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

## Question Paper Code: 37044

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Seventh Semester

Electronics and Communication Engineering

01UEC704 - EMBEDDED AND REAL TIME SYSTEMS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. How is ARM processor different from other processors?
2. List out the two power management features provided by CPUs.
3. What is BIOS?
4. What does a linker do?
5. State the functions of operating system.
6. Define context switching.
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?

PART - B (5 x 16 = 80 Marks)

11. (a) Explain about cache memory in ARM processor. (16)

Or

(b) Explain briefly the model train controller system. (16)

12. (a) Explain on how on chip memory management schemes can improve higher speed process. (16)

Or

(b) Why not use the source code directly? Explain briefly the fundamental model for programs. (16)

13. (a) Describe in detail about the inter process communication mechanism. (16)

Or

(b) Why need multiprocessors? Analyze the performance of the system with multiple processors. (16)

14. (a) Demonstrate the operation of Internet enabled system. With a suitable example. (16)

Or

(b) Briefly describe the design of accelerators with an algorithm. (16)

15. (a) Discuss about the design of data compressor in detail. (16)

Or

(b) Discuss the design of personal digital assistants with step by step procedure. (16)

———————