(6 pages) **Reg. No. :** 

## Code No.: 5917 Sub. Code: PCSM 14

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2020.

First Semester

Computer Science - Core

## OBJECT ORIENTED SYSTEMS DEVELOPMENT

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A —  $(10 \times 1 = 10 \text{ marks})$ Answer ALL questions.

Choose the correct answer.

- 1. The top-down approach supports abstraction at the <u>level</u>.
  - (a) data (b) object
  - (c) function (d) block
- 2. Component based development is an \_\_\_\_\_\_ approach to the software development process
  - (a) capital (b) environmental
  - (c) Integrative (d) Industrialized

- 3. A "pattern in waiting" which is not yet known to recur, sometimes is called a ———.
  - (a) Non generative pattern
  - (b) Pattern language
  - (c) Generative pattern
  - (d) Proto pattern
- 4. \_\_\_\_\_ is a relationship between a more general class and a more specific class.
  - (a) Aggregation (b) Composition
  - (c) Generalization (d) Association
- 5. ——— is a valuable tool during business object analysis.
  - (a) Prototype (b) RAD
  - (c) Fuzzy (d) Use case
- 6. \_\_\_\_\_ is not constructed from physical parts.
  - (a) Assembly (b) Collection member
  - (c) Container (d) Composition
- 7. <u>occurs</u> when class internal implementation are disclosed through interface.
  - (a) Visibility
  - (b) Encapsulation leakage
  - (c) Protocol
  - (d) Attributes

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- 8. A ——— is the language used to describe the structure of and relationships between objects stored in a database.
  - (a) Data Manipulation Language
  - (b) Data Control Language
  - (c) Structured Query Language
  - (d) Data Definition Language
- 9. Software assets intentionally are created or acquired to be reusable is known as \_\_\_\_\_\_ approach.
  - (a) test case
  - (b) inheritance
  - (c) institutionalized
  - (d) COTS
- 10. The most significant part of the test are ———.
  - (a) comments
  - (b) results
  - (c) attributes
  - (d) design process.

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PART B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write an overview of software development methodology along with orthogonal view of the software.

Or

- Discuss object relationship and association in (b) brief.
- 12.Explain pattern template in detail. (a) Or
  - What are the different kinds of interaction (b) models explain it with example.
- 13. (a) What are the guidelines to be followed for developing effective documentation? Or

- Write the guidelines for identifying super-(b) sub relationship a generalization.
- 14. (a) Explain the following :
  - (i) Attribute types
  - (ii) UML Attribute Presentation. Or
  - Explain CORBA in detail. (b)

Code No.: 5917 Page 4 [P.T.O.] 15. (a) State the test cases for developing quality assurance.

Or

(b) Define quality. Explain various issues in software quality.

PART C —  $(5 \times 8 = 40 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) State how object oriented development method differ from traditional software development approach. Explain Object Orientation.

Or

- (b) Explain Component based development activity in detail.
- 17. (a) Explain the JACOBSON methodologies.

 $\mathbf{Or}$ 

- (b) Discuss object modeling in detail.
- 18. (a) Explain business object analysis and state why analysis is a difficult activity.

Or

(b) Explain association in detail.

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19. (a) Explain how designing with inheritance corollary is more useful in making design decisions.

Or

- (b) Explain heterogeneous database system in detail.
- 20. (a) What impact does an object orientation do on testing?

Or

(b) Explain Usability Testing.

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