PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 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 Write a note on origin of PIC microcontroller.
OR
    b Explain RISC concept.

2   a Explain in detail, the data memory.
OR
    b What is Reset circuitry? Explain in detail.

3   a Explain with example, the files with default extension.
OR
    b Explain the term : Text strings.

4   a Describe the working of multichannel ADC with a neat diagram.
OR
    b Explain the interfacing PIC microcontroller with LCD modules.

5   a Explain the operation of blind temperature controller with a suitable
      diagram.
OR
    b Describe the working of remote relay control with a neat diagram.

SECTION -B (45 Marks)
Answer any THREE questions
ALL questions carry EQUAL Marks ( 3 x 1 5 = 45)

6       Explain in detail, the features of PIC 16F877A microcontroller.

7       Draw the block diagram of PIC microcontroller and explain briefly        the
        function of each block.

8       Explain the various types of instruction set used in PIC microcontroller.

9       With suitable sketches, explain the interfacing PIC microcontroller        to a
        stepper motor.

10      Explain with suitable program, design a 2-digit timer with a PIC
        microcontroller.

Z-Z-Z                                                              END