

2020

COMPUTER SCIENCE — HONOURS

Paper : CC-5

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer **question no. 1** and **any four** from the rest.

1. Answer **any five** questions : 2×5
- (a) What are tristate devices?
 - (b) How does ALE operate?
 - (c) What is DMA?
 - (d) What do you understand by operand?
 - (e) How does principal of locality help in memory hierarchy design?
 - (f) State the differences between DRAM and SRAM.
 - (g) Mention the function of Program Counter.
 - (h) What is memory mapped I/O?
2. (a) What is absolute addressing mode?
(b) State the differences between burst mode and cycle stealing technique.
(c) What do you mean by pseudo code? 2+6+2
3. (a) What is the role of flag register?
(b) State the functions of Auxiliary carry and parity flag register. 5+5
4. (a) Draw the logic symbol of
(i) inverting tri-state buffer
(ii) non-inverting tri-state buffer.
(b) Compare between EPROM and EEPROM. 5+5
5. (a) State the characteristics of Von-Neumann computers and IAS computers.
(b) Compare and Contrast CISC and RISC architecture. 5+5

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6. (a) Compare between I/O mapped I/O and memory mapped I/O operation.
(b) Name and explain the function of special purpose registers. 5+5
7. What are the functions of Stack Pointer Program Counter, Accumulator and PSW? 10
8. (a) Why do we need to multiple the address and data bus?
(b) Explain the function of ALE and HOLD. 5+5
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