

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING– SEMESTER –4 (NEW) EXAMINATION – WINTER-2020

Subject Code:3341603**Date:16-02-2021****Subject Name:Fundamentals Of Software Development****Time:02:30 PM TO 04:30 PM****Total Marks:56****Instructions:**

1. Attempt any FOUR Questions from Q.1 toQ.5.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate fullmarks.
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

Answer any seven out of ten. દશમાંથી કોઈપણ સાતના જવાબ આપો.

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1. Define software.
૧. Software ની વ્યાખ્યા આપો.
2. What is real-time software?
૨. Real-time સોફ્ટવેર એટલે શું?
3. List out umbrella activities.
૩. Umbrella activities ની યાદી બનાવો.
4. Which are the tools used in Software Development?
૪. સોફ્ટવેર ડેવલોપમેન્ટ માટે ઉપયોગમાં લેવાતા સાધનો કયા છે?
5. Where we can use Prototyping model?
૫. Prototyping model નો ઉપયોગ ક્યાં કરી શકાય?
6. Draw symbols used in DFD.
૬. DFD માં ઉપયોગમાં આવતા Symbol જણાવો.
7. What is Risk Identification?
૭. રીસ્ક આઈડેન્ટીફિકેશન શું છે?
8. Give full name: (1) SRS (2) COCOMO
૮. પુરુ નામ આપો: (1) SRS (2) COCOMO
9. What is project monitoring and control in software engineering?
૯. Software engineeringમાં project monitoring અને control શું છે?
10. Give full form: (1) LOC (2) WBS
૧૦. પુરુ નામ આપો: (1) LOC (2) WBS

Q.2**પ્રશ્ન. ૨**

- (a) Justify: software doesn't wear out.
(અ) સમજાવો: સોફ્ટવેર નાશવંત થતુ નથી.

03**03****OR**

- (a) What is Web-based Software, Personal Computer Software & System Software?
(અ) Web based Software, Personal Computer Software અને System Software શું છે?
- (b) Explain cardinality and modality.
(બ) Cardinality અને modality સમજાવો.

03**03****03****03**

		OR	
	(b)	Compare functional and non-functional requirement of software.	03
	(બ)	સોફ્ટવેરની ફંક્શનલ અને નોન- ફંક્શનલ જરૂરિયાતોની તુલના કરો.	03
	(c)	Explain software myths.	04
	(ક)	Software Myths સમજાવો.	0૪
		OR	
	(c)	Explain waterfall model.	04
	(ક)	Waterfall model સમજાવો.	0૪
	(d)	Explain RAD model.	04
	(ડ)	RAD Model સમજાવો.	0૪
		OR	
	(d)	Explain Coupling	04
	(ડ)	Coupling સમજાવો.	0૪
Q.3	(a)	Explain data attributes	03
પ્રશ્ન. 3	(અ)	Data Attributes સમજાવો.	03
		OR	
	(a)	Draw context level diagram for student management system	03
	(અ)	Student management system માટેનો context level diagram દોરો.	03
	(b)	Explain classification of design methodology.	03
	(બ)	“Classification of design methodology” સમજાવો.	03
		OR	
	(b)	Explain activity diagram in brief.	03
	(બ)	Activity Diagram ટૂંકમાં સમજાવો.	03
	(c)	Explain Use Case Diagram.	04
	(ક)	Use case diagram સમજાવો.	0૪
		OR	
	(c)	Write a note on “Classification of design activities”.	04
	(ક)	“Classification of design activities” ઉપર નોંધ લખો.	0૪
	(d)	Explain Function Point Technique.	04
	(ડ)	Function point technique સમજાવો.	0૪
		OR	
	(d)	Explain Heuristic Technique for Project Estimation.	04
	(ડ)	Project Estimation માટેની Heuristic Technique સમજાવો.	0૪
Q.4	(a)	Explain Gantt Chart.	03
પ્રશ્ન. ૪	(અ)	Gantt Chart સમજાવો.	03
		OR	
	(a)	Explain code walkthrough.	03
	(અ)	Code Walkthrough સમજાવો.	03
	(b)	Draw a use case diagram for online shopping web application.	04
	(બ)	Online shopping web application માટેનો use case diagram દોરો.	0૪
		OR	
	(b)	Explain Critical Path Method (CPM).	04
	(બ)	CPM સમજાવો.	0૪

	(c) Explain: White Box Testing Method	07
	(ઁ) White Box Testing Method સમજવો.	09
Q.5	(a) Explain Analytical Estimation Technique.	04
પ્રશ્ન. ૫	(અ) Analytical Estimation Technique સમજવો.	04
	(b) Explain Internal & External Documentation of software	04
	(બ) Software માટેની Internal & External Documentation સમજવો.	04
	(c) Write advantages and disadvantages of DFD.	03
	(ઁ) DFDની ફાયદા અને નુકસાન સમજવો.	03
	(d) Explain risk assessment.	03
	(ડ) Risk assessment સમજવો.	03
