

OBJECT ORIENTED CONCEPTS (BCA 301)

Duration: 2 Hours

Max. Marks: 50

Instructions:

- *Figures to the right indicate maximum marks.*
- *Start each question on a fresh page*
- *All questions are compulsory*

Q. 1) Explain the use of the following with an example

(2X5=10)

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|----------------------|-------------------------|
| A. super keyword | D. Function overloading |
| B. this keyword | E. Multiple Inheritance |
| C. protected keyword | |

Q. 2) Answer the following.

A. Define Encapsulation.

(2)

B. Object Oriented Programming is better than Procedure Oriented Programming. Justify.

(3)

C. Identify classes and associations & draw a Class Diagram for the following scenario:

(5)

Shree Damodar college is conducting various competitions for its students. A Teacher is made incharge of each competition. A single student can participate in many competitions and one teacher is made incharge of only one competition.

Regarding the competition, Name & Type of competition is to be stored and About the Teacher , his/her name & Contact Number is to be stored.

P.T.O.

Q. 3) Answer the following.

- A. Define a Destructor. (2)
- B. Elaborate on Function / Method Overriding and polymorphism with an example. (3)
- C. Highlight the role of various types of constructors. (5)

Q. 4) Answer the following.

- A. Give one example of aggregation & composition. (2)
- B. Provide examples of Single Level and Multilevel Inheritance. (3)
- C. How are Abstract Classes different from Interfaces? (5)

Q. 5) Answer the following.

- A. What is the benefit of using Templates? (2)
 - B. What are the different Streams in Java? (3)
 - C. Why is exception Handling important & how is it handled? (5)
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