

# Question Paper

Exam Date & Time: 20-Apr-2018 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

### SCHOOL OF INFORMATION SCIENCE (SOIS) SECOND SEMESTER Master of Science - M.Sc (INFORMATION SCIENCE) DEGREE EXAMINATION - APRIL 2018

Friday, 20 April 2018

Time : 10:00 am to 1:00 pm

#### Advance Programming Techniques [MIS 506]

Marks: 100

Duration: 180 mins.

#### Answer all the questions.

- 1) Write a short note on the important object oriented principles. (10)
- 2) List any five features of Java with brief description of each feature. (10)
- 3) a) What is the difference between Primitive Data Type and Reference Data Type (2) (10)  
b) Write note on iterative statements in Java (4)  
c) Write a note on Scope and Lifetime of variables in Java (4)
- 4) Define and explain the difference between method overloading and method overriding with suitable examples in java. (10)
- 5) a) What are the features of a typical interface? Explain with an example. (5) (10)  
b) Differentiate an interface from an abstract class (with reference to Java). (5)
- 6) a) Define Package with an example (10)  
b) Discuss general form of exception handling block in Java. (5) (5)
- 7) Explain the following with their uses (with reference to Java): (2.5 x 4) (10)  
a) super  
b) static  
c) final and finalize()  
d) Garbage Collection

- 8) Draw neat sketch of Life Cycle of a Thread and explain different states. (10)
- 9) a) What do you mean by predefined streams(with reference to Java)? (3)  
b) What is serialization (with reference to Java)? Give one example for serialization. (7)
- 10) Write a note on JFC and Swing and describe the advantages over the AWT based approach for GUI development. (10)

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