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PG (CBCS)
M.Sc. Semester- I Examination, 2023
COMPUTER SCIENCE
PAPER: COS 104
(REAL TIME SYSTEM)

Full Marks: 40**Time: 2 Hours**

The figures in the right-hand margin indicate full marks.
 Candidates are required to give their answers in their own words as far as practicable.

GROUP-A**1. Answer any FOUR of the following questions:****4×2=8**

- a) What are the types of Real-Time Systems?
- b) Define Release Time.
- c) What is Deadlines?
- d) Define Jitter.
- e) Describe Data Dependency.
- f) What is Real-Time Scheduling?
- g) What is Hard constraints with example?
- h) What are the types of Data Dependency?

GROUP-B**2. Answer any FOUR of the following questions:****4×4=16**

- a) Explain Priority Driven Approach with Example
- b) What are the differences between Dynamic System Vs Static Systems?
- c) What is Real Time Scheduling? What are the types of Reference Model?
- d) What are the differences between Offline Scheduling and online Scheduling?
- e) What are the differences between Difference between Sporadic and Aperiodic Real-time Tasks?
- f) What is Resource Reservation Protocols? What are the types of Resource Reservation Protocols?
- g) What is Real time operating system (RTOS)? What is a real-time database?

GROUP-C**3. Answer any TWO of the following questions:****2×8=16**

- a) What are the differences between Hard Real-Time System and Soft Real-Time System? Give Examples.
- b) Describe Real-time Communication. Explain model of Real-Time Communication.

(P.T.O.)



(2)

- c) Write the features of RTOS. Explain temporal data in Real-Time OS.
- d) Explain Weighted Round Robin (WRR) Scheduling with the help of an example.
