

Council for Technical Education and Vocational Training
Office of the Controller of Examinations
Sanothimi, Bhaktapur

Regular/Back Exam-2075 Shrawan/Bhadra

Program: Diploma in Computer Engineering

Full Marks: 80

Year/Part: II/II

Pass Marks: 32

Subject: Computer Architecture

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt Any Ten Questions.

1. What is computer architecture? Explain about adder and logic circuit with example. [6+2]
2. What is cache memory? Explain about memory hierarchy with diagram. [3+5]
3. Explain the need of common bus system with diagram. [8]
4. Define computer register and instruction set architecture. List out different registers used in computer with symbol and function. [4+4]
5. What do you mean by Input and Output interrupt? Write short notes on Memory reference instruction. [4+4]
6. Define micro-program control unit. Differentiate it from hardware control unit. [3+5]
7. What is set Associative mapping? Explain virtual memory and cache memory in brief. [2+3+3]
8. What are the CISC instructions? Explain the various pipelining Hazards in instruction pipelining and its solution. [2+6]
9. Explain addition and subtraction with 2's complement with examples. [8]
10. Perform 4×3 using unsigned multiplication algorithm. [8]
11. Explain matrix multiplication using vector processing. [8]
12. Write short notes on (Any two): [2×4]
 - a] Multiprocessors
 - b] Address Sequencing
 - c] Associative Memory

Good Luck!

*If you have question paper,
please take a picture and send
me at mail@rijankc.com.np
I will type it and provide you as
PDF document.*