

DHARMSINH DESAI UNIVERSITY, NADIAD FACULTY OF TECHNOLOGY

B.TECH. SEMESTER V [INFORMATION TECHNOLOGY] SUBJECT: (IT 502) DATABASE MANAGEMENT SYSTEM

Examination : Block Exam (Regular) Seat No. :
Date : 17/10/2015 Day :
Time : 3.00 to 4.15 Max. Marks : 36

INSTRUCTIONS:

- 1. Figures to the right indicate maximum marks for that question.
- 2. The symbols used carry their usual meanings.
- 3. Assume suitable data, if required & mention them clearly.
- 4. Draw neat sketches wherever necessary.

Q.1	Do as directed.	[12]
	(a) Define referential integrity with example.	[2]
	(b) Explain Insert and Update anomalies with example.	[2]
	(c) Define instance and schema.	[2]
	(d) What is the purpose of different database abstraction levels?	[2]
	(e) Explain starvation using example.	[2]
	(f) Define unsafe expression in TRC with example.	[2]
Q.2	Attempt the following questions.	[12]
	(a) Draw an E-R diagram for Hospital Management System . (Min. 4 Entity Sets)	[6]
	(b) What is the difference between Primary Index and Secondary Index? Explain with example.	[6]
Q.3	(a) Explain state diagram of transaction.	[6]
	(b) Explain Two Phase Commit Protocol. Also explain any two handling of failures in 2PC.	[6]