Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – IV • EXAMINATION – SUMMER- 2016

Subject Code: 341603   **Date: 24 - 05 - 2016**
Subject Name: Software Engineering
Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make Suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **Use of programmable & Communication aids are strictly prohibited.**
5. **Use of only simple calculator is permitted in Mathematics.**
6. **English version is authentic.**

Q.1	(a)	List the characteristics of a good software requirement specification document.	**07**
પ્રશ્ન. ૧	અ	સારા software requirement specification document ની વિશેશતાઓ જણાવો	**07**
	(b)	What is feasibility study and what activities does it entail.	**૦૭**
	બ	Feasibility study શું છે અને એમા કઇ activities હોય છે.	**૦૭**
Q.2	(a)	What is data flow diagram and explain different symbols of data flow diagrams.	**07**
પ્રશ્ન. ૨	અ	Data flow diagram શું છે અને તેના જુદા જુદા symbols સમજાવો.	**07**
	(b)	Explain with figure the spiral model of software development.	**૦૭**
	બ	આકૃતિ સાથે spiral model of software development સમજાવો.	**૦૭**

OR

	(b)	What is the function and role of a system analyst ?	**07**
	બ	System analyst નો function અને role શું છે ?	
Q.3	(a)	State and explain the different types of software.	**07**
પ્રશ્ન. ૩	અ	જુદા જુદા સોફ્ટવરે સમજાવો.	**07**
	(b)	Compare function oriented matrices with size oriented matrices.	**૦૭**
	બ	સર્ખાવો function oriented matrices ને size oriented matrices સાથે	**૦૭**

OR

Q.3	(a)	Define the following	**07**
		Data dictionary Reusability ER diagram	
પ્રશ્ન. ૩	અ	વ્યાખ્યા આપો	**07**
		Data dictionary Reusability ER diagram	
	(b)	Explain the RAD model of software development.	**૦૭**
	બ	RAD model of software development સમજાવો	**૦૭**
Q.4	(a)	Explain white box testing	**07**
પ્રશ્ન. ૪	અ	White box testing સમજાવો	**07**
	(b)	Explain the different types of risk a software project may encounter.	**૦૭**

	બ	Software project ને કેટ્લી ટાઇપ ના risk નો સામનો કર્વો પડે છે.		૦૭

<div align="center">OR</div>

Q.4	(a)	Write a short note on Risk mitigation monitoring management plan.	**07**
પ્રશ્ન. ૪	અ	Risk mitigation monitoring management plan પર ટૂંકિ નોંધ લખો	**07**
	(b)	Explain black box testing	૦૭
	બ	Black box testing સમજાવો	૦૭
Q.5	(a)	Write a short notes on unit testing and integration testing	**07**
પ્રશ્ન. ૫	અ	Unit testing અને integration testing પર ટૂંકિ નોંધ લખો	**07**
	(b)	Explain time line chart , Gantt chart and PERT	૦૭
	બ	Line chart , Gantt chart અને PERT સમજાવો	૦૭

<div align="center">OR</div>

Q.5	(a)	Explain cohesion and coupling	**07**
પ્રશ્ન. ૫	અ	Cohesion અને coupling સમજાવો	**07**
	(b)	Write a short note on Empirical estimation model COCOMO	૦૭
	બ	Empirical estimation model COCOMO પર ટૂંકિ નોંધ લખો	૦૭

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