

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - COMPUTER TECHNOLOGY

CORE ELECTIVE - I: EMBEDDED SYSTEMS

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 Microcontrollers?
- 2 Define Actuators.
- 3 Define Response.
- 4 Define Evoluability.
- 5 What is Registers?
- 6 What is Oscillator?
- 7 Define long addressing.
- 8 Define Boolean variable instructions.
- 9 What is Simulator?
- 10 What is Emulator?

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a Briefly explain about purpose of Embedded systems.
OR
b Write short note on RISC and CISC controllers.
- 12 a Write any five characteristics of embedded systems.
OR
b Briefly explain about operational quality attributes of embedded systems.
- 13 a Write about the memory organization of 8051 architecture.
OR
b Write short note on Times unit in embedded system.
- 14 a Explain about different addressing modes supported by 8051 architecture.
OR
b Brief about computational models in Embedded system.
- 15 a Write short notes on IDE for Embedded System.
OR
b Briefly explain about developmental language trends for embedded system.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Explain about PCB and passive components.
- 17 Explain application specific embedded system - Washing Machine.
- 18 Explain about Interpretation system in 8051.
- 19 Explain about UML in an elaborate way.
- 20 Explain about various phase in EDLC.