Exam Date & Time: 29-Sep-2020 (10:00 AM - 01:45 PM)

PSG COLLEGE OF ARTS AND SCIENCE

Note: Writing 3hrs: Checking & Inserting Image : 30mins

BSc DEGREE EXAMINATION MAY 2020
(Sixth Semester)

Branch - ELECTRONICS

REAL TIME OPERATING SYSTEM [14ELU26]

Marks: 75 **Duration: 210 mins.**

SECTION A

Answer all the questions.

1) Define round robin. (2)

2) what is RTOS? (2)

3) Write few lines for semaphores. (2)

4) Mention two ways to protect shared data. (2)

5) What is mail box? (2)

6) Define queues. (2)

7) List any two principle of RTOS. (2)

8) Mention 2 ways to save power. (2)

9) Define cross compiler. (2)

10) What is linker? (2)

SECTION B

Answer all the questions.

11) a) Enumerate codeless bar code scanner. (5)

[OR] b) Describe round robin with example. (5)

12) a) Summarise about task and fare states. (5)

[OR]

b) Narrate how to initialize semaphores. (5)

13) a) Elucidate the timer function. (5)

[OR]

b) Illustrate the memory management. (5)

14) a) Describe the overview in basic design using RTOS. (5)

[OR]

b) Narrate how to save memory space. (5)

15) a) Enumerate address resolution. (5)

[OR]

b) Describe about host and target machines. (5)

SECTION C

Answer 3 out of 5 questions.

16) Briefly explain round robin with interrupts giving suitable example. (10)

17) Enumerate semaphores as a signaling device with two problems. (10)

18) Elucidate interrupt routines in an RTOS environment. (10)

19) Outline on how encapsulating semaphores and queues. (10)

20) Discuss about the cross assembler and tool chains. (10)

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