2022
B.A./B.Sc. (General) First Semester
Computer Applications
Paper: CA01: Fundamentals of IT

Time allowed: 3 Hours

Max. Marks: 30

NOTE: *Attempt five questions in all, including Question No. 9 (Unit-V) which is compulsory and selecting one question each from Unit I – IV.*

x-x-x

UNIT-I

1) a) Discuss characteristics of computers. (3)
   b) Discuss about RAM, ROM and their types. (3)
2) a) Discuss working of computer system with the help of block diagram. (3)
   b) Discuss about Magnetic disk with the help of neat diagrams. (3)

UNIT-II

3) a) What is a programming language? Discuss about the generations of programming languages. (3)
   b) What is a Flowchart? Discuss with the help of an example. (3)
4) a) Discuss and compare Compilers and Interpreters. (3)
   b) Discuss about Documentation and Debugging with the help of suitable examples. (3)

UNIT-III

5) a) How to convert a number in Decimal number system into Binary and Octal? Give examples. (3)
   b) What is the need of character codes? Discuss about ASCII code. (3)
6) a) How to perform addition and subtraction in Binary number system. Give examples. (3)
   b) Convert the following: (3)
   - $(345)_8 \rightarrow (?)_2$
   - $(5234)_8 \rightarrow (?)_{10}$

UNIT-IV

7) a) What is an Operating System? Discuss the functions performed by Operating System. (3)
   b) What is the use of Windows Explorer in Windows Operating System? Explain in detail. (3)
8) a) What are Wildcard characters? How to use wildcard characters in DOS commands? Explain with the help of suitable examples. (3)
   b) What is the use of following commands in DOS? How to use these commands? (3)
   - UNFORMAT
   - XCOPY
   - FDISK

UNIT-V

9) a) Give difference between Software and Firmware. (1)
   b) What do you understand by testing a program? (1)
   c) What is a Utility software? Give example. (1)
   d) What is a Positional number system? Give example. (1)
   e) What do you understand by Unicode Character Set? (1)
   f) Give difference between Warm and Cold booting. (1)

x-x-x