PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2019
(Third Semester)

Branch - **APPLIED ELECTRONICS**

ARM PROCESSOR

Time : Three Hours   Maximum : 75 Marks

SECTION -A (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 6 = 30)

1 a Explain the concept of 3-stage instruction pipeline.
OR
   b Describe the functions of program status registers of ARM processor.

2 a Explain briefly, the memory formats of ARM7TDM1.
OR
   b What are Data Timed Signals? Explain their function.

3 a Explain the importance co processor interface signals.
OR
   b With suitable examples, explain undefined instructions.

4 a Explain the features of LPC 2378.
OR
   b Write a note on general purpose DMA controller.

5 a Describe the various registers to configure the function of ADC in LPC 2378.
OR
   b Explain the operations of Watchdog timer in EPC 2378.

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

6   Draw the architecture of ARM7TDMI and explain the functions of each block.

7   Discuss with suitable examples, the various data types of ARM7TDM1.

8   With a suitable diagram, explain the functions of Debug systems in ARM7TDMI.

9   Explain the functional description of LPC 2378 with a neat block diagram.

10   Write detailed notes on
       (i) USB interface in LPC 2378 and
       (ii) UART in LPC 2378.

Z-Z-Z   END