Reg. No. : | | | | | | | | | | |

Question Paper Code: 37404

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Seventh Semester

Electronics and Communication Engineering

01UEC704 - EMBEDDED AND REAL TIME SYSTEMS

(Regulation 2013)

Duration: One hour Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

(Answer any six of the following questions)

1. ARM processors are basically designed for _____

   (a) Main frame systems (b) Distributed systems

   (c) Mobile systems (d) Super computers

2. ARM7 is a _____ processor with _____Architecture

   (a) RISC, Harvard (b) CISC, Von Neumann

   (c) RISC, Von Neumann (d) CISC, Hardvard

3. A large memory is compressed into a small one by using _____

   (a) LSI semiconductor (b)VLSI semiconductor

   (c) CDR semiconductor (d) MSI semiconductor

4. Executable binary file generation is carried out by

   (a) Assembler (b) Loader (c) Linker (d) Compiler

5. If the period of process is P,then the rate of the task is_____

   (a) P^2 (b) 2P (c) 1/P (d) P

6. The priorities that change during execution is

(a) Static (b) Dynamic (c) Both (d) None

7. The interconnect network used in automotive electronics is

(a) I^2C (b) Ethernet (c) Internet (d) CAN

8. Internet enabled network has applications in

(a) Hard Real time (b) Soft Real Time (c) In both a & b (d) Non Real Time

9. Software Modem utilizes

(a) PSK (b) ASK (c) FSK (d) QPSK

10. Huffman coding is used for_____

(a) Text compression (b) Video compression

(c) Image compression (d) File compression

PART – B (3 x 8= 24 Marks)

(Answer any three of the following questions)

11. Explain about cache memory in ARM processor. (8)

12. Explain on how on chip memory management schemes can improve higher speed process. (8)

13. Describe in detail about the inter process communication mechanism. (8)

14. Explain briefly I^2C bus and Ethernet. (8)

15. Explain the design procedure of data compressor with its specifications and requirements. (8)