

2019

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** questions from the rest.

1. Answer **any five** questions of the following : 2×5
- (a) Define 'machine cycle' and 'instruction cycle'.
 - (b) What are tristate devices?
 - (c) What do you mean by 'pseudo code'?
 - (d) Highlight the main differences between DRAM and SRAM.
 - (e) What is the function of temporary register?
 - (f) What is IAS computer?
 - (g) What is cache coherence problem?
 - (h) What is DMA?
2. (a) What are zero, one, two and three addressing of a general purpose computer? Explain with proper examples. 8+2
- (b) What are the differences between opcode and operand? 8+2
3. (a) What is flag register?
- (b) State the functions of different types of flag registers. 2+8
4. (a) What does an interface do?
- (b) Draw a block diagram to show the connection between the processor, I/O bus and I/O devices.
- (c) Briefly explain the steps of data communication between the processor and the peripheral devices. 2+4+4
5. (a) What are the different types of non-volatile memories? Explain briefly with suitable examples. 6+4
- (b) How data can be re-written on a PROM and EPROM?
6. What are the functions of Stack Pointer, Program Counter, Accumulator and Instruction Register? 10

Please Turn Over