

PART - A (10 X 2 = 20 MARKS)

Answer ALL the Questions

1. Give the details of project size categories for software product.
2. How to define the problem?
3. Define product size.
4. What do you mean by available time?
5. Mention the format of SRS.
6. What is Petri Nets?
7. Define Modularity.
8. What is coupling?
9. What are the functions of software quality assurance group? Explain.
10. Define static analysis.

PART - B (5 X 5 = 25 MARKS)

Answer ALL the Questions

11. (a) How to plan an organization structure? Explain briefly.
(OR)
(b) What are the project size categories? Explain.
12. (a) Explain the software cost factors in detail.
(OR)
(b) How to estimate software maintenance cost? Explain.
13. (a) Explain State oriented notation in detail.
(OR)
(b) What is structured system analysis (SSA)? Explain.
14. (a) Explain any three design techniques.

(OR)

(b) Elaborate on Milestones, walkthrough and Inspections

15. (a) Describe software maintenance with managerial aspects
(OR)
(b) Explain briefly, formal verification.

PART - C (3 X 10 = 30 MARKS)

Answer any THREE Questions

16. How to plan a development process? Explain in detail.
17. List and describe the Software Cost Estimation Techniques in detail.
18. Elaborate on Structure Analysis and Design Techniques.
19. Explain the fundamental concepts of software design.
20. Describe Unit Testing and Debugging.

PART - A (10 X 2 = 20 MARKS)

Answer ALL the Questions

1. Mention the details of project size categories.
2. List down the other planning activities.
3. What are the Software cost estimation techniques?
4. What is reliability?
5. Define Recurrence relations.
6. What is a Decision table?
7. Define Concurrency.
8. Give the use of HIPO diagram.
9. List down the different testing techniques.
10. What is a structural induction?

PART - B (5 X 5 = 25 MARKS)

Answer ALL the Questions

11. (a) What are the different team structures?
(OR)
(b) List and explain the quality and productivity factors.
12. (a) Elaborate on software cost factors.
(OR)
(b) Explain Delphi-cost estimation technique in detail.
13. (a) Give the format of SRS.
(OR)
(b) Explain briefly, SADT.
14. (a) Write note on Jackson structured programming.

(OR)

(b) What are the detailed design considerations?

15. (a) Write note on Software Quality Assurance.
(OR)
(b) Explain system testing in detail

PART - C (3 X 10 = 30 MARKS)

Answer any THREE Questions

16. How to plan an organisation structure? Explain briefly.
17. Explain the software cost factors in detail.
18. Elaborate on Formal Specification Techniques.
19. Give the detailed note on Design notations.
20. How to enhance maintainability during software development?
Explain in detail.

PART - A (2X10=20 MARKS)
Answer All Questions

1. Define Legacy software.
2. What are the software engineering layers?
3. Name any two empirical estimation models?
4. Define COCOMO II model.
5. Define Elicitation.
6. List out the different traceability table.
7. What is information hiding?
8. What is meant by functional independence?
9. Define stress testing.
10. Explain White box testing.

PART - B (5 X 5 = 25 MARKS)
Answer ALL the Questions

11. (a) What are the quality and productivity for planning a software project?
(OR)
(b) How to plan an organization structure?
12. (a) Explain any one cost estimation technique.
(OR)
(b) Explain software specification techniques
13. (a) Explain software requirement specification.
(OR)
(b) Explain the processors for requirement specification.
14. (a) Explain various design notations.
(OR)
(b) Explain quality assurance in detail.

15. (a) Explain Formal verification in detail.
(OR)
(b) How to enhance maintainability during development?

PART - C (3 X 10 = 30 MARKS)
Answer any THREE Questions

16. Explain various planning activities of a software project.
17. Explain how to estimate software maintenance costs..
18. What are the formal languages used for requirement specification?
19. Explain any two design technique followed in software design.
20. Explain in detail about configuration management.

PART - A (2X10=20 MARKS)
Answer All Questions

1. Define software engineering.
2. List out the quality factors?
3. What are the cost factors?
4. Define COCOMO model.
5. What are the requirement engineering tasks?
6. Define business process re-engineering.
7. What are the design concepts?
8. Define Abstraction.
9. Define unit testing.
10. Explain black box testing.

PART - B (5 X 5 = 25 MARKS)
Answer ALL the Questions

11. (a) What are the managerial issues for planning a software project?
(OR)
(b) what are the planning steps in development process?
12. (a) Explain various software cost factors
(OR)
(b) Explain software specification techniques
13. (a) Explain software requirement specification.
(OR)
(b) Explain the processors for requirement specification.
14. (a) Discuss in detail about walkthrough and inspection.
(OR)
(b) Explain quality assurance in detail.

15. (a) Explain system testing in detail.
(OR)
(b) What are the software maintenance tools and techniques?

PART - C (3 X 10 = 30 MARKS)
Answer any THREE Questions

16. Explain various planning activities of a software project.
17. Explain any one software cost estimation techniques.
18. What are the formal languages used for requirement specification?
19. Explain any two design technique followed in software design.
20. Explain in detail about configuration management.

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS, NOVEMBER-2016

Time : 3 Hrs

Max. 75 Marks

Subject: Software Engineering

Subject Code: U3CSE501 / U3BCE501 / U3SWE501

PART-A (10 X 2 = 20)
Answer ALL the Questions

1. Define LOC and KLOC
2. What is meant by software engineering?
3. What do you meant by cost factor ?
4. Define SRS.
5. List out the phases of project management.
6. Define RE.
7. Expand OOD.
8. Define PDL.
9. What is state-based testing.
10. Name synchronization errors.

PART-B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Discuss software quality attributes.
(OR)

(b) Briefly explain about the components of software process.

12. (a) Describe the need for SRS.

(OR)

(b) Explain Object Oriented modeling .

13. (a) Write a note on SCM.

(OR)

(b) Briefly explain Top down and Bottom up strategies.

14. (a) Discuss Software Metrics.

(OR)

(b) Write a note on UML.

15. (a) Describe coding Process.

(OR)

(b) Explain the Data-flow Based Testing.

PART-C (3X 10 = 30)
Answer any THREE Questions

16. Discuss phased development process of Software development in detail.

17. Explain in detail dataflow diagram and data dictionary.

18. Describe the metrics used to quality the complexity of function oriented

design.

19. Explain with example OO concepts.

20. Discuss the Block Box testing in detail.

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| ISLAMIAH COLLEGE (AUTONOMOUS), VANIYAMBADI | | |
| END SEMESTER EXAMINATIONS | | |
| UOBC5003 | | APRIL/MAY-2017 |
| SOFTWARE ENGINEERING | | |
| Time: 3 Hrs | | Max.Marks:75 |

PART - A (10 X 2 = 20)
Answer ALL the Questions

1. Define Software Engineering.
2. How to define the problem in planning the project?
3. Define Software.
4. How to estimate software Maintenance Cost?
5. How to specify the processors for requirements?
6. Define GIST.
7. Define HIPO diagram.
8. Write any two guidelines of Software Design.
9. Define Unit Testing.
10. What are the steps involved in analysis activities during maintenance?

PART - B (5 X 5 = 25)
Answer ALL the Questions

11. (a) Explain about Size Categories for S/W Products.
(OR)
(b) Write short notes on Phased life cycle and Cost model.
12. (a) Explain the five software cost factors.
(OR)
(b) Briefly explain software maintenance.

13. (a) Write short notes on software requirement specification.
(OR)
(b) Explain structure analysis and design technique?
14. (a) Write short notes on Software Design concepts.
(OR)
(b) Write short notes on HIPO diagram.
15. (a) Explain about System testing.
(OR)
(b) Explain about unit testing.

PART - C (3 X 10 = 30)
Answer any THREE Questions

16. Discuss about the planning an Organization Structure.
17. Discuss about the different software cost estimation techniques.
18. Explain about Coupling and Cohesion.
19. Discuss about software design technique in detail.
20. Explain about Managerial Aspects of Software Maintenance.

ISLAMIAH COLLEGE [AUTONOMOUS], VANITYAMBADI

END SEMESTER EXAMINATIONS – APRIL / MAY 2017

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Sub. Code: U3CSE501 / U3BCE501 / U3SWE501

PART - A (10 X 2 = 20)

Answer ALL the Questions

1. What is the role of a software engineer?
2. Why many software's have failed?
3. What is known as SRS review? How is it conducted?
4. Define Metric.
5. What are the steps in risk management?
6. Define system design.
7. What are the advantages of object oriented design?
8. Define UML?
9. What is the use of unit testing?
10. Define the term cyclomatic complexity.

PART - B (5 X 5 = 25)

Answer ALL the Questions

11. (a) Explain the waterfall model in detail with a neat diagram.
(OR)

(b) Explain the different types of software components.

12. (a) Explain the importance of SRS in software development.
(OR)

(b) Explain Software Architecture Views in detail

13. (a) Explain staffing level estimation.
(OR)

(b) Explain State Transition diagram.

14. (a) Explain the concept of object-oriented design.
(OR)

(b) Explain PDL in detail.

15. (a) Write a note on internal documentation.
(OR)

(b) Explain structured coding techniques.

PART - C (3 X 10 = 30)

Answer any THREE Questions

16. Compare and contrast different Software Process models.
17. Explain Software Architecture in detail.
18. Explain the COCOMO model.
19. Explain the concept and procedure in the construction of DFD with an example.
20. Explain black box testing and white box testing.

ISLAMIAH COLLEGE [AUTONOMOUS]
VANIYAMBADI

TIME : 3 Hrs

MAX. 75 MARKS

Class: III B.Sc., (CS)/BCA/SW

Semester V

Sub Code: U5CS5004

Software Engineering

PART-A (10 X 2 = 20 MARKS)

Answer ALL Questions

1. Differential program and software.
2. Why Software is Expensive?
3. Why validation of SRS Document is needed?
4. Write on software metrics.
5. List the step in bottom up approach of software project effect estimation
6. List the Errors committed in DFD?
7. When do you consider a system and modular?
8. Draw FSA model of stack operations.
9. What are error, fault, and failure?
10. Draw the life cycle of a defect.

PART-B (5 X 5 = 25 MARKS)

Answer ALL Questions

11. (a) Write on Software quality attributes? (Or)
(b) Explain SE challenges
12. (a) Perform Structured analysis(DFD)and Object Oriented analysis for a simple Student Registration System? (Or)
(b) Write on use of SA description

13. (a) What are limitations of cost estimation models (Or)
(b) Draw DFD of ATM payment system.
14. (a) Justify structure chart as a design notation tool (Or)
(b) Explain UML.
15. (a) What is Testing? Write its types (Or)
(b) Write on Bad smells in coding.

PART-C (3 X 10 = 30 MARKS)

Answer any THREE Questions

16. Discuss software development process models?
17. Give the General Structure of SRS Document and explain?
18. Explain cocomo model of project planning
19. Explain the design methodology for producing an Object oriented design.
20. Explain White Box and Black box testing?

ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI

ARREAR EXAMINATIONS –OCTOBER - 2018

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Subject Code: U5CS5004 / U5SW5004 / U5BC5004 / U3BCE501

PART-A (10 X 2 = 20)

Answer ALL the Questions

1. Define the term: Software Engineering
2. List out any four Software Quality Attributes.
3. Define SRS
4. What is data flow diagram?
5. Expand COCOMO
6. Define Risk management.
7. Define the term coupling.
8. What is metrics?
9. What is Unit Testing?
10. What is meant by Black box testing?

PART-B (5 X 5 = 25)

Answer ALL the Questions

11. (a) Explain the Quality and productivity factors to be considered.
(Or)
(b) Discuss about the desired characteristics of software process.
12. (a) Write short notes on prototyping.
(Or)
(b) Discuss the need for software requirement specification.

13. (a) Give notes on Project scheduling.

(Or)

- (b) Write short notes on Risk scheduling.

14. (a) Explain the types of coupling in detail

(Or)

- (b) Write short notes on Unified Modeling Language.

15. (a) Discuss about software verification

(Or)

- (b) Give notes on Refactoring.

PART-C (3 X 10 = 30)

Answer any THREE Questions

16. Explain software development process model.
17. Discuss about role on Software Architecture, Component and Connector view.
18. Write short notes on
 - (a) Effort Estimation
 - (b) Project Scheduling and staffing.
19. Explain structured chart in detail
20. Explain the following:
 - (A) Testing Process (B) White box testing

ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI

ARREAR EXAMINATIONS, OCTOBER - 2018

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Sub. Code: U3CSE501

PART - A (10 X 2 = 20)

Answer ALL the Questions

1. Define: Software Reliability.
2. Define: Project Plan.
3. What is Project Estimation?
4. Define: Software Maintenance.
5. What is a well formed design class?
6. What are HIPO diagrams?
7. Define PDR.
8. What are Stress Tests?
9. What is configuration Management?
10. Define: Symbolic Execution.

PART - B (5 X 5 = 25)

Answer ALL the Questions

11. (a) Explain the important activities of Project planning.
(Or)
(b) What are the quality & productivity factors? Explain.
12. (a) Explain any four software cost factors.
(Or)
(b) Describe the phased life-cycle model.

13. (a) Briefly explain the activities of project planning.
(Or)
(b) Write down the system descriptions of PSL/PSA.

14. (a) Describe about Structured Analysis and Design Techniques(SADT)
(Or)
(b) Write short notes on metrics for Source code.

15. (a) Explain in detail Black Box Testing.
(Or)
(b) Explain the do's and don'ts of good coding style.

PART - C (3 X 10 = 30)

Answer any THREE Questions

16. Discuss how you can plan an organizational structure.
 17. Discuss in details the maintenance tools and techniques.
 18. Explain the following:
(a) Staffing Level Estimation
(b) Software Cost factors.
 19. Discuss in detail Cost Estimation procedure using COCOMO.
 20. Explain design techniques in software design.
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**ISLAMIAH COLLEGE [AUTONOMOUS], VANIAMBADI
END SEMESTER EXAMINATIONS, MAY -2019**

Time: 3 Hrs

Max Marks: 75

Subject: Software Engineering Sub Code: U3CSE501/U3BCE501

**PART-A (10 X 2 = 20)
Answer ALL Questions**

1. What is the main goal of S/W Engineering?
2. Define Software Process.
3. What is meant by SRS?
4. Define Functional Specifications with use case.
5. What is the role of project scheduling and staffing?
6. Enumerate few design concepts.
7. Define quality plan
8. What is the use of UML in s/w engineering?
9. How reliability estimation is helpful in s/w engineering?
10. Define the role of Testing in s/w engineering.

**PART-B (5 X 5 = 25)
Answer ALL Questions**

11. (a) Write short notes on Software Engineering approach.
(OR)
(b) List out the challenges of S/W Engineering.
12. (a) Enumerate the characteristics of SRS.
(OR)
(b) What is the use of SA algorithm?

13. (a) How does Cohesion reduce computing? What are it's types?.
(OR)
(b) Draw DFD of ATM payment system.
14. (a) Write notes on object oriented concepts in S/w Engineering..
(OR)
(b) Briefly explain UML.
15. (a) Briefly explain Testing and its types.
(OR)
(b) Describe Verification and validations.

**PART-C (3 X 10 = 30)
Answer any THREE Questions**

16. Discusses in detail S/W Development process models.
17. Explain in detail about S/W Requirement Analysis and Specification.
18. Discuss Structure of design methodology and verification metrics.
19. Elaborate S/W Metrics for Detailed Design.
20. Describe in details Defect Analysis and Prevention.

ISLAMIAH COLLEGE [AUTONOMOUS]-VANIYAMBADI-2

END SEMESTER EXAMINATIONS – MAY - 2019

TIME: 3 Hrs

MAX. 75 MARKS

Class: III BCA/III-B.Sc (CS/ECS/SW)

Semester-VI

Sub. Code: U5CC5004

Subject Name: Software Engineering

PART-A (10×2=20 MARKS)

Answer ALL Questions

1. What is a Runaway Projects?
2. What are the reasons for rework of Software?
3. What is the basic aim of problem analysis?
4. Write the Steps in ATAM Analysis method of s/w architecture design
5. Justify why process planning should be done
6. Give guidelines for risk prioritization
7. Write on functional and data abstraction
8. Draw a structure chart to sort and sum numbers of an array
9. What are the outputs of Refactoring?
10. What is test plan? What are its components?

PART-B (5×5=25 MARKS)

Answer ALL Questions

11. (a) Write on software process
(OR)
(b) Why configuration model is needed in addition to development process?
12. (a) What are the Different Architecture views of software and explain them
(OR)
(b) Explain ATAM analysis S/w Architecture design
13. (a) Write about panning for risk management

(OR)

(b) What are limitations of cost estimation models

14. (a) Apply structured design methodology to design a system that manage inventory at a drug store including expiry of drugs.

(OR)

- (b) What are the different ways in which an object can access another object in language supporting object orientation?

15. (a) Write on Bad smells in coding.

(OR)

- (b) Write on size and complexity metrics used for coding.

PART-C (3×10=30 MARKS)

Answer any THREE Questions

16. A project uses the time boxing process model with three stages in each time box but with unequal length. Suppose the requirement specification stage takes 2 weeks with a team of 2 people, the build stage takes 3 weeks with a team of 4 people, and deployment takes 1 week with a team of 2 people. Design the process for this project that maximizes resource utilization. Assume that each resource can do any task.
17. Design a C & C architecture of online Survey of policy holder of an insurance company
18. Explain all software metrics for detailed design.
19. Justify coupling and cohesion as modularization criteria for modules in function oriented system design
20. Explain some common programming practices that help to write simple and clear code with less error.

**ISLAMIAH COLLEGE [AUTONOMOUS], VANIAMBADI
END SEMESTER EXAMINATIONS, DECEMBER – 2020**

Time: 3 Hrs

Max. 75 Marks

Subject: Software Engineering

Subject Code: U8CC5004 / U5CS5004 / U5BC5004

PART-A (10 X 2 = 20 MARKS)

Answer ALL Questions

1. Define Software Engineering?
2. What are the outputs of design activity?
3. What is the role of problem analyst in informal approach way of problem analysis?
4. List the characteristics of SRS?
5. List out the activities for which Software project planning be done
6. What are the basic steps in COCOMO effort estimation model
7. Define coupling and Cohesion? How they are related?
8. Why are private parts of super class generally not made accessible to subclasses?
9. What is NULL dereferencing error?
10. What is the role of test class and test criteria in testing?

PART-B (5 X 5 = 25 MARKS)

Answer ALL Questions

11. (a). Elaborate the challenges in Software Engineering?
(Or)
(b). Compare the software development process model?
12. (a) Perform structured analysis(DFD)and Object Oriented analysis for a System to manage provisions(Food items) for a house?
(Or)
(b) Justify the need of s/w architecture description.

13. (a) For a student project being done in a semester course, list the major risks and risk mitigation strategy for them.
(Or)
(b) Explain how Cohesion is used as a metric to evaluate detailed design.
14. (a) What are the different ways in which an object can access another object in language supporting object orientation?
(Or)
(b). Draw a DFD, first level factoring to count number of different words in a file using function oriented design
15. (a) Design a check list for code inspection.
(Or)
(b) Draw the State model used in Black box testing for a Student survey system

PART-C (3 X 10 = 30 MARKS)

Answer any THREE Questions

16. A project uses the timeboxing process model with three stages in each time box but with unequal length. Suppose the requirement specification stage takes 2 weeks with a team of 2 people, the build stage takes 3 weeks with a team of 4 people, and deployment takes 1 week with a team of 2 people. Design the process for this project that maximizes resource utilization. Assume that each resource can do any task.
17. Give a detail account of component and connector view of software architecture
18. The detailed design of a system can involve many persons, each developing the detailed design of a set of modules. Draw a process diagram for this method of detailed design development.
19. Discuss in detail all software metrics for Object oriented design.
20. Explain some common programming practices that help to write simple and clear code with less error.

**ISLAMIAH COLLEGE [AUTONOMOUS], VANIAMBADI
END SEMESTER EXAMINATIONS, DECEMBER - 2020**

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Subject Code: U3CSE501

**PART - A (10 X 2 = 20)
Answer ALL the Questions**

1. Define Software Engineering.
2. List down any four factors to consider in setting project goals.
3. Write a note on: Hierarchical team structure.
4. What are the major factors that influence software cost?
5. Write a note on: Petri Nets.
6. What are HIPO diagrams?
7. Define PDR.
8. What are Stress Tests?
9. What is configuration Management?
10. Define: Symbolic Execution.

**PART - B (5 X 5 = 25)
Answer ALL the Questions**

11. (a) Discuss about size categories for software products.
(Or)
(b) Write short notes on Project Structure.
12. (a) Explain about Delphi cost Estimation Technique.
(Or)
(b) Explain briefly the Software cost and Quality.

13. (a) Briefly explain the activities of project planning.
(Or)
(b) Discuss about Relational Notations in Formal Specification Techniques.
14. (a) Describe about Structured Analysis and Design Techniques(SADT)
(Or)
(b) Write short notes on metrics for Source code.
15. (a) Explain in detail Black Box Testing.
(Or)
(b) Explain the do's and don'ts of good coding style.

**PART - C (3 X 10 = 30)
Answer any THREE Questions**

16. Explain in detail the planning of the Software Project.
17. Elaborate Software Requirement Specification.
18. Explain the following:
(a) Staffing Level Estimation
(b) Software Cost factors.
19. Explain about any four Software design Notations.
20. Discuss in details the maintenance tools and techniques.

**ISLAMIAH COLLEGE (AUTONOMOUS), VANİYAMBADI
END SEMESTER EXAMINATIONS – MAY - 2020**

Time: 3 Hours

Max. Marks: 75

Subject: Software Engineering

Sub. Code: U0CSSB61

**PART - A (10 X 2 = 20)
Answer ALL the Questions**

1. Name the categories of software projects.
2. List out the various models in life cycle models.
3. Define Reliability and its characteristics.
4. What is the role of WBS chart?
5. Define COCOMO model.
6. What is Petri Nets?
7. Define Modularity.
8. What is formal verification?
9. Why walkthrough is very important in S/W life cycle?
10. Define static analysis.

**PART - B (5 X 5 = 25)
Answer ALL the Questions**

11. a. How to plan an organization structure? Explain briefly.
(Or)
b. Write a note on managerial issues in software engineering.
12. a. Brief about distribution of efforts.
(Or)
b. Write a short note on product complexity.

13. a. What is modularity and concurrency in system design.
(Or)
b. Brief about coupling and its types.
14. a. Write a note on HIPO diagrams.
(Or)
b. Brief about Jackson structured programming.
15. a. Define about walkthroughs and inspections.
(Or)
b. Write a note on symbolic exception.

**PART - C (3 X 10 = 30)
Answer any THREE Questions**

16. How to plan a development process? Explain in detail.
17. Give a detailed note on software cost estimation.
18. Explain about formal specification techniques.
19. Discuss about design techniques.
20. Describe Unit Testing and Debugging.

**Due to COVID-19 Pandemic
Sanitize Your Hands
Wear Face Mask
Follow Social Distancing Norms**

**ISLAMIAH COLLEGE [AUTONOMOUS], VANIYAMBADI
END SEMESTER EXAMINATIONS, FEBRUARY - 2022**

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Sub Code: U8CC5004

**PART-A (10 x 2 = 20)
Answer ALL the Questions**

1. Define Software Engineering.
2. State the second step in Software Development Life cycle?
3. What is Domain requirement?
4. What is a Software Requirements Specification?
5. List the characteristics of the products of software projects?
6. Define Project.
7. What is an Object Oriented concept?
8. What is UML and why it is used?
9. In white box testing, what do you verify?
10. What are the different test levels?

**PART-B (5 x 5 = 25)
Answer ALL the Questions**

11. (a). Explain Waterfall model with neat diagram.
(Or)
(b). What are the challenges facing software engineering?
12. (a). List five desirable characteristics of a good software requirements specification document and Explain it .
(Or)
(b). What's the relationship between software architecture and software design?

13. (a). What are the activities within stepwise planning? Explain
(Or)
(b). Explain software project estimation.
14. (a) Compare relative advantages of the object oriented and function oriented approaches to software design
(Or)
(b) Discuss about OO design
15. (a) Differentiate between black box and white box testing.
(Or)
(b) Justify the importance of testing process

**PART – C (3 x 10 = 30)
Answer any THREE Questions**

16. With suitable illustration explain SPIRAL model evolutionary software development.
17. Explain the desirable characteristics of good SRS.
18. Explain risk management categories.
19. Describe about Unified Modeling Language (UML)
20. Write about defect analysis and prevention method

**ISLAMIAH COLLEGE [AUTONOMOUS] VANIYAMBADI
END SEMESTER EXAMINATIONS, FEBRUARY - 2022**

Time: 3 Hrs

Max. Marks: 75

Subject: Software Engineering

Sub. Code: U3BCE501

**PART - A (10 X 2 = 20)
Answer ALL the Questions**

1. Define Software Engineering.
2. Define: Software Reliability.
3. What is Project Estimation?
4. Define: Software Maintenance.
5. Define: Project Plan.
6. What are HIPO diagrams?
7. Define: Data Design.
8. Write a note on: Gist.
9. What is configuration Management?
10. Define: Symbolic Execution.

**PART - B (5 X 5 = 25)
Answer ALL the Questions**

11. (a) Explain the important activities of Project planning.
(Or)
(b) Write short notes on Project Structure.
12. (a) Explain any four software cost factors.
(Or)
(b) Describe the phased life-cycle model.

13. (a) Briefly explain the activities of project planning.
(Or)
(b) Write down the system descriptions of PSL/PSA.

14. (a) Define software cyclomatic Complexity. How it can be calculated?
(Or)
(b) What are coupling and cohesion? Discuss.

15. (a) Discuss briefly on: System Testing.
(Or)
(b) What are test Plans? Explain.

**PART - C (3 X 10 = 30)
Answer any THREE Questions**

16. Explain in detail the planning of the Software Project.
17. Elaborate Software Requirement Specification.
18. Explain the following:
 - (a) Staffing Level Estimation
 - (b) Software Cost factors.
19. Explain about any four Software design Notations.
20. Discuss in details the maintenance tools and techniques.