F–1635

Sub. Code
7BCE4C1

B.Sc. DEGREE EXAMINATION, APRIL 2019

Fourth Semester

Computer Science

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is significance between Java and Internet?
2. What are variables and constants?
3. What are special operators supported by Java?
4. List out any four mathematical functions supported by Java.
5. What is an object?
6. What are the purpose of private and protected qualifier?
7. What is the advantage of a package?
8. What is thread synchronization?
9. What is applet?
10. What is the purpose of graphics class?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the data types supported by Java?

Or

(b) Explain Java program structure.

12. (a) Explain operator precedence and associativity.

Or

(b) Compare entry restricted and exit restricted loops.

13. (a) What is interface? How is it used in Java?

Or

(b) Briefly explain about wrapper classes.

14. (a) Explain extending the thread class with an example.

Or

(b) Explain implementing threads using 'Runnable' Interface.

15. (a) Write a Java Program to draw circles and ellipses.

Or

(b) Write a Java Program to draw line graph.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain Java features and Java Environment.

17. Write a Java program to sort ten names.

18. Explain method overloading & method overriding with suitable JAVA program.

19. write JAVA program to illustrate creating & using a package.

20. Explain about Applet life cycle.

F–2630

Sub. Code
7BCE4C1

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

Fourth Semester

Computer Science

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are Web Browsers?
2. How are command line arguments handled in Java?
3. How are Arithmetic expressions evaluated?
4. What is conditional operator?
5. What is the purpose of keyword 'final'?
6. What is interface?
7. What is a package?
8. What is thread priority?
9. What is the use of keyword 'throws'?
10. How do pass parameters to the applet?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain features of Java.

Or

(b) How is Type casting done is Java?

12. (a) Explain bitwise operators with suitable example.

Or

(b) Compare if .. else if with switch statement.

13. (a) Write a Java program to illustrate method overloading.

Or

(b) What is abstract class? Explain.

14. (a) Write a Java program to illustrate Divide by zero exception.

Or

(b) Explain syntax of exception handling code.

15. (a) Write a Java program to line and Rectangle for the given co-ordinates.

Or

(b) How to use control loops in Applets?

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain about Java environment and JVM.

17. Write a Java program to sort Ten numbers in ascending order.

18. Explain multiple inheritance in JAVA
19. Explain Thread life cycle with suitable eg.
20. Explain Applet life cycle with suitable eg.

F–7158

Sub. Code
7BCE4C1

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fourth Semester

Computer Science

JAVA PROGRAMMING

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What is web browsers?
2. What is type casting?
3. What is the purpose of Bitwise operators?
4. Write any four mathematical functions.
5. How are strings handled in Java?
6. What is the purpose of keyword 'final'?
7. What is the need for package?
8. How to access a package?
9. Write methods to draw lines and rectangles.
10. How to pass parameters to the Applet?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain structure of a Java program.

Or

(b) Discuss "How Java is platform independent".

12. (a) Discuss operator precedence of Arithmetic, relational and logical operators.

Or

(b) Compare if... elseif with switch statement.

13. (a) Write a Java program to illustrate method overloading.

Or

(b) Explain about abstract class.

14. (a) How are exception handled in Java?

Or

(b) How to throw an exception?

15. (a) Explain methods used to draw polygons and line graph.

Or

(b) How to use control Loops in Applets?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain features of Java.

17. Write a Java program to arrange given Ten names in alphabetical order.

18. write JAVA pgm defining & implementing interface.

19. Explain life cycle of a thread.

20. Explain Applet life cycle.

F–2631

Sub. Code
7BCE5C1

B.Sc DEGREE EXAMINATION, NOVEMBER 2019

Fifth Semester

Computer Science

OPERATING SYSTEM

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define operating system.
2. What is process control Block?
3. What is mutual exclusion?
4. What is critical section?
5. What are different levels of scheduling?
6. What is Non Preemptive scheduling?
7. What is contiguous memory allocation?
8. Define multi programming.
9. Define file system.
10. What is Data Hierarchy?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss process states.

Or

(b) What are the goals of operating system?

12. (a) Explain software solution to the mechanical exclusion problem.

Or

(b) Explain concurrents programming.

13. (a) Write short notes on deadlock recovery.

Or

(b) Explain any tow processor scheduling Algorithm

14. (a) Explain memory management.

Or

(b) Explain variable partition multi programming.

15. (a) Explain about file organization.

Or

(b) Discuss free space management.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Explain operating system components.

17. Explain the role of semaphores.

18. Explain Banker's Algorithm.

19. Explain page replacement strategies.

20. Discuss disk scheduling. Explain which scheduling policy is suitable.

F–7159

Sub. Code
7BCE5C1

B.Sc. DEGREE EXAMINATION, APRIL 2022

Fifth Semester

Computer Science

OPERATING SYSTEM

(CBCS – 2017 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. What are the goals of operation system?
2. List the two components of an operating systems.
3. What is critical section problem?
4. List the disadvantages of Petersons solution.
5. List two preemptive scheduling algorithms
6. Define Deadlock.
7. What is external fragmentation?
8. What is virtual memory?
9. Why we need disk scheduling?
10. What is mounting?

Part B (5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the goals of an Operating System.

Or

(b) Describe shared memory concept in Inter process communication.

12. (a) What are all the criteria that solution to critical section problem should satisfy? Explain.

Or

(b) What is semaphores? How semaphores can be operated? Give code using semaphore how it manages the critical section?

13. (a) Explain the bankers algorithm in detail.

Or

(b) Explain what will happen if the time quantum of the round robin scheduling is very large? Give example wherever necessary.

14. (a) What is Belady's anomaly? Where does it occur? Give your own example and show the occurrence of this anomaly.

Or

(b) Explain segmentation in detail with diagram.

15. (a) Write a short note on file access control.

Or

(b) Explain about rotational optimization in brief.

Part C (3 × 10 = 30)

Answer any **three** questions.

16. Discuss the components of the operating system in detail.

17. Explain semaphore and its types in detail.

18. Consider the following set of processes, with the length of the CPU-burst time given in milliseconds:

Process	Burst Time	Priority
P_1	10	3
P_2	1	1
P_3	2	3
P_4	1	4
P_5	5	2

The processes are assumed to have arrived in the order P_1 P_2, P_3, P_4, P_5 all at time 0. Draw Gantt charts illustrating the execution of these processes using FCFS, SJF and round robin scheduling algorithm with time quantum as 1.

19. Explain all the page replacement algorithms in detail.

20. Explain the various disk scheduling algorithm in detail.