## 2018

Time: 3Hrs Full Marks': 80

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer five questions in which Q. No. 1 is compulsory.

- 1. Choose the correct answer of the following:
  - (a) In UML diagrams, relationship between object and component parts is represented by
    - (i) Ordination (ii)
- ii) Aggregation .
  - (iii) Segregation
- (iv) · Increment
- (b) A class consists of which of the following abstractions:
  - (i) Set of the object (ii) Behaviors
  - (iii) Attributes
- (iv) · All of the above
- (c) Which diagram in UML shows a complete or partial view of the structure of a modeled system at a specific time?
  - (i) Sequence diagram
- (ii) Class diagram
- (iii) Collaboration diagram (iv). Object diagram
- (d) What does a simple name in UML class and objects consist of?

P.T.O.

- (i) Letters
- (ii) Digits
- (iii) Punctuation characters
- (iv) All of the above
- (e) Which of the following UML diagrams has a static view?
  - (i) Collaboration diagram
  - (ii) Activity diagram
  - (iii) State-chart diagrams
  - (iv) Use-case diagrams
- (f) Use case diagram, Collaboration diagram, Sequence diagram and Activity diagram are considered as type of:
  - (i) Structural diagram
  - (ii) Behavioural diagram
    - (iii) Non-behavioural diagram
    - (iv) Non-structural diagram
- (g) Which model shows the flow of object interactions?
  - . (i) Sequence model
    - (ii) Sub system model
    - (iii) Dynamics model
    - (iv) None of the above



- (h) UML stands for:
  - (i) Unstructured modified language
  - (ii) Unified modeling language `
  - (iii) Unified markup language
  - (iv) None of the above
- 2. What is UML? Discuss the various categories of UML diagrams. Explain any two of them with suitable example.
- 3. What is static behavior? Discuss the various techniques for documenting control.
- 4. Differentiate between them:
  - (a) State-chart diagram and activity diagram
  - (b) Relationship and Aggregations
- 5. What do you mean by object-oriented modeling? Explain the different types of models for a system description.
- 6. What do you mean by sequence diagram? Draw a clear sequence diagram of e-ticket reservation.
- 7. What do you mean by Attributes? Discuss the properties of Attributes.
- 8. What is OOP's? Explain the various paradigm of OOP's in relation to UML with suitable example.
- 9. Write short notes on any two:
  - (a) Association
  - (b) Documenting Rules

P.T.O.

2011 (102) O Machine Russuption Autority to use The Sebuce the Stabbert Aspects of the morald (c) OO Model (d) Subsystems where as computervity.

13\*\* He power to Analyse

visual Expert with of

visual Expert prompter

Robotic Robotics is a magis billion

related to At Robot Requero Intelligence to hande tasks and marination, along, with someproblem of location moran plaking and maping sepination of AI is or govite on the bource or pollouin por converses 1) Thinking humanly (1) Acting humanli 11) Thinking resnolaly (1) Acting Resonals