

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2018
(Second Semester)

Branch - APPLIED ELECTRONICS

PIC MICROCONTROLLER

Time : Three Hours

Maximum : 75 Marks

SECTION -A (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 1 a Draw the pin diagram of PIC microcontroller and describe important signals.
OR
b Compare and contrast CISR and RISC.
- 2 a Describe the following :
(i) Program memory (ii) Data memory
OR
b Explain the functions of 'RESET Circuitry'.
- 3 a Describe the sources code formats in PIC microcontroller.
OR
b Explain the Tent strings used in PIC microcontroller.
- 4 a Discuss a PIC based stepper motor controller.
OR
b Explain the interfacing of DAC with PIC microcontroller.
- 5 a Discuss the design of single digit counter / timer using PIC.
OR
b Explain the operation of Remote Relay Control.

SECTION -B (45 Marks)

Answer any THREE questions

ALL questions carry EQUAL Marks (3 x 15 = 45)

- 6 Describe in detail the hardware of PIC microcontroller.
- 7 Explain the following :
(i) Watch dog timer (ii) Configuration fuses
- 8 Discuss in detail, the various types of instructions used in PIC microcontroller.
- 9 Explain the interfacing of PIC with LCD modules.
- 10 Discuss the hardware, operation and software details of 'Blind Temperature Controller'.