Reg. No. :

Question Paper Code: 37404

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Seventh Semester

Electronics and Communication Engineering

01UEC704 - EMBEDDED AND REAL TIME SYSTEMS

(Regulation 2013)

Duration: 1:45 hour   Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

(Answer any ten of the following questions)

1. List the functions of ARM processor in supervisor mode.

2. How is ARM processor different from other processors?

3. What is a data flow graph?

4. What does a linker do?

5. Define context switching.

6. What are the three conditions that must be satisfied by the re-entrant function?

7. What is best effort routing?

8. What is the use of attached accelerator to CPU?

9. State the function of Set-Top-Box.

10. What are FOSS tools for embedded systems?

11. Define the power optimization strategies used for processes?

12. What is mean by accelerators/hardware accelerator and give one example?

13. What are the advantages of network based design?

14. Define Hardware and software co-design.

15. What is PDA?

<div align="center">PART – B (3 x 10= 30 Marks)</div>

<div align="center">**(Answer any three of the following questions)**</div>

16. Explain about cache memory in ARM processor. (10)

17. Explain on how on chip memory management schemes can improve higher speed process. (10)

18. Describe in detail about the inter process communication mechanism. (10)

19. Explain briefly I^{2}C bus and Ethernet. (10)

20. Explain the design procedure of data compressor with its specifications and requirements. (10)

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