



26-3-18

DOON UNIVERSITY, DEHRADUN
Department of Computer Science, School of Technology
Integrated MCA (Computer Science), Fourth Semester

Mid Semester Examination, 2018

TMC-252: Core Java

Time Allowed: 2 Hours

Maximum Marks: 30

SECTION: A (Short Answer Type Questions)

(Total Marks: 1*6=6)

Attempt all questions (Answer all questions in this section in brief) -

1. Write Java Program structure?
2. Explain JVM?
3. What are the rules to declare a variable in java?
4. What is the size of Integer types in java? Derive their range in terms of n?
5. Differentiate between = and == operators?
6. Write different syntaxes to declare and initialize a single dimensional array in java?

SECTION: B (Long Answer Type Questions)

(Total Marks: 3*4=12)

Attempt any 3 questions

1. Explain the data types in java?
2. Write a statement to calculate the highest numbers amongst three variables a,b and c using Ternary/Conditional operator only?
3. Explain different types of operators in java?
4. Write a Program in java to design a Calculator using switch cases.

The user inputs either + , - , / or * for respective calculation between two variables which are the inputs given by user.

SECTION: C (Very Long Answer Type Questions)

(Total Marks: 6*2= 12)

Attempt any 2 questions.

1. Write a Program in java to find the maximum and minimum elements in a 1D Array?
2. Write a Program in java to check whether a user input (in integer) is a hawking number or not (in the range 1 to 50000.)
A hawking number is that number whose sum of digits is a Palindrome number
A palindrome number is a number whose reverse is the same number(example 12321)
3. Write a Program in java to print only those integers in a 1D array which are repeated.