R18 Regulation

Subject code: 2E6BB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A' Grade)

B.Tech VI Semester Regular/Supplementary Examinations, June 2022

COMPUTER ARCHITECTURE

(Electrical and Electronics Engineering)

Maximum Marks: 70 Date:22.06.2022 Duration: 3 hours

Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10x2M=20 Marks)

1 What is the function of control unit?
2 List out the difference between CISC and RISC.
3 What are the main components of optical disks?
4 Write short notes on cache memory.
5 List out the features of PCI bus.
6 What is meant is arbitration?
7 What is the function of Bus interface unit?
8 List out the addressing modes of 80x86 processor.
9 Write short notes on Instruction level pipelining
10 What is the function of dynamic scheduling?

Part-B

Answer All the following questions. (5X10M=50Marks)

11 Explain the architecture and function of general computer system in detail with a neat diagram. [10]

OR

12 Explain the Hardware implementation of CPU with Micro instruction in detail with neat diagram. [10]

13 Explain memory management unit in detail with a neat diagram. [10]

OR

14 With a neat diagram explain the magnetic hard disk in detail. [10]

15 With a neat block diagram explain the DMA controller in detail. [10]

OR

16 Explain the interrupt controller in detail with a neat block diagram. [10]

17 Explain the architecture of 80x86 processor in detail with a neat diagram. [10]

OR

18 Explain the instruction set 80x86 processor in detail. [10]

19 Explain the VLIW architecture in detail with a neat block diagram. [10]

OR

20 With a neat block diagram explain the DSP architecture in detail. [10]