Roll No. | | | | | | | | | | | | |

Total No. of Questions: 07 **Total No. of Pages: 02**

BCA (Sem. 2)
COMPUTER SYSTEM ARCHITECTURE
Subject Code: BSBC-204
Paper ID: B1116

Time: 03 Hrs. **Max. Marks: 60**

INSTRUCTIONS TO CANDIDATES:

1. **Section A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **Section B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**

SECTION A

1. Briefly answer the following questions-

a) What is Stored Program concept?

b) Define SISD, SIMD and MIMD.

c) Differentiate between Data bus, Control bus and Address bus.

d) What is the difference between direct and indirect address instructions?

e) What is an Interrupt?

f) What is strobe control in asynchronous data transfer?

g) What is control memory?

h) What do you mean by DMA?

i) Briefly discuss LPU algorithm.

j) What is Android architecture?

SECTION B

2. Discuss with examples various arithmetic, logic and shift micro-operations.

3. Explain the instruction cycle of a computer?

4. Define and distinguish between Hardwired and Micro-programmed control. Is it possible to have a hardwired control associated with a control memory?

5. What is Input-output Interface? Briefly discuss and compare the following I/O schemes:
(i) Programmed I/O (ii) Interrupt driven I/O

6. Explain memory hierarchy and discuss different types of memory.

7. Define Cache memory. What are the various memory mapping procedures involving cache memory? Explain.