

2018

2nd Semester

COMPUTER SCIENCE

PAPER—C3T

(Honours)

Full Marks : 40

Time : 2 Hours

*The figures in the right hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group—A**

1. Answer any five questions.

5×2

(a) What is byte code ?

(b) Why do we refer Java as pure object-oriented Programming language ?

(c) What do you mean by Autoboxing ?

- (d) What is mutable string?
- (e) What is the role of Metaclass?
- (f) How do we define try block in exception handling?
- (g) Name the different states of Applet life cycle.
- (h) What are the two frame works for building GUI-based application?

**Group—B**

2. Answer any *four* questions. 4×5
- (a) Illustrate how does Java implement multiple inheritance. 5
  - (b) How does java manage garbage collection? 5
  - (c) Explain the role played by Wrapper class. 5
  - (d) Discuss Applet life Cycle with suitable diagram. 5
  - (e) (i) How does error differ from exception?
  - (ii) Give an example of user-defined exception. 2+3

- (f) (i) What is package ?
- (ii) How do we add a class or an interface to a package ?
- (g) (i) What do you mean by multi-threading ?
- (ii) Explain thread life cycle.

**Group—C**

3. Answer any *one* question.

1×10

- (a) What is an interface ?
- (b) What are the differences between interface and abstract class ?
- (c) Give one example to realize on interface.
- (d) What do you mean by listener interface ?

2+3+3+2

4. (a) How does remote applet differ from local applet ?
- (b) Write a Java Program to draw a hexagon and fill it with blue color using applet.
- (c) Write a Java program to check if a string is palindrome or not.
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