MCA-101

M.C.A (First Semester) Examination, Dec., 2011

(Grading/Non-Grading)

INFO TECHNOLOGY

(MCA-101)

Time: 3 hours Maximum Marks: GS: 70 NGS: 100

Note: Attempt 1 ques. from every unit. All ques. carry equal marks.

1. A) explain the important features of generations of computer. provide a few examples of computers for every generation.
B) A page has 2000 characters. How many bits are needed to store it in a bit mapped form?how many bits are needed if it is stored on EBCDIC?

Or

2. A) discuss the subsequent term with example:

i. System software ii. Application software iii. Utility packages

B) Differentiate impact and non-impact printers.

3. A) Why are 2 passes requires in the design of an assembler? Write the algorithm for pass-1 of an assembler.

b) What is macro? How does it differ from a subroutine?

Or

4. A) elaborate assembler directives? Distinguish ranging from MOT and POT. elaborate literals?
B) Which macro features are needed us to have a stack and the need for recursion?

5. A) Draw a block diagram of the phases of a compiler and discuss the main function of every phase.
B) discuss enhancement of program performance with suitable example.

Or

6. A) What is memory management?
B) What is essential difference ranging from an Interpreter and compiler?

7. A) elaborate the important functions of a loader? discuss with the help of general loading scheme.
B) describe the term "Bind" during the life of a process and provide an example.

Or

8. A) provide an example of every of the subsequent kinds of address constant:

i. Simple reloadable
ii. Absolute
iii. Complex reloadable

B) What is linkage editor?

9. A) explain different techniques through which files can randomly be accessed.
B) What is indexing? discuss dense index and sparse indexex with example.

Or

10. A) Write short note on any 3 of the following:

i. File organization
ii. Editors
iii. I/O devices
iv. Code optimization
v. History of computers