

**Fifth Semester B.E. Degree Examination, Jan./Feb. 2021**  
**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.~~ Demonstrate with example print(), input() and string replication. (06 Marks)
- ~~b.~~ Explain elif, for, while, break and continue statements in python with examples for each. (10 Marks)
- ~~c.~~ Write a Python program to check whether a given number is even or odd. (04 Marks)

**OR**

2. ~~a.~~ How can we pass parameters in user defined functions? Explain with suitable example. (05 Marks)
- ~~b.~~ Explain local and global scope with local and global variables. (08 Marks)
- ~~c.~~ Demonstrate the concept of exception. Implement a code which prompts the user for Celsius temperature, convert the temperature to Fahrenheit, and print out the converted temperature by handling the exception. (07 Marks)

**Module-2**

3. ~~a.~~ What is list? Explain append(), insert() and remove() methods with examples. (08 Marks)
- ~~b.~~ How is tuple different from a list and which function is used to convert list to tuple. (05 Marks)
- ~~c.~~ Create a function to print out a blank tic – tac – toe board. (07 Marks)

**OR**

4. a. Discuss get(), item(), keys() and values() Dictionary methods in python with examples. (08 Marks)
- b. With example code explain join() and split() string methods. (06 Marks)
- c. Develop a program to accept a sentence from the user and display the longest word of that sentence along with its length. (06 Marks)

**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)

**Module-5**

- 9 a. Explain parsing HTML with the BeautifulSoup Module with code snippet for creating finding an element and getting data. (09 Marks)  
b. What methods do Selenium's web element object have for simulating mouse clicks and keyboard keys. Explain with python code snippet. (06 Marks)  
c. Write a python program to access cell in a worksheet. (05 Marks)

**OR**

- 10 a. Write a program to get a list of all files with the .pdf extension in the current working director and sort them. (06 Marks)  
b. Demonstrate the json module with python program. (06 Marks)  
c. What are the advantages of CSV files? Explain the Reader objects and Writer objects with python code. (08 Marks)

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