

**Date: 29-01-2021.**

**IV.B.TECH- I-SEM (R20)-I MID EXAMINATIONS-AUGUST-2023 Date: 01/09/2023**

**Subject: Introduction to Embedded System Time: 10:00 TO 11:30 AM**

**Branch: CSC, IT-A&CSM-C Marks: 25 M**

***Answer All Questions In Part-A& Part-B***

**PART A 5 x2=10 M**

1. What is an Embedded system and its functions? . (CO1) [BTL1]
2. List out the major application areas of embedded systems (CO1) [BTL2]
3. What is a microprocessor and its role in embedded systems? (CO2) [BTL2]
4. Explain about load –store operation. (CO2) [BTL1]
5. Explain about Oscillator unit. (CO3) [BTL1]

**PART B 3 x5=15 M**

6. Explain the about the characteristics of embedded systems in detail. (CO1) [BTL2]

**(OR)**

7. What is the purpose of embedded systems? (CO1) [BTL2]

8. Differences between microprocessor and microcontroller? (CO2) [BTL2]

**(OR)**

9. What are the types of different ROM types and explain. (CO2) [BTL2]

10. Explain about Reset circuit and Brown-out protection circuit. (CO3) [BTL2]

**(OR)**

11. Describe the purpose of Watch Dog Timer and Real Time Clock. (CO3) [BTL2]

**SCHEME OF EVALUATION**

**Part –A**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **1** | What is an Embedded system and its functions? | **2** | **2** |
| **2** | List out the major application areas of embedded systems | **2** | **2** |
| **3** | What is a microprocessor and its role in embedded systems? | **2** | **2** |
| **4** | Explain about load –store operation. | **2** | **2** |
| **5** | Explain about Oscillator unit. | **2** | **2** |

**Part –B**

| **SNO** | **THEORY** | **MARKS** | **TOTAL** |
| --- | --- | --- | --- |
| **6** | Explain the about the characteristics of embedded systems in detail.  **(OR)** | **5** | **5** |
| **7** | What is the purpose of embedded systems? | **5** |  |
| **8** | Differences between microprocessor and microcontroller?  **(OR)** | **5** | **5** |
| **9** | What are the types of different ROM types and explain. | **5** |  |
| **10** | Explain about Reset circuit and Brown-out protection circuit.  **(OR)** | **5** | **5** |
| **11** | Describe the purpose of Watch Dog Timer and Real Time Clock | **5** |  |