

**BE Semester- VII (ATKT CE / IT) Question Bank
Embedded System**

All questions carry equal marks (10 marks)

Q.1	What do you mean by embedded systems? Explain in brief with an example.
Q.2	Define different Categories and requirements of embedded systems.
Q.3	What are the different challenges related to embedded software development?
Q.4	What are the different issues related to embedded software development?
Q.5	What do you mean by Hardware/Software co-design?
Q.6	Write a short note on : IC technology
Q.7	Write a short note on : design technology
Q.8	Define : concurrency, processes, threads, mutual exclusion and inter-process communication
Q.9	What are the different models and languages for embedded software?
Q.10	Explain synchronous approach to embedded system design
Q.11	Explain one Scheduling paradigms for embedded software development
Q.12	Which are the different scheduling algorithms for embedded system? Explain one in brief.
Q.13	Write short note on : RTOS.
Q.14	Short Note On: standard I/O functions.
Q.15	Explain in brief: Preprocessor directives
Q.16	What are the different methods of interfacing?
Q.17	Write short Note on: Parallel I/O interface.
Q.18	Explain blind counting synchronization with an example.
Q.19	Explain gadfly Busy waiting with an example.
Q.20	Explain Parallel port interfacing with switches.
Q.21	Write a short note on : Keypads
Q.22	Write a short note on : Display units
Q.23	Explain memory and high speed interfacing in brief.
Q.24	Explain interfacing of data acquisition systems.
Q.25	Explain interfacing of controllers with an example.
Q.26	Short note On: Serial communication interface
Q.27	Draw and Explain RISC Processor architecture
Q.28	Explain with diagrams Memory, Reset and interrupt functions of RISC processor architecture.
Q.29	Which are the different Parallel I/O ports? Explain in brief.
Q.30	Short note on: Timers/Counters.
Q.31	Explain serial communication with an example.
Q.32	Short note on : Analog interfaces
Q.33	Differentiate between hardware and software co-design.
Q.34	Explain Process Control in terms of operating system.
Q.35	Write a short note on: Functional units of Digital Camera.
Q.36	What do you mean by Network Router? Explain in brief.
Q.37	Write a short note on : RTLinux
Q.38	Differentiate between IC and Design technology.
Q.39	Compare RISC vs CISC processor.
Q.40	Draw and explain CISC processor architecture.

