

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

**Term-End Examination, 2019**

**BICSE-013 : REAL TIME SYSTEMS**

**Time : 3 Hours]**

**[Maximum Marks : 70**

---

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

---

1. What are sensors and transducers ? Explain their uses in Real Time System. [10]
2. What is Real Time System ? Explain hardware requirements for Real Time Systems. [10]
3. What is CPU board ? Explain main components of CPU board. [10]
4. Explain features of Real Time Languages. Also write name of two Real Time Languages. [10]
5. What is an interrupt ? Explain difference between maskable and non-maskable interrupt. [10]

6. What is Real Time Operating System ? Explain issues and challenges of task scheduling in Real Time Operating System. [10]
7. Explain direct memory access interface with the help of suitable diagram. [10]
8. What is fault tolerance ? Why fault tolerant systems may be considered good ? Explain features of fault tolerant systems. [10]
9. Describe how analysis for Real Time Systems are done. Explain need of response time specification for development of Real Time System. [10]
10. Explain any two of the following : [2×5=10]
- (a) Linking high and low level programs
  - (b) Modular Design
  - (c) Task Synchronisation

----- X -----