

BE Semester- VIII_CE_ Question Bank

(Advance Computer Architecture)

All questions carry equal marks (10 marks).

Q.1	Explain the Salient features of VLIW processor.
Q.2	Explain CISC.
Q.3	With reference to Linear processors, explain pipelining in detail.
Q.4	With non-linear processors, explain pipelining with latency analysis, make use of relevant state diagrams whenever required.
Q.5	Explain in details the various pipeline hazards and the methods to overcome.
Q.6	Discuss in detail the different levels of RAID.
Q.7	Explain the different types of data dependence with an example for each.
Q.8	Explain SISD.
Q.9	Write a short note on Arithmetic Pipeline design.
Q.10	What do you mean by Cache coherence problem? Explain in detail.
Q.11	Compare the following: 1) SISD 2) MIMD 3) SIMD
Q.12	Write a short note on Control flow versus Data flow.
Q.13	Explain the concept of Hardware parallelism.
Q.14	Describe the characteristics of Cache memory.
Q.15	Discuss in detail Parallel processing application.
Q.16	Write notes on pipelining. How does it differ from parallelism?
Q.17	Describe the techniques for increasing the memory bandwidth.
Q.18	Write short note on data flow execution.
Q.19	Describe the characteristics of Vector processing.
Q.20	Write note on Static interconnection network.
Q.21	Explain RISC.
Q.22	Discuss Super Scalar Processing.
Q.23	Explain Pipelining techniques.
Q.24	Explain MIMD.
Q.25	Explain SIMD.
Q.26	Discuss the concept of Software parallelism.
Q.27	Write note on Dynamic interconnection network.
Q.28	Explain Concurrency for multiprocessor.
Q.29	Discuss multiprocessor operating system.
Q.30	Write Short note on Parallel Memory Organizations.
Q.31	Explain Functional structure of multiprocessor architecture.
Q.32	Explain Interconnection network of multiprocessor architecture
Q.33	Discuss Grain Size Latency.
Q.34	Write short note on Crossbar Switches.
Q.35	Write short note on Multi port Memory.
Q.36	Explain multi stage network.
Q.37	Discuss branch handling techniques.

Q.38	Explain High bandwidth memory.
Q.39	Explain register file and Virtual file.
Q.40	Discuss Cache performance Analysis.