

**M. TECH.-II (INFORMATION TECHNOLOGY) (CBCS –
2015 COURSE) : WINTER - 2017
SUBJECT: REAL TIME SYSTEMS**

Day: **Wednesday**
Date: **29/11/2017**

Time: **11.00 AM TO 02.00 PM**
Max Marks: 60

W-2017-2814

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written **SEPARATE** answer book.
- 4) Assume suitable data, if necessary.

SECTION-I

Q1 What are traditional performance measures used for any general purpose systems? Can they be applied for measuring performance of real time system? Justify your answer. **(10)**

OR

What is performability? State and explain the qualities of performability.

Q.2 List the classical uniprocessor scheduling algorithms. Explain any one dynamic priority scheduling algorithm. **(10)**

OR

State and explain the 0/1 Reward Function for uniprocessor scheduling of an IRIS task.

Q.3 What is task assignment? Explain process of task assignment with precedence condition. **(10)**

OR

Which algorithm proceeds allocation tasks serially to the least utilized processor? Explain it in detail.

SECTION-II

Q.4 State and explain the characteristics of real time programming language. **(10)**

OR

What is task scheduling? Elaborate with an appropriate example.

Q.5 State a disk scheduling algorithm and its functionality towards Real time database. **(10)**

OR

Justify how two phase approach is preferable from improving the predictability in Real time system.

Q.6 How priority based services are preferred for switched network. Explain with proper example. **(10)**

OR

Briefly define the weighted Round Robin services and explain the role of Real Time communication in detail.