

5. (a) Write short notes on memory hierarchy.

Or

- (b) Explain the hardware required for virtual memory.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

6. Explain the different data transfer and manipulation instruction with examples.
7. Describe stack organization.
8. Explain about vector processing.
9. Explain the algorithm for division with an example.
10. Explain the following:
- (a) daisy-chaining priority.
  - (b) parallel Priority interrupt.
11. Explain in detail on direct memory access.
12. Explain about RAM and ROM. Classify the types of ROMs.
13. Explain in detail about Interconnection structures between the computer components.

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**P/ID 17462/  
RCM/PCAN**

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Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) Explain any five program control instructions.  
Or  
(b) Write short notes on RISC.
2. (a) Explain about instruction pipeline.  
Or  
(b) Write short notes on Arithmetic pipeline.
3. (a) Explain the addition with signed magnitude data.  
Or  
(b) Explain subtraction of floating point numbers with a flowchart.
4. (a) Discuss on asynchronous data transfer.  
Or  
(b) Write short notes on Input-Output Interface.