

**Birla Institute of Technology & Science, Pilani- KK Birla Goa Campus**  
**II Semester 2015-2016**  
**EEE/CS/INSTR F241- MICROPROCESSOR PROGRAMMING AND INTERFACING**

**Quiz 6 (Open Book)**

**Date: 29-04-2016**

**Max Marks: 10**

**Duration: 30 Mins**

**ID No.**

**Name:**

**Q1.** There is only a single cache in processor based system and the cache access time is 10ns with a hit rate of 85%. The main memory access time is 25ns what is the average memory access time? **(4)**

**$0.85 \times 10\text{ns} + 0.15 \times 25\text{ns} = 12.25\text{ns}$**

**Q2.** The table below shows the threads with their priorities in a multi-threading system. The threads which will complete in one-time slot are shown by columns that are shaded. **(6)**

**Fill in the threads that will be executed in timeslots 1 -12 – assuming that no new threads are available for execution**

THREAD	TH1	TH2	TH3	TH4	TH5	TH6	TH7	TH8
Priority	1	7	3	4	6	2	8	5

**Fill in the threads that will be executed in timeslots 1 -12 – assuming that no new threads are available for execution**

Time slot	1	2	3	4	5	6	7	8
Thread	TH1	TH6	TH3	TH4	TH8	TH5	TH2	TH7
Time Slot	9	10	11	12				
Thread	TH6	TH3	TH2	TH7				