

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(Fifth Semester)

Branch- COMPUTER TECHNOLOGY

CORE ELECTIVE -1 EMBEDDED SYSTEMS

Time : Three Hours

Maximum : 75 Marks

SECTION-A 120 Marks!

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10x2 = 20)

- 1 What are microprocessors?
- 2 Define sensors.
- 3 Define reliability.
- 4 Define portability.
- 5 What is interrupt?
- 6 What is serial port?
- 7 What is based indexed addressing mode?
- 8 What is data transfer instruction?
- 9 What is IDE?
- 10 What is decompiler?

SECTION - B (25 Marks!)

Answer **ALL** Questions

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

- 11 a Write about classifications of embedded system.
OR
b Brief about big Indian and little Indian processor.
- 12 a Write short note on washing machine-embedded system.
OR
b Briefly explain about non-operational quality attributes of embedded system.
- 13 a Write about the factors to be considered in selecting a controller for embedded system.
OR
b Write short note on oscillator unit in embedded system.
- 34 a Brief about the instruction set of 8051.
OR
b Write short note on UML.
- 15a Explain about types of files generated on cross compilation.
OR
b Write short notes on development phase of embedded product development life cycle.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Elaborate about application specific ICs.
- 17 Explain characteristics of embedded system.
- 18 Explain 8051 architecture.
- 19 Explain about fundamental issues in hardware, software co-design.
- 20 Explain about simulator.