

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: Computer Organization and Architecture****Sub. Code: 86164****Day and Date: Wednesday, 10-12-2025****Total Marks: 70****Time: 02:30 PM To 05:00 PM****Instructions:**

- Special Inst.:**
1. Question no. 6 is compulsory
 2. Solve any four questions from Q. No. 1 to Q. No. 5
 3. Assume suitable data wherever necessary
 4. Figures to the right indicate full marks

- Q1)** Attempt The Following Questions **[15]**
a) Explain 4th & 5th Generations of Computer. **(8 Marks)**
b) Draw & explain structure of an IAS Computer. **(7 Marks)**
- Q2)** Attempt The Following Questions **[15]**
a) Draw & explain Carry Lookahead adder. **(8 Marks)**
b) What are fundamental concepts in processing unit?. **(7 Marks)**
- Q3)** Attempt The Following Questions **[15]**
a) Differentiate between synchronous bus & asynchronous bus. **8 Marks**
b) Differentiate between RISC & CISC. **(7 Marks)**
- Q4)** Attempt The Following Questions **[15]**
a) Explain Booth's algorithm for unsigned binary multiplication. **(8 Marks)**
b) Differentiate between Hardwired Control & Microprogrammed Control. **(7 Marks)**
- Q5)** Attempt The Following Questions **[15]**
a) What are basic concepts in pipelining? **(8 Marks)**
b) Differentiate between Static RAM & Dynamic RAM. **(7 Marks)**
- Q6)** Write a short note on: **(Any 2)** **[10]**
a. Data Transfer Instruction
b. Data Processing Instruction
c. Program Control Instruction

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (1154) B.Tech. CBCS (86164) Computer Organization and Architecture Part 2 SEM 3

927256