**Program: BE ELECTRONICS AND TELECOMMUNICATION Engineering**

**Curriculum Scheme: Revised 2016**

**Examination: Fourth Year Semester VII**

**Course Code: ECCDLO7035 and Course Name: Embedded Systems**

**Time: 1 hour Max. Marks: 50**

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**SAMPLE PAPER**

Note to the students:- All the Questions are compulsory and carry equal marks .

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| Q1. | Which one of following is not a feature of embedded system |
| Option A: | May or may not contains OS |
| Option B: | Performs specific task |
| Option C: | Reactive and real time |
| Option D: | Response requirement are not time critical |
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| Q2. | The time taken to respond to an interrupt is known as |
| Option A: | Interrupt delay |
| Option B: | Interrupt time |
| Option C: | Interrupt latency |
| Option D: | Interrupt function |
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| Q3. | Which of the following is example of embedded system for signal processing |
| Option A: | CRO |
| Option B: | Digital multimeter |
| Option C: | Router |
| Option D: | Digital Hearing Aid |
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| Q4. | Which of the following model is best suited for modeling a reactive embedded system |
| Option A: | Finite state machine |
| Option B: | DFG |
| Option C: | Control DFG |
| Option D: | Object oriented model |
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| Q5. | Which of the following is not a static diagram in UML |
| Option A: | Class diagram |
| Option B: | Object diagram |
| Option C: | Use case diagram |
| Option D: | Component diagram |
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| Q6. | Which of the following is true about CISC processor |
| Option A: | The instruction set is orthogonal |
| Option B: | The number of general purpose register is limited |
| Option C: | Fixed length instructions |
| Option D: | Less number of instructions |
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| Q7. | In the ZigBee network which of the following ZigBee entity stores the information about the network |
| Option A: | ZigBee Coordinator |
| Option B: | ZigBee router |
| Option C: | ZigBee reduced function device |
| Option D: | ZigBee end device |
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| Q8. | What is the minimum number of interface lines required for implementing SPI interface |
| Option A: | 2 |
| Option B: | 3 |
| Option C: | 4 |
| Option D: | 5 |
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| Q9. | Which of the following is the main function of watchdog timer |
| Option A: | Control the compare mode |
| Option B: | Control the capture mode |
| Option C: | Protection from failure to the system |
| Option D: | Delay generation |
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| Q10. | What is the clock source for counter |
| Option A: | External frequency |
| Option B: | Internal frequency |
| Option C: | Crystal frequency |
| Option D: | Through software |
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| Q11. | What is the minimum number of USB device that can be connected to a USB host |
| Option A: | Unlimited |
| Option B: | 128 |
| Option C: | 127 |
| Option D: | 64 |
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| Q12. | What is the maximum data transfer rate offered by High speed CAN protocol |
| Option A: | 40kbps |
| Option B: | 19.2 kbps |
| Option C: | 1Mbps |
| Option D: | 2mbps |
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| Q13. | How many maximum devices can be connected in Modbus |
| Option A: | 16 |
| Option B: | 8 |
| Option C: | 32 |
| Option D: | 64 |
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| Q14. | Bluetooth uses |
| Option A: | Frequency hopping spread spectrum |
| Option B: | Orthogonal frequency division multiplexing |
| Option C: | Time division multiplexing |
| Option D: | Channel division multiplexing |
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| Q15. | To extend the connectivity of the bus we use |
| Option A: | PCI bus |
| Option B: | SCSI bus |
| Option C: | controllers |
| Option D: | Multiple bus |
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| Q16. | Which of the following is not true for Real time operating system? |
| Option A: | Possess specialized kernel |
| Option B: | Deterministic in behavior |
| Option C: | Predictable performance |
| Option D: | May cause slow responsiveness of an application at unexpected times |
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| Q17. | Which of the following is not true about threads? |
| Option A: | A thread is the primitive that can execute code |
| Option B: | A Thread is a single sequential flow of control within process |
| Option C: | Thread is also known as light weight process |
| Option D: | Different threads of same process do not share data memory and code memory |
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| Q18. | The ability of the operating system to have multiple program memory which are  ready for execution is referred as |
| Option A: | Multitasking |
| Option B: | Multiprocessing |
| Option C: | Multiprogramming |
| Option D: | Multithreading |
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| Q19. | For a good scheduling algorithm, the response time for a process should be |
| Option A: | Maximum |
| Option B: | Average |
| Option C: | Least |
| Option D: | Varying |
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| Q20. | The ready queue contains |
| Option A: | All the processes present in the system |
| Option B: | All the processes which are ready for execution |
| Option C: | The currently running processes |
| Option D: | Processes which are waiting for I/O |
|  |  |
| Q21. | The average waiting time for SJF scheduling compared to FIFO scheduling is |
| Option A: | Minimum |
| Option B: | Maximum |
| Option C: | Average |
| Option D: | Can’t be decided |
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| Q22. | Which of the following is not true about signals for Inter process communications |
| Option A: | Signals are used for asynchronous notifications |
| Option B: | Signals are not queued |
| Option C: | Signals do not carry any data |
| Option D: | Signals carry some data |
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| Q23. | Which one of following is not message passing technique for inter process communication |
| Option A: | Message queue |
| Option B: | Pipes |
| Option C: | Mail Box |
| Option D: | Signaling |
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| Q24. | Which of the following is input for digital camera |
| Option A: | Intensity and colour vales for each picture in horizontal and vertical row of a pixel |
| Option B: | Encoded file for a picture |
| Option C: | Screen display of picture from the file after decoding |
| Option D: | File output to an interface computer |
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| Q25. | Which one of following is input port in Automatic chocolate vending machine |
| Option A: | Port – Refund |
| Option B: | Port- Deliver |
| Option C: | Port- Display |
| Option D: | Port- 1Rs Coin |