

Reg. No.



MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

II SEMESTER M.C.A.

END SEMESTER EXAMINATION – APRIL 2018

(REVISED CREDIT SYSTEM)

SUBJECT: ADVANCED JAVA PROGRAMMING [MCA 4201]

17-04-2018

Time : 3 hours

Max. Marks : 50

Instructions to Candidates

1. Answer ALL questions.
2. Missing data may be suitably assumed.

- 1A Explain the purpose of FileReader and FileWriter classes. Write the syntax of read() and write() methods of these classes and explain their working. Write a code snippet to transfer the contents of the text file "input.txt" to another text file "output.txt". Explain the steps. 5
- 1B What do you mean by BorderLayout in AWT? Explain the two constructors used to create a BorderLayout. List the constants used to specify various regions in BorderLayout. Explain. 3
- 1C What is a socket? What are the components of a socket address? 2
- 2A Define a package. Explain the method of creating a package and using it in another program. Illustrate with an example. 5
- 2B What is an exception? How can it be handled in a program? Explain with an example code. 3
- 2C Differentiate between *indexOf()* and *lastIndexOf()* methods of String class. Given the string *s* = "Master of Computer Applications", write the values of *m* and *n* obtained after executing the statements: 2
- a) `int m = s.indexOf("cr")`
- b) `int n = s.lastIndexOf("te", 5).`

- 3A What is the difference between String and StringBuffer objects? Explain the following with syntax and an example each. 5
- a) *compareToIgnoreCase()* method of String class.
 - b) *setCharAt()* method of StringBuffer class.
- 3B How does the *mkdir()* method of File class differ from the *makedirs()* method? Illustrate them for the file path “/dir1/dir2/dir3”. 3
- 3C List the two uses of *super* keyword. 2
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- 4A Explain the use of a listIterator object? Write the syntax of *hasPrevious()* and *hasNext()* methods of the listIterator interface. Illustrate with an example each. 5
- 4B What is a ResultSet? What are the two ways of retrieving data from the ResultSet? Explain with an example. 3
- 4C List the four components of a URL specification. 2
- 5A Name the two classes used for data communication using TCP? Explain, with an example, the relevant methods and steps used for communication between a Server and a Client. 5
- 5B Explain with syntax, the *getEchoChar()* and *setEchoChar()* methods of TextField class of AWT. 3
- 5C How does the *wait()* method of the Thread class differ from the *sleep()* method in the context of holding / releasing the monitor? 2