



CBCS SCHEME

18CS55

Fifth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026

Application Development using Python

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain string concatenation and string replication operator with an example. (05 Marks)
- b. Illustrate the use of break and continue with an example. (05 Marks)
- c. With the flow chart, explain the flow control statements while, for and elif. Write a python program to check whether the given number is positive, negative or zero. (10 Marks)

OR

- 2 a. What are functions? Define python function with parameter and return statement. Write a python function to generate the factorial of a number. (07 Marks)
- b. Explain local and global scope with suitable example. (05 Marks)
- c. Define exception handling. How exceptions are handled in python? Write a python program to solve divide by zero exception. (08 Marks)

Module-2

- 3 a. What is a List? Explain the methods that are used to delete items from the list. (08 Marks)
- b. Write a program to take a sentence as input and display the longest word in the given sentence. (06 Marks)
- c. How is the dictionary different from list? Assume a dictionary containing city and population as key and value respectively. Write a program to traverse the dictionary and display most populous city. (06 Marks)

OR

- 4 a. Explain the following string methods with example:
i) join() ii) islower() iii) strip() iv) center(). (08 Marks)
- b. Write a program to create a list of number and display the count of even and odd numbers in the list. (06 Marks)
- c. If S = 'Hello World', explain and write the output of the following statements:
i) S[1:5] ii) S[:5] iii) S[3: - 1] iv) S[:]. (06 Marks)

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Module-3

- 5 a. What are regular expression? Describe question mark, star, plus-and dot Regex symbols with suitable python code snippet. (09 Marks)
- b. With code snippet, explain saving variables using the shelve module and PPrint Pformat() functions. (06 Marks)
- c. Write a program that reads a string with five characters which starts with 'a' and ends with 'z'. Print search successful if pattern matches string. (05 Marks)

OR

- 6 a. Explain functions of Shutil Module with examples. (08 Marks)
- b. Explain buttons in the Debug control widow. (05 Marks)
- c. What is meant by compressing files? Explain reading, extracting and creating ZIP files with code snippet. (07 Marks)

Module-4

- 7 a. What is class, object, attributes. Explain copy-copy() with an example. (06 Marks)
- b. Demonstrate pure functions and modifiers with examples. (08 Marks)
- c. Use the datetime module to write a program that gets the current date and prints that day of the week. (06 Marks)

OR

- 8 a. Explain operator overloading and polymorphism with examples. (08 Marks)
- b. Illustrate the concepts of inheritance and class diagrams with examples. (08 Marks)
- c. Write a function called print time that takes a time object and print it in the form hour : minute : second. (04 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. 2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

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Module-5

- 9 a. What is Web Scraping? Explain the process of downloading the file from web and saving downloaded files. (08 Marks)
- b. Explain the process of reading cells from EXCEL sheets. (06 Marks)
- c. With a code snippet, discuss how to change the text style of .doc file using paragraph and run objects. (06 Marks)

OR

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- 10 a. How do we extract, decrypt, copy and encrypt PDF files in Python. (08 Marks)
- b. Discuss the process of creating a beautiful soup object and finding an element from HTML. (06 Marks)
- c. With an example, illustrate the use of JASON module in Python. (06 Marks)
