

Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER 3 – EXAMINATION – WINTER 2018**Subject Code:3539252****Date:10/12/2018****Subject Name: System analysis and Design****Time:10:30am To 01:30pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q. No.		Marks
Q.1	Explain Following terms (a) Decomposition (b) Coupling (c) Cohesion (d) Static Binding (e) Encapsulation (f) Polymorphism (g) Enterprise Data Warehouse	14
Q.2	(a) Explain outsourcing. Describe different sources of software.	07
	(b) Explain the waterfall model with suitable example.	07
	OR	
	(b) Explain different types of file with suitable example in brief	07
Q.3	(a) Describe System Analysis and the major activities that occur during this phase of the System Development Life Cycle.	07
	(b) Describe Data Flow Diagramming Mechanics with an Example	07
	OR	
Q.3	(a) Explain any three traditional methods to determine system requirements.	07
	(b) Define the points to be considered while assessing the feasibility of the project. Explain any three.	07
Q.4	(a) Write a note on OOPs Basics	07
	(b) Explain Software Testing and Installation process	07
	OR	
Q.4	(a) Explain Conceptual Data Modeling and the E-R Model	07
	(b) Describe the procedure to design a distributed system.	07

Data warehouse is a massive independent business database system that is populated with data that has been extracted from a range of sources. The data is held separately from its origin and is used to help to improve the decision-making process.

Many traditional Databases are involved in recording day to day operational activities of the business, called online transaction processing (OLTP)., commonly implemented in Airline Bookings & Banking Systems, for fasters response and better control over data.

After establishment of OLTP Systems, reports and summaries can be drawn for giving inputs to decision-making process and this process is called online analytical processing (OLAP).

For better customer relationships management strategy, the call centers and data warehouses must be fully integrated. Data warehouse works as a strategic tool for decision-support which requires lot of time for establishment, and needs to be updated with operational information on daily weekly or monthly basis.

Data warehouse is used for proactive strategies formulation in critical & complex situations. A number of CRM vendors are advocating for single integrated customer database which includes call centre, web sites, branches and direct mail, but it lacks in analytical functioning of data warehouse. This Database can't be expanded also, and carry decision support operations on call centre Database becomes slow & the query processing and inquiries handling operations also become slow & inefficient for agents dealing with customers.

Data warehouse is must for identifying most profitable & loyal customers and those customers can be offered better customized services which increases the chances of additional profits. Although call centre systems & data warehouses are altogether different systems yet dependant on each other to fully exploit their potential respectively.

- (a) Explain OLTP & OLAP processes with their respective advantages. **07**
- (b) How the response time in performing OLAP queries can be improved? **07**

OR

- Q.5** (a) Explain the importance of regular updation of data in a data warehouse. **07**
- (b) Explain the role of data warehousing in the functioning of a call centre. **07**
