Seat No.:	Enrolment No.
Deat 110.:	Emonited 10:

Subject Code:163101

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI • EXAMINATION - SUMMER • 2015

Date: 18/05/2015

Ti	ime:(structi 1 2	t Name: Operating System Design 2.30pm-05.00pm Total Marks: 7 ons: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	70
Q.1	(a) (b)	Explain Unix file system also explain i-node in detail. What is scheduling? Explain short, medium and long term scheduler	07 07
Q.2	(a) (b)	Explain the following commands in Unix operating system 1)chmod 2)pwd 3)grep Explain process states & transition with diagram	07 07
	(b)	OR Why kernel use a hash function? Explain why kernel not reading directly from the disk?	07
Q.3	(a) (b)	Discuss the advantages and disadvantages of the buffer cache What is procedure for reading & writing disk blocks? Write simple algorithm for the same	07 07
Q.3	(a) (b)	OR Explain Peterson's solution for mutual exclusion problem Explain the term; Multics and Shell	07 07
Q.4	(a) (b)	Explain ialloc algorithm in detail Explain the context switching in detail	07 07
Q.4	(a) (b)	OR Explain ifree algorithm indetail Explain placement of Unix operating system with the help of diagram	07 07
Q.5	(a)	Explain following algorithms getblk(), brelse()	07
	(b)	What is the bookkeeping operation? Explain in detail	07
Q.5	(a) (b)	OR Explain the features of Unix operating system Write the differences between user mode and kernel mode	07 07
