Registration No.:_____

PNR No:: 117182DCA498495

COURSE CODE : DCAP608
COURSE NAME : REAL TIME SYSTEMS

Time Allowed: 03:00 hrs ***Max.Marks: 80***

1. This question paper is divided into two parts A and B.
2. Answer all the questions in serial order.
3. Part A contains 10 questions of 2 marks each. All questions are compulsory.
4. Part B contains 10 questions (Questions 2 to 11) of 10 marks each, attempt any 06 questions out of 10. Attempt all parts of the selected question. Only first 06 attempted questions would be evaluated.
5. The student is required to attempt the question paper in English medium only.
6. Simple non programmable calculator is allowed.

PART A

Q1(a) Describe the concept of real time operating system.
(b) Define release time.
(c) Discuss with example data dependency.
(d) Differentiate internal and external component parameter.
(e) What do you understand by table-driven scheduling?
(f) Explain the clock-driven approach.
(g) What is the scheduling block? What is its use in scheduling?
(h) Define cyclic EDF algorithm.
(i) What scheduling schemes are there for multiprocessors?
(j) Explain fixed-priority systems.

PART B

Q2 Differentiate between hard and soft real time system.

Q3 What is slack stealing? How does it work with aperiodic jobs?

Q4 Discuss the term optimality of the EDF and LST algorithms.

Q5 What do you understand by maximum schedulable utilization?

Q6 Explain weight Round Robin approach in detail.

Q7 What is hierarchy scheduling?

Q8 Describe sufficient schedulability conditions for the DM Algorithms in detail.

Q9 Enumerate Static, Timer-Driven Schedules in detail.

Q10 What are jobs and processors?
Q11 Describe processors and resources.

-- End of Question Paper --