Total no. of Pages-01   *Roll No. ....*

SIXTH SEMESTER   B.Tech.[ALL]

MID SEMESTER EXAMINATION   (March-2019)

SE322 REAL TIME SYSTEMS

Time: 1:30 Hours   Max. Marks: 25

Note: Answer All questions. Assume suitable missing data, if any.

Q. 1. Attempt all questions.   (2x5=10)

a. Describe the terms: Release time Jitter, Relative deadline, sporadic jobs, Hyperperiod.

c. Write a note on "optimality of the EDF algorithm".

d. Explain Periodic Task model with suitable example.

d. Differentiate between Hard and Soft Real Time systems.

e. Explain and mention set representation of Precedence Graph.

Q. 2. Attempt any Three of the following.   (5x3=15)

a. Explain Uncontrolled Priority Inversion with suitable example.

b. A system have tasks such as T1=(10,2) , T2=(15,5), T3=(25,9). Show the periodic task T1, T2 and T3 are scheduled by RMA.

c. Describe the Deferrable server with example.

d. Discuss the Radar System in detail with neat diagram.

e. Prove that "When Pre-emption is allowed and jobs do not contend for resources, the EDF algorithm can produce a feasible schedule of a set J of jobs with arbitrary release times and deadlines on a processor if and only if J has feasible schedules".