

**B.Tech. - VIEP - COMPUTER SCIENCE AND  
ENGINEERING (BTCSVI)**

**Term-End Examination**

**00974**

**June, 2017**

**BICSE-013 : REAL TIME SYSTEMS**

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** Answer any **seven** questions. All questions carry equal marks.

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1. What is the significance of real time operating systems in today's world ? What are the different factors for selecting a real time operating system ? 10
2. What do you mean by cache coherency ? Explain in detail with the help of suitable example. 10
3. Give the design specifications for a real time system. Also explain the concept of task scheduling in a real time system. 10
4. What is an Interrupt ? Differentiate between maskable and non-maskable interrupts in detail. 10

5. What is the process to select programming languages ? Explain the limitations of assembly language. 10
6. What do you mean by Assmby Language Programming ? Explain all the components. 10
7. Explain the differences between the following : 10
- (a) RAM and ROM
  - (b) Data flow and Control flow
8. Explain the following : 10
- (a) Two-state actuator
  - (b) Start-up routines
9. What do you mean by a flow chart ? Explain structured flow chart with a suitable example. 10
10. Write short notes on the following : 10
- (a) Features of Fault Tolerant System
  - (b) Task Synchronization
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