

1. All Questions are compulsory.
2. All Questions carry equal marks.

**Q.1 Answer the following.(Attempt any four)**

**[20marks]**

- a. Explain any 5 features of Python.
- b. Explain keywords and return statement in Python
- c. Explain break statement in python with an example.
- d. Write a program to find factorial of a number. Take the input from user.
- e. Write a program to check whether the given number is even or odd.
- f. Explain while loop in python with an example.

**Q.2 Answer the following.(Attempt any four)**

**[20marks]**

- a. Explain attributes of an Array.
- b. Explain bitwise operators with examples..
- c. Explain any 5 built in functions in python.
- d. Write a program to demonstrate modules in Python.
- e. Explain insert, search, update and delete operations of an Array.
- f. Write a program to demonstrate parameters and arguments in a function.

**Q.3 Answer the following.(Attempt any four)**

**[20marks]**

- a. Write a program in python to update and delete dictionaries.
- b. What is a list? Explain with example.
- c. Explain any 5 dictionary functions.
- d. What are tuples? Explain with an example.
- e. Explain splitting and joining of strings.
- f. Explain various list operations.

**Q.4 Answer the following.(Attempt any five )**

**[15marks]**

- a. Write a program to input 3 employees salary and find minimum and maximum salary among 3 employees using tuples.
- b. Explain any three list methods.
- c. Explain logical operators with example.
- d. Write a program to show negative slicing in an Array.
- e. Explain call by reference in functions
- f. Using for loop, write program that prints out the decimal equivalent of  $\frac{1}{2}, \frac{1}{4}, \dots$

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