BCA–03

Basic of OS and PC Software

Bachelor of Computer Application
(BCA–11/16/17)

First Semester, Examination, 2018

Time : 3 Hours   **Max. Marks : 80**

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A
(Long Answer Type Questions)

Note : Section 'A' contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. What is the operating System ? Enlist the functions of Operating System.

2. Explain Multitasking and Multiuser Operating System. What are their uses ?

3. Discuss the *three* properties of each of the following types of operating system :

   (i)   Batch

   (ii) Time sharing

   (iii) Real time

4. Which of the four basic operating system modules might be required on a computer system ? Explain them briefly.

Section–B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. Write two command of MS-DOS.
2. Describe Window operating system.
3. Write down the functions and formats of the following DOS commands : CD, Copy, RD, Tree, DIR.
4. Explain Linux file system.
5. Comparative discussion of Windows and Linux operating system.
6. What are the different directory handling commands of UNIX ?
7. How to align the word document ? And write down the shortcut keys required.
8. What is the role of Sort and Filter operation in spreadsheet ?

Section–C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. The minimum number of frames to be allocated to a process is decided by :

    (a) The amount of available physical memory

(b) Operating System

(c) Instruction set architecture

(d) None of the mentioned

2. Consider a machine in which all memory reference instructions have only one memory address, for them we need at least _____ frame(s).

(a) one

(b) two

(c) three

(d) None of the mentioned

3. The part of machine level instruction, which tells the central processor what has to be done, is :

(a) Operation code

(b) Address

(c) Locator

(d) Flip-Flop

4. To avoid the race condition, the number of processes that may be simultaneously inside their critical section is :

(a) 8

(b) 1

(c) 16

(d) 0

5. Process is :

(a) program in high level language kept on disk

(b) contents of main memory

(c) a program in execution

(d) a job in secondary memory

6. The Memory Buffer Register (MBR) :

   (a) is a hardware memory device which denotes the location of the current instruction being executed.

   (b) is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.

   (c) contains the address of the memory location that is to be read from or stored into.

   (d) contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write".

7. The Storage-to-Storage instructions :

   (a) have both their operands in the main store.

   (b) which perform an operation on a register operand and an operand which is located in the main store, generally leaving the result in the register, expect in the case of store operation when it is also written into the specified storage location.

   (c) which perform indicated operations on two fast registers of the machine and have the result in one of the registers

   (d) All of the above

8. Which of the following statements is false ?

   (a) the technique of storage compaction involves moving all occupied areas of storage to one end or other of main storage

    (b)   compaction does not involve relocation of programs

    (c)   compaction is also known as garbage collection

    (d)   the system must stop everything while it performs the compaction

9.   Which of the following functions is (are) performed by the loader ?

    (a)   allocate space in memory for the programs and resolve symbolic references between object decks

    (b)   adjust all address dependent locations, such as address constants, to correspond to the allocated space.

    (c)   physically place the machine instructions and data into memory.

    (d)   All of the above

10. While running DOS on a PC, which command would be used to duplicate the entire diskette ?

    (a)   COPY

    (b)   DISKCOPY

    (c)   CHKDSK

    (d)   TYPE