

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2022
(Fourth Semester)**

Branch – **ELECTRONICS**

8085 MICROPROCESSOR & INTERFACING

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 What is meant by an instruction cycle?
- 2 What do you mean by multiplexed address, data bus?
- 3 State the use of PUSH instruction
- 4 What is stack memory?
- 5 Write a program to add two numbers.
- 6 Expand ASCII
- 7 What do you mean by NMI?
- 8 What is PIC?
- 9 Expand DMA.
- 10 What are the different modes of 8255-PPI?

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a With example, Explain the memory Interfacing techniques of 8089.
OR
- b What are the classifications of instructions? Explain with examples.
- 12 a Write a program for counter with time delay.
OR
- b Explain the operation of looping and counting.
- 13 a Write a program to convert binary number to ASCII.
OR
- b Write a program to multiply the given number.
- 14 a What are interrupt priorities? Explain with examples.
OR
- b Briefly explain about software interrupts.
- 15 a Explain the operations of 8257 DMA controller.
OR
- b With an neat diagram explain the operation of 8253 timer.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Draw the architecture of 8085 micro-processor and explain the various blocks.
- 17 Explain with examples, the conditional CALL and RET instructions.
- 18 Write a program for BCD to seven segment LED code conversion.
- 19 Explain the hardware interrupt system of 8085 microprocessor.
- 20 Explain the operation of 8255 PPI.

Z-Z-Z

END

