

Max. Marks: 80
Internal Marks: 20
Time: 3 Hours

Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 15 marks each.

Introduction to Java- features of Java- object oriented concepts- data types – variables- arrays- operators- control statements- input and output- scanner and system - class print(), println(), printf() methods; Class- objects- constructors- overloading method- access control- static and fixed methods- inner classes- string class- inheritance.

GUI components- common GUI event types and listener interfaces - Joptionpane – JLabel – JTextField – JButton – JcheckBox - JTextarea – JComboBox – Jlist – Jpanel - Mouse Event Handling – Adapter Classes - Key Event Handling.

Layout Managers – Flow layout, BorderLayout, GridLayout - Graphics and Java 2D - Graphics contexts and Graphics objects - Color control - Font Control – Drawing Lines, Rectangles and ovals - JSlider- Using menus with frames

Practical: The candidates should be able to write programmes for the simple business applications using Java Programming.

REFERENCES

- Deitel and Deitel, Java: How to Program, PHI Publication.
- C. Muthu, programming with Java, McGraw Hill Education (India) Private Ltd.