

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

**Term-End Examination**

00376

**June, 2016**

**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. Explain sensors and transducers. What is signal conditioning? 10
2. What is a real time operating system ? Describe the basic elements of a real time operating system. 10
3. State and explain the factors for selecting a real time operating system. 10
4. What do you mean by 'cache coherency' ? Explain in detail with the help of an example. 10
5. Explain structured flow charts in software design with a suitable example. 10

6. What is functional decomposition and what are the relationships among them ? 10
7. List any five high level languages. What are the advantages and disadvantages of high level languages ? 10
8. What is an interrupt ? Describe the various interrupts and service routines. 10
9. Define interface and control. Draw and explain the parallel output-input interface. 10
10. Write short notes on any *two* of the following : 2×5=10
- (a) Data Transfer Line
  - (b) Fault Tolerant System
  - (c) Flash Converter
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