Paper code: 13514

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## B.Sc. (Computer Science) (Part 2)

## Examination, 2016

Paper No. 2.2

## SYSTEM PROGRAMMING AND MICROPROCESSOR

Time: Three Hours] [Maximum Marks: 33

Note: Attempt five questions in all. Question No. 1 is compulsory.

- 1. (a) What is the importance of system software in a computer system?
- (b) How will you classify a software as either an application software or a system software?
- 2. (a) Mention some advantage of assembly language over machine language.
- (b) What are assembler directives in assembly language? Illustrate with an example the importance of assembler directives. http://www.mjpruonline.com
- 3. (a) Draw and explain the detailed flowchart for pass-2 of two-pass assembler.
- (b)Explain briefly the different phases of a compiler.
- 4. (a) Define the following:
  - 1. Execution time
  - 2. Compile time
- (b) Define address bus, data bus and control bus.
- 5. (a) Why the feature is putting "Break points" very importance in debuggers?
- (b) Explain absolute loader scheme with its advantages and disadvantages.
- 6. (a) Write short notes on the following:
  - 1. Dynamic loading
  - 2. Dynamic linking
- (b) What do you mean by A/D conversion? Explain any one of the A/D techniques.
- 7. (a) Explain data addressing modes (with explains) available in microprocessors.
- (b) Define the following:
  - 1. Isolated I/O
  - 2. Memory mapped I/O
  - 3. Handshaking