

MANIPAL UNIVERSITY
SCHOOL OF INFORMATION SCIENCES

SECOND SEMESTER M.Sc. INFORMATION SCIENCE
DEGREE EXAMINATION – APRIL / MAY 2016

SUBJECT: MIS 506 – ADVANCED PROGRAMMING TECHNIQUES

Friday, April 29, 2016

Time: 10.00 – 13.00 Hrs.

Max. Marks: 100

1. Explain the data types used in JAVA
(10 marks)
2. With suitable example explain **Scanner** and **BufferedReader** in java
(10 marks)
3. Explain control statements available in java with suitable examples
(10 marks)
4. Explain the scope of local and instance variables
(10 marks)
5. Write short notes on following functions with suitable example
a) `parseInt()` b) `parseFloat()`
(5+5 = 10 marks)
6. Explain following keywords in java
a. `new`
b. `this`
c. `super`
d. `final`
(2.5x4 = 10 marks)
7. a) Explain the concept of arrays in java with an example
b) What is `ArrayIndexOutOfBoundsException` exception? Give an example
(5+5 = 10 marks)
8. Explain `try`, `catch`, `finally` and `throws` in java
(10 marks)
9. Write short notes on 'Menu' and 'JMenu' classes in java
(10 marks)
10. Explain inheritance in java, provide suitable examples
(10 marks)
