PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BBA DEGREE EXAMINATION MAY 2025
(Fifth Semester)
Branch- BUSINESS ADMINISTRATION (INFORMATION SYSTEM)

PYTHON PROGRAMMING

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1   Which method is used to find the number of occurrences of a substring in a string?
    (i)   center()   (ii) count()
    (iii) endswith()   (iv) index()

2   Identify the correct method used to remove all items from a Python list.
    (i)   clear()   (ii) delete()
    (iii) remove()   (iv) pop()

3   When would you use a while loop instead of a for loop?
    (i)   When you know the number of iterations
    (ii) When iterating over a list
    (iii) When iterating over a string
    (iv) When you need to iterate based on a condition

4   What is the purpose of the try and except blocks in Python?
    (i)   To define a function   (ii) To handle exceptions
    (iii) To write comments   (iv) To declare variables

5   Which function is used to read the contents of an entire text file in Python?
    (i)   readline()   (ii) readlines()
    (iii) read()   (iv) readfile()

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6   a   Describe the purpose of the format() method when concatenating strings.
                            OR
    b   Summarise how Python handles mixed-mode arithmetic expressions and type conversion.

7   a   Explain how to unpack tuples and the use cases of tuple unpacking.
                            OR
    b   Describe how the union() method works for sets in Python.

8   a   Explain the function of the get() method when retrieving dictionary values.
                            OR
    b   State the significance of the if-else control structure in decision-making processes.

9 a   Summarise the role of constructors in class instantiation.

OR

b   State the purpose of the try-except block in handling exceptions.

10 a   Describe the process of opening, reading, and closing a text file in Python.

OR

b   Show how to use Python to list all files in a directory.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks   (5 x 6 = 30)

11 a   Discuss how Python's character set and escape characters enable flexibility in handling text data.

OR

b   Examine the process of variable assignment in Python and its impact on program behavior.

12 a   Differentiate between mutable and immutable data types using lists and tuples as examples.

OR

b   Elucidate the various list methods such as append(), insert(), and pop(), and their effects on list manipulation.

13 a   Analyze how nested dictionaries work and how to access data from them.

OR

b   Discuss the importance of control structures like loops and conditional statements in program flow.

14 a   Justify the use of exception handling in Python programs with a focus on error management and robustness.

OR

b   Compare traditional procedural programming and Object-Oriented Programming, highlighting their key differences.

15 a   Differentiate between reading text and reading numbers from files, emphasizing how Python treats data types during file I/O.

OR

b   Examine how Python's built-in functions like open(), read(), and write() are used to manage file access and content.

Z-Z-Z   END