Department of Computer Engineering

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SUBJECT: Database Management System (DBMS)	
CLASS: TE Shift-I	SEMESTER: 5th
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NAME OF STUDENT: KAUSTUBH KABRA	ROLL NO. 38
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Summary/Abstract/Review:

Complex data objects are not amenable to reduction to a tuple and it represents abstractions comprising of not only structure but also behavioral. Instances distinct from classes and represented by current state. Object orientation concepts such as message passing, inheritance, polymorphism, overloading etc. are referred and used in object-oriented database modeling.

Object Oriented Database has persistent objects that persist even after program execution and re-read whenever required. Another important requirement is object identifier which is automatically generated by system. These identifiers cannot uniquely identify unique objects but still represent two different objects. The object structure direct correspondence to real world objects. Other concepts such as instance variables, attributes and encapsulation of objects are explained in the lecture video. Many object-oriented properties like signature and method of objects, inheritance and reuse of objects, referential integrity OIDs are used and valid. Object identity is system generated unique identifier and it does not depend on the value of an attribute. It is inappropriate to base OID on the physical address of the object. Object behavior is dependent on interface/signature of an object and the method of invocation via messaging is done. Visible and hidden attributes are also present. Methods are defined elsewhere using a programming language.

Object persistence naming mechanism is done by Entry points and its reachability sequences of references in the object graph lead from object

'A' to object 'B' with a persistent collection made. Types of hierarchies and inheritance along with examples is been explained under subtype and supertype etc. Extents is a collection of objects of same type and its default extent is called 'root' or 'object' class hierarchy. Types of complex objects are structured complex object, unstructured complex object and blobs. The object database standards mentioned are portability across ODBMS, interoperability, Object Data management Group (ODMG).

Conclusion:

   Thus, the concept of Object-Oriented Database is been summarized based on the Nptel course provided.

| Name & Sign of Subject In-charge: | Marks: | |