTER AND PROGRAMMING
FUNDAMENTALS**
Paper - BCA-101

Time allowed : 3 hours]

[Maximum marks : 80

Note: Attempt any five questions at least one question from each unit. Question No. 1 is compulsory. All questions carry equal marks.

1. (i) Explain RAM and ROM.
- (ii) What is anti-virus software ?
- (iii) What do you mean by Virtual memory ?
- (iv) Explain modes of data transmission.
- (v) What do you mean by Linker and Loader ?
- (vi) What is problem design ?
- (vii) What do you mean by virtual memory ?
- (viii) What is the use of Magnetic tape ?

(2)

Unit - I

2. What is Computer ? Explain the characteristics and classification of computers in detail. Also explain the limitations of computers.
3. (i) What do you mean by Computer Memory ? Explain Primary and Secondary Memory in detail.
- (ii) Write detail note on secondary storage device in detail.

Unit - II

4. What is Operating system ? Explain the functions of operating system ? Also explain Multiprogramming, Multitasking, Time-sharing and Real Time Operating System in detail.
5. (i) What is Software ? Explain its types and role. Also explain the relationship between Hardware and Software.
- (ii) What is Computer Virus ? Explain its different types in detail.

Unit - III

6. (i) What is Programming Language ? What are the good features of a Programming Language ?
- (ii) Explain the concept of Structured Programming. Also explain the top-down and bottom-up programming.
7. Explain the following in detail :
- (i) Compiler and Interpreter
- (ii) Machine Language and Assembly Language

Unit - IV

8. (i) What are computer networks ? Explain the types of computer network.
- (ii) Explain the Hardware and Software requirements for Internet.
9. (i) What is internet ? Explain the history of internet. Also explain the main applications of internet.
- (ii) What do you mean by Topologies ? Explain in detail.