Q.3 Attempt any four of the following. (4 mark for each)

1. Define anonymous function with suitable example.
2. Explain Local and Global scope of variable?
3. Explain dir() and enumerate functions with example.
4. Explain a function with default argument with suitable example.
5. Write a Python function to calculate the factorial of a number (a non-negative integer). The function accepts the number as an argument
6. What is meant by module in python? List some built in modules in python
7. Write a short note on assert function.
8. What is module? Write down five advantages of module.
9. What are modules in Python? Explain.
10. Explain python built in and user defined exceptions.
11. What is random module? Explain with its functions.
12. What are packages? Give an example of package creation in Python
13. What is seek() and tell() function.
14. What is an exception? Explain with few examples.
15. How do you handle the exception inside a program when you try to open a non-existent file?
16. List some few common Exceptions types and explain when they occur.
17. Write a simple program which illustrates Handling Exceptions.
18. Write a small code to illustrate try and except statements in Python
19. Explain about the import statement in modules.
20. Explain about the different types of Exceptions in Python.
21. What is error in python? Explain types of error.
22. Explain Try-finally Clause with example.
23. What are the different operations we can perform on file?
24. How to open and close file? Also give the Syntax for same.
25. What are different modes to open a file?
26. Explain python constructor with example.
27. Explain operator overloading with suitable example.
28. Explain method overriding with suitable example.
29. Write short note on - data abstraction, encapsulation, polymorphism, inheritance.
30. Explain super class and sub class with example.
31. What is polymorphism? Explain static and dynamic polymorphism.
32. What is data abstraction? How to achieve data abstraction?
33. What is an abstract class? Can you create an instance of an abstract class?

35) Which object of HttpSession can be used to view and manipulate information about a session?

i) session identifier
ii)creation time
iii) last accessed time
iv) All of these

36) SWING components are_____.

i) Platform dependent
ii) heavy weight
iii)Platform independent
iv)both (i) & (ii)

37) Cookies are stored on _____ side.

i) server
ii)client
iii)both (i) & (ii)
iv)none of these

38) In Swing, _____ class is used to display data in tabular form.

i)JList
ii) JMenu
iii) JTable
iv)JTextArea

39) _____ are session tracking techniques.

i)URL rewriting
ii) Hidden Form Field
iii) Cookies
iv)All of these

40) Which is passive swing control that does not support any interaction with the user?

i)JChoice
ii)JLabel
iii) JList
iv)JButton

Q.2) Attempt any two of the following. **[16]**

1) Explain Connection, Statement and ResultSet interfaces of JDBC API.
2) Explain different session management techniques in servlet.
3) Explain different components of swing with example.
4) What is JDBC? Explain in detail the process of JDBC.
5) Explain servlet communication in detail.
6) Explain in detail Life cycle of servlet.
7) What is JDBC? Explain JDBC connection steps with simple example.
8) Explain any four components of swing.
9) What is JSP? Explain different scripting elements of JSP.
10) Explain Session tracking technique in servlet.
11) Explain different JDBC drivers in detail.