Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VI (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2160701   **Date: 27/04/2017**

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.**

Q.1		**Answer the following**	**14**

1 The most important feature of spiral model is
A) requirement analysis   B) risk management.
C) quality management   D) configuration management.

2 "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing ?
A) Functional B) Non Functional C)Non of the above

3 Agility is defined as the ability of a project team to respond rapidly to a change.(TRUE/FALSE)

4 In function point analysis, value adjustment factors used to rate the system are
A) 10 B) 14   C) 20 D) 12

5 Which one is not a risk management activity?
A) Risk identification   B) Risk generation
C) Risk Monitoring   D) Risk Mitigation

6 SRS is also known as _____ testing.

7 What DFD notation is represented by the Rectangle?
A) Data flow   B) Data Store
C) Process   D) None of the mentioned

8 Alpha and Beta Testing are forms of _____ testing.

9 _____ is a collection of software engineering work tasks, milestones, and deliverable that must be accomplished to complete a particular project.

10 _____ tools extract data, architectural, and procedural design information from an existing program.

11 Which web app attribute is defined by the statement:"A large number of users may access the WebApp at one time"?

12 What combines procedures and tools to manage different versions of configuration objects that are created during the software process?

13 SaaS means _____.

14 Which of the following is not a direct measure of SE process?
A) Efficiency   B) Cost
C) Effort Applied   D) All of the mentioned

Q.2	**(a)**	Explain Software Engineering as a Layered Technology.	**03**
	(b)	Compare Prototype and RAD Process Model.	**04**
	(c)	Explain Scrum with merits and demerits.	**07**

OR

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	(c)	Enlist characteristic of SRS.Write a SRS for college management system.	**07**
Q.3	**(a)**	Compute function point value for a project with the following domain characteristics: No. of I/P = 30 No. of O/P = 62 No. of user Inquiries = 24 No. of files = 8 No. of external interfaces = 2 Assume that all the complexity adjustment values are average.	**03**
	(b)	What is architectural design? Enlist different style and patterns of architecture.	**04**
	(c)	Explain different design Concepts in details.	**07**

OR

Q.3	**(a)**	Describe golden rules of User Interface Design.	**03**
	(b)	Explain RMMM.	**04**
	(c)	Define Coupling and Cohesion.What is the difference between cohesion and coupling.	**07**
Q.4	**(a)**	Explain Formal Technical Review.	**03**
	(b)	Compare: Quality Control Vs. Quality Assurance.	**04**
	(c)	Consider the program given below	**07**

```
void main()
{
int i,j,k;
readln (i,j,k);
if( (i < j) || ( i > k) )
{
writeln("then part");
if (j < k)
writeln ("j less then k");
else writeln ( " j not less then k");
}
else writeln( "else Part"); }
```

(i) Draw the flow graph.
(ii) Determine the cyclomatic complexity.
(iii) Arrive at all the independent paths.

OR

Q.4	**(a)**	List quality standards.Explain any one.	**03**
	(b)	Difference between reverse engineering and forward engineering.	**04**
	(c)	List set of guidelines for BVA.Also Explain merits and demerits of BVA.	**07**
Q.5	**(a)**	Enlist and explain different types of maintenance.	**03**
	(b)	What is mobile testing? Mention the challenges in mobile testing.	**04**
	(c)	Explain Client/Server Software Engineering.	**07**

OR

Q.5	**(a)**	The WebE process model.	**03**
	(b)	Describe CASE building blocks.	**04**
	(c)	Explain SCM process in details.	**07**

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