

DECEMBER 2014

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

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Explain the general register organization.
Or
(b) Explain the data transfer instructions with examples.
2. (a) Explain instruction pipeline.
Or
(b) Write short notes on Arithmetic pipeline.
3. (a) Draw the flowchart for binary division and explain.
Or
(b) Draw the flowchart for floating point addition and explain.
4. (a) Write short notes on asynchronous serial transfer.
Or
(b) Write about serial communication.

5. (a) Explain the concept of memory hierarchy briefly.

Or

- (b) What is associative memory? Explain.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Describe stack organization.
7. Explain various addressing modes with examples.
8. Discuss on array processors.
9. Explain the algorithm for addition with an example.
10. Explain the following:
- (a) daisy-chaining priority.
- (b) parallel priority interrupt.
11. Explain direct memory access.
12. Describe the organization of cache memory.
13. Explain virtual memory.