

# GITAM

BRUHJYHVLW

(Estd. u/s 3 of the UGC Act, 1956)

## Centre for Distance Learning

(Approved by Joint Committee of UGC-AICTE-DEC)

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### SPDCA 301 - OBJECT ORIENTED ANALYSIS AND DESIGN

#### ASSIGNMENT- I 5 X 3 =15 Marks

Answer all the questions. All questions carry equal marks.

1. List different steps involved in OOM process.
2. Explain what is Abstraction, Association and Multiplicity in a associations.
3. a) create a sequence diagram for a log on scenario.  
b) Write a note on behavioral diagrams explain each with a neat diagram.
4. Differentiate between object oriented decomposition and structured decomposition?
5. What is object design and explain the following terms event , state and operation with respect to the advancedobject modeling concept.

#### ASSIGNMENT-II 5 X 3 =15 Marks

6. Suppose that a computer is built out of one or more CPU, sound card and video. Model the system with representative classes and draw the class diagram.
7. Describe dynamic model and explain functional mode with the help of an example.
8. What is Data Flow Diagram? What is the state diagram?
9. Explain how the Generalization is mapped to the tables.
10. What are different approaches for Database design?

### SPDCA 302- ARTIFICIAL INTELLIGENCE AND KNOWLEDGE MANAGEMENT

#### ASSIGNMENT- 1 5 X 3 =15 Marks

1. Discuss State Space Representation for the following problems:
  - (i) Travelling Salesman Problem
  - (ii) Water-Jug Problem

2. Describe what 'Physical Symbol System Hypothesis' is. Further, critically examine its validity, relevance and significance.
3. Write a LISP program to solve a quadratic equation  $ax^2 + bx + c = 0$  having real coefficients a, b, c.
4. Explain the sequence of steps of processing by PROLOG system for the following query? – prefix ([a,c],[a,b,c])
5. Write short notes on the following:
  - i) Expert systems
  - ii) Methods to deal with Uncertainties in knowledge systems

#### ASSIGNMENT- II 5 X 3 =15 Marks

6. Discuss state space representation for the following well-known problems:
  - (i) Water-Jug Problem
  - (ii) Human Cannibal River-Crossing Problem.
7. How is Inference used in deriving conclusions from the facts ? Differentiate between Forward Chaining and Backward Chaining. On what factors does the decision to choose forward or backward chaining depend
8. Define a LISP function FACT-SUM-SQ that reads two integers and returns the factorial of the sum of their squares.
9. Explain how the PROLOG system responds to the following query? -member (pascal,[prolog,fortran,cobol]).
10. Write short notes on the following:
  - i) Fuzzy systems
  - ii) Non Deductive Inference rules

### SPDCA 303- ADVANCED INTERNET TECHNOLOGIES

#### ASSIGNMENT- I 5 X 3 =15 Marks

Answer all the questions. All questions carry equal marks.

1. Write a brief note on J2EE.
2. Write a note on Evolution of Servlets.
3. Write 4 types of Connections available in JDBC ?
4. Write a note on EJB Container.
5. Write about Beans and usage.

#### ASSIGNMENT-II 5 X 3 =15 Marks

6. Features of XML
7. MDB calling.

8. Web Services and its advantages.
9. Write a note on Authentication.
10. Write a note on SOA.

**NOTE:**

- 1) Last date for submission of assignments for all the courses / papers is- **15-10-2018**
- 2) Non-submission of assignments as per the scheduled date mentioned above attracts a fine of Rs. 200/- upto 31-10-2018 per each assignment of a course / paper and under any circumstances the assignments will not be accepted from 1st November, 2018.
- 3) Assignments are to be written in the Book-lets provided by CDL and other formats are not accepted.
- 4) Answer all 10 questions, in a single book only.