**Reg. No. :** ☐☐☐☐☐☐☐☐☐☐☐☐

## Question Paper Code: U5804

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2024

Fifth Semester

Information technology

<span style="color:red">21UIT504- OBJECT ORIENTED ANALYSIS AND DESIGN</span>

(Regulation 2021)

Duration: Three hours                                           Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

| | | |
|---|---|---|
| 1. | Why do we need object oriented analysis for solving problems? | CO1 -U |
| 2. | Define Requirements and mention its types. | CO1 -U |
| 3. | Give one example for include and extend relationship between actors. | CO1 -U |
| 4. | Draw use-case Diagram for payroll system. | CO1 -U |
| 5. | Analyze the statement is True or False and identify the diagram name. This diagram is used to describe the states of different objects in its life cycle. | CO3 -Ana |
| 6 | Where do you use the sequence diagrams? | CO1 -U |
| 7 | What are the nine principles of GRASP? | CO1-U |
| 8 | Why is object-oriented methodology important? | CO1-U |
| 9 | What are different levels of OO testing? | CO1-U |
| 10 | Where do we use silk test? | CO1-U |

PART – B (5 x 16= 80 Marks)

| | | | | |
|---|---|---|---|---|
| 11. | (a) | Write a detailed problem statement for "Smart Dustbin" | CO1 -U | (16) |
| | | Or | | |
| | (b) | Write a detailed problem statement for a "Smart home Application" | CO1- U | (16) |
| 12. | (a) | Draw the use case diagram for "Online shopping Application". | CO2- App | (16) |
| | | Or | | |
| | (b) | Draw the Class diagram for "Online Ticket Reservation". | CO2- App | (16) |

13. (a) Draw and explain the package diagram for "Student information CO2- App (16)
system".

                                    Or

(b) Draw the interaction diagrams for "Passport Automation system". CO2- App (16)


14. (a) Differentiate Jacobson and Rumbaugh Methodologies with CO1- U (16)
suitable examples.

                                    Or

(b) Explain Unified approach with suitable examples. CO1- U (16)


15. (a) What is object-oriented testing? Explain the Object Oriented CO1- U (16)
System Testing types and phases

                                    Or

(b) Draw the Component and Deployment diagram for Attendance CO1-U (16)
management system.

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