

**Sant Gadge Baba Amravati University, Amravati Summer 2020 Exam**  
**H.V.P. Mandal's College of Engineering & Technology Amravati**  
**Course: Computer Science & Engineering**  
**BE Four Year Third Semester (Computer Science & Engineering) summer 2020 Exam**  
**3KS 02 Programming Methodology**  
**ASSIGNMENT ONLY FOR BACKLOG STUDENTS**

**Marks: 20**

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**Note: 1. Solve any two questions 2. Each question carries 10 Marks.**

**Question No.1 (10 Marks)**

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| A. Explain Operators? Explain about precedence and associativity of an operator.   | (1) |
| B. What is command line argument? Explain with suitable example.   | (2) |
| C. What is inheritance? Explain multilevel inheritance with example.   | (2) |
| D. What is exception handling mechanism? Write an application which handles Arithmetic and array index out of Bound Exception. | (2) |
| E. Explain the difference between applet and application   | (1) |
| F. Explain delegation event model with example.  | (2) |

**Question No.2 (10 Marks)**

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|---|-----|
| A. Write a program to print square of first 20 odd numbers.                   | (2) |
| B. What is the purpose of 'this' keyword? Explain with example                | (1) |
| C. Explain package. Explain the procedure to create a user defined package.   | (2) |
| D. Write a java program to write character stream to a file using fileWriter. | (1) |
| E. What are different parameters of applet tag.                               | (2) |
| F. Explain procedure for creating Menubar, MenuItem and Menus.                | (2) |

**Question No.3 (10 Marks)**

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|---|-----|
| A. Explain JVM and the importance of JVM in JRE.  | (1) |
| B. What is constructor? Write program for constructor overloading.  | (2) |
| C. Abstract method and abstract class.  | (2) |
| D. Explain why scanner class is needed with example.  | (2) |
| E. Write an applet program to draw rectangle using drawLine() method and display the string _welcome' inside rectangle. | (2) |
| F. Write an applet to implement all the methods of mouse listener and mouse motion listener.                            | (1) |

**Question No.4 (10 Marks)**

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| A). Explain the terms i. Class ii. Object iii. Polymorphism iv. Inheritance    | (2) |
| B. Write a complete java code for display the information of a single student. | (1) |
| C. Final method and final class  | (2) |
| D. Explain the following terms: - i) try ii) catch                             | (2) |
| E. Explain applet life cycle in detail.  | (2) |
| F. Explain Adapters classes  | (1) |