(6 pages) **Reg. No. :** .....

Code No. : 21007 **Sub. Code : GMCS 4 A/ GMSE 4 A**

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2017.

Fourth Semester

Computer Science — Main

Major Elective — MICROPROCESSOR

(For those who joined in July 2012 – 2015)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. ———————— Language consists of Mnemonic code

(a) Highlevel

(b) Machine

(c) Assembly

(d) 4GL

2. Now a days the computers are called Microcomputer because it has ———————— inside

(a) Microcontroller

(b) Microprocessor

(c) Microchip

(d) None of these

3. How many flags are there in 8085?

(a) 4 (b) 5

(c) 6 (d) 7

4. Which is most commonly used output device?

(a) Monitor

(b) Screen

(c) LCD

(d) Touch screen

5. Which of the following instruction use immediate addressing mode?

(a) MVI R, data (b) MOV Rd, Rs

(c) In port# (d) Out Port#

6. The LXI instruction is ———— bit data transfer instruction

(a) 8 (b) 16

(c) 24 (d) 32

7. When subroutine is called ———— and ———— instructions are executed

(a) call, return (b) save, return

(c) call, save (d) forward, return

8. A stack can also called as

(a) FILO (b) FIFO

(c) LIFO (d) None of these

9. ———— converts assembly language to machine language.

(a) compiler (b) interpreter

(c) assembler (d) none

10. How many parts are there in microcomputer

(a) 2 (b) 3

(c) 4 (d) 5

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain various arithmetic instructions.

Or

(b) Discuss about high level languages.

12. (a) With neat pin out diagram explain the 8085 microprocessor.

Or

(b) Describe memory interfacing.

13. (a) What is counting?

Or

(b) What is indexing?

14. (a) Describe debugging counter.

Or

(b) Write about time delay programs.

15. (a) Write short notes on BCD number system.

Or

(b) Explain binary to BCD conversion.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain 8085 programming model.

Or

(b) Give an overview of 8085 instruction set.

17. (a) Describe I/O and memory.

Or

(b) How to interface 8155 memory segment?

18. (a) Explain various rotate instructions with an example program.

Or

(b) Explain all data transfer instructions.

19. (a) Describe hexa decimal counter.

Or

(b) Describe module 10 counter

20. (a) Explain BCD to binary conversion.

Or

(b) Explain BCD subtraction.

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