General system characteristics	Weights
Performance	4
Heavily used configuration	3
Transaction rate	3
End user efficiency	4
Online update	2

Calculate unadjusted function points, value adjustment factors and function points of a given project.

29. a. Compare and contrast requirement management process in waterfall model with iterative model.

(OR)

b. Analyze the software construction characteristics and mention the necessities in detail.

30. a. Consider a company in CMMI level II certification, now they are working in a new project. If they want to move to next level of certification, what are the steps needed to improve?

(OR)

b. Describe the strength and limitations of agile methods.

31. a. Consider you are the project manager and managed different project teams. Analyze the team management challenges and mention the solutions.

(OR)

b. Summarize the following customer management components
   (i) Customer expectation management
   (ii) Negotiation management
   (iii) Reporting management

32. a. Discuss the benefits of tools and tool selection considerations

(OR)

b. Summarize the following tools
   (i) Requirement elicitations tools
   (ii) Requirement development tools
   (iii) Requirement management tools

* * * * *

Reg. No.														

B.Tech. DEGREE EXAMINATION, MAY 2019
3rd to 8th Semester

15SE313 – SOFTWARE PROJECT MANAGEMENT
(For the candidates admitted during the academic year 2015-2016 to 2017-2018)

Note:
(i) **Part - A** should be answered in OMR sheet within first 45 minutes and OMR sheet should be handed over to hall invigilator at the end of 45th minute.
(ii) **Part - B** and **Part - C** should be answered in answer booklet.

Time: Three Hours Max. Marks: 100

PART – A (20 × 1 = 20 Marks)
Answer **ALL** Questions

1. Project initiation, planning, _____and project closure are project management process.
   (A) Project monitoring and control (B) Project configuration management
   (C) Project quality assurance (D) Project evaluation and verification

2. _____is a defined way of doing things.
   (A) Process (B) Product
   (C) System (D) Task

3. To monitor and control effectively, the project manager needs _____data.
   (A) Model (B) Sample
   (C) Dummy (D) Measurement

4. Cause and effect diagrams also known as
   (A) Linear diagrams (B) Layer diagrams
   (C) Use case diagrams (D) Fish bone diagrams

5. _____are the first phase of any software life cycle management.
   (A) Software requirements (B) Design
   (C) Testing (D) Construction

6. Tool used for secure expert judgment
   (A) Peer review (B) Delphi technique
   (C) Expected value technique (D) Work breakdown structure

7. What should a project manager do or follow to ensure clear boundaries for project completion?
   (A) Scope verification (B) Completing a scope statement
   (C) Scope definition (D) Risk management plan

8. What should be done by the project manager to ensure that all work in the project is included?
   (A) Create SRS (B) Create risk management plan
   (C) Create a WBS (D) Create a scope statement

9. The final form of testing COTS software is _____testing.
(A) Unit (B) Integration
(C) Alpha (D) Beta

10. Which technique is applicable when other projects in the same analogy application domain have been completed?
(A) Algorithm cost modelling (B) Expert judgment
(C) Estimation by analogy (D) Parkinson's law

11. _____number of maturity levels in CMM are available.
(A) 2 (B) 5
(C) 8 (D) 4

12. _____is not an input to project plan execution.
(A) Work authorization system (B) Project plan
(C) Corrective action (D) Preventive action

13. The individual or organization who wants a product to be developed is known as the
(A) Developer (B) User
(C) Contractor (D) Client

14. _____is the best way to test the software project management plan.
(A) Prototyping (B) Inspection
(C) Simulation (D) Compilation

15. _____is the most important motivating factor for any employee.
(A) Advice (B) Salary
(C) Suggestions (D) Guidance

16. Which of the following is not a requirement management work bench tool?
(A) RTM (B) Doors
(C) Rational suite (D) RDD100

17. _____are COTS or service providers.
(A) Supplier (B) Customer
(C) Client (D) Tester

18. _____increase productivity
(A) Tools (B) Reviews
(C) Inspections (D) Defects

19. Which of the following is not a requirement management tool?
(A) Requirement priority list (B) Requirement change management
(C) Use cases (D) Requirement version management

20. _____is not the usage of configuration management tool.
(A) Version control (B) Project reporting
(C) Configuration control (D) Project document management

PART – B (5 × 4 = 20 Marks)
Answer **ANY FIVE** Questions

21. With the help of pareto analysis identify the important causes and less important causes for the given error (cause) details of a website

Errors (causes)	Count
Broken links	200
Spelling errors	75
Missing title tag	120
Missed description tag	95
Browser capability	85
Security warning	60

22. Draw the cause and effect diagram for product failure.

23. Mention the characteristics of a good software design.

24. Analyze some reasons for software maintenance.

25. Assume you are the project manager. Mention the benefits of using standard proceses across projects in your way.

26. List the customer management challenges.

27. Specify the factors to be considered during tool section.

PART – C (5 × 12 = 60 Marks)
Answer **ALL** Questions

28. a. A show room management system consists of 5 major functionalities. The functionalities and their estimated size are given below

Sales management	20 KLOC
Inventory management	20 KLOC
Customer management	150 KLOC
Employee management	10 KLOC
Service management	100 KLOC

The cost drivers considered are reliability as nominal, size of application database is high and complexity of the product is low. The rating of cost drivers are given below

Cost drivers	Ratings			
	Very low	Low	Nominal	High
Software reliability	0.75	0.88	1.00	1.15
Size of application database		0.94	1.00	1.08
Complexity of the product	0.70	0.85	1.00	1.15

Calculate effort and development time using all 3 modes of intermediate COCOMO.

(OR)

b. Rojar and his team is developing an application system. It has 10 inputs, 10 outputs, 10 inquiries, 1 internal logical file and 1 external interface file. Assume average complexity for 5 primary factors. The general system characteristics involved in this project and their influential weights are given below