

Hall Ticket Number:

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Code No. : 13165 N (F)

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. III-Semester Main Examinations, Jan./Feb.-2024

Computing Using Python (OE-I)

Time: 3 hours

Max. Marks: 60

Note: Answer all questions from **Part-A** and any **FIVE** from **Part-B****Part-A (10 × 2 = 20 Marks)**

| Q. No. | Stem of the question | M | L | CO | PO |
|----------------------------------|---|---|---|----|----|
| 1. | Write syntax of if-else statement in python with suitable example. | 2 | 2 | 1 | 1 |
| 2. | List any two features of python language. | 2 | 1 | 1 | 1 |
| 3. | What is the difference between find () and index () method in lists. | 2 | 2 | 2 | 1 |
| 4. | How to create a single element in tuple? | 2 | 1 | 2 | 1 |
| 5. | What is the difference between lists and sets in python? | 2 | 1 | 3 | 1 |
| 6. | List any two methods in dictionary with suitable example | 2 | 2 | 3 | 1 |
| 7. | How to create a private variable in class in python. | 2 | 1 | 4 | 1 |
| 8. | Write down the syntax of open() function in files in python | 2 | 2 | 4 | 1 |
| 9. | Write a python code to swap two numbers without using third variable. | 2 | 2 | 1 | 1 |
| 10. | How range () function works, explain with suitable example? | 2 | 2 | 2 | 1 |
| Part-B (5 × 8 = 40 Marks) | | | | | |
| 11. a) | What is the significance of break, continue and pass statement in python. | 4 | 1 | 1 | 1 |
| b) | Write a program in python to find factorial of number 'N' using recursive function. | 4 | 3 | 1 | 2 |
| 12. a) | Using slicing perform following operations on string | 4 | 3 | 2 | 2 |
| | i) Reverse of string | | | | |
| | ii) Swap First and Last character in a string | | | | |
| | iii) Display every alternative character in a string. | | | | |
| | iv) Display every 3 rd character in a string | | | | |
| b) | Write a python program to create a list of N elements and calculate sum of odd numbers and sum of all even numbers in it. | 4 | 3 | 2 | 2 |

Contd... 2

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| 13. a) | What is the output of following code : S1={1,2,3,4,5,6,7} S2={4,5,6,7,8,9,10} print(s1 s2) print(s1&s2) print(s1-s2) print(s1.symmetric_difference(s2)) s1.add(15) s2.remove(4) print(s1 s2) print(s1&s2) print(s1-s2) print(s1.symmetric_difference(s2)) | 4 | 3 | 3 | 2 |
| b) | Generate the following output in dictionary using comprehensive Output = { 'A': 65, 'B' : 66, 'C' :67, 'Z' : 90 } | 4 | 3 | 3 | 2 |
| 14. a) | Explain various methods present in files with example. | 4 | 2 | 4 | 1 |
| b) | Write a code, class that has a list of integers as data members and read (), display (), find-largest (), find-smallest (), sum (), and find-mean () as its member functions. | 4 | 4 | 4 | 2 |
| 15. a) | Explain while and for loop with suitable example. | 4 | 1 | 1 | 1 |
| b) | Explain methods and functions present in string in python programming. | 4 | 2 | 2 | 1 |
| 16. a) | Write a program to create a set of prime number from a list consisting of elements from 1 to N. | 4 | 3 | 3 | 2 |
| b) | Explain the various functions present in PICKLE and JSON. Answer any <i>two</i> of the following: | 4 | 2 | 4 | 1 |
| 17. a) | Explain comparison operator and logical operator with python code. | 4 | 2 | 1 | 1 |
| b) | Write python code to find maximum element in a list. | 4 | 3 | 2 | 2 |
| c) | Explain different types of inheritance present in python programming with block diagram. | 4 | 2 | 3 | 1 |

M : Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

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| i) | Blooms Taxonomy Level – 1 | 20% |
| ii) | Blooms Taxonomy Level – 2 | 40% |
| iii) | Blooms Taxonomy Level – 3 & 4 | 40% |

P-305
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