(DCS / DIT 312)

B.Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Third Year)

Computer Science & IT

Paper - II : Systems Software

Time : 3 Hours   **Maximum Marks : 75**

Answer question No.1 compulsory   *(15)*

Answer any four questions from Part - B   *(4 × 15 = 60)*

PART – A

1) Explain the following :

  a)   Assemblers.

  b)   Macro Instructions.

  c)   Relocating Loaders.

  d)   Buffer Headers.

  e)   Driver Interfaces.

Part – B

2) Mention various Data formats for the system 360/370. Explain each one with examples.

OR

3) Explain the implementation of the Macro processor within an assembler (pass 1).

4) What are the various types of Loaders? Discuss about the Design of an Absolute loader.

OR

5) Describe an algorithm used in the design of a direct - linking loader for an 1 BM system / 360 - type computer.

6) Explain the scenarios for Retrieval of a buffer from buffer cache.

OR

7) a)   Explain in detail about UNIX Kernel.

  b)   Write a short note on structure of a Regular file.

8)   Explain about the Disk Drivers in I/O subsystem.

<div align="center">OR</div>

9)   What is a system call? Discuss about various system calls used for file systems.

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