**20EI504**

**Hall Ticket Number:**

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| **III/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **January, 2024** | **Electronics and Instrumentation Engineering** | | |
| **Fifth Semester** | **Python Programming** | | |
| **Time:** Three Hours | | **Maximum:** 70 Marks | |
| ***Answer question 1 compulsory.*** | | | **(14X1 = 14Marks)** |
| ***Answer one question from each unit.*** | | | **(4X14=56 Marks)** |
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|  |  |  | CO | BL | M |
| 1 | a) | What is a list? How list differs from tuples. | CO 1 | L4 | 1M |
|  | b) | Write Difference between break and continue. | CO 1 | L4 | 1M |
|  | c) | Write about IDLE. | CO 1 | L4 | 1M |
|  | d) | Define Exception. | CO 2 | L4 | 1M |
|  | e) | What is polymorphism . | CO 2 | L4 | 1M |
|  | f) | Explain any one special method in python. | CO 2 | L3 | 1M |
|  | g) | Define Module. | CO 3 | L4 | 1M |
|  | h) | What is Lambda. | CO 3 | L4 | 1M |
|  | i) | Define Recursive function | CO 3 | L4 | 1M |
|  | j) | Difference between binary and text files in Python. | CO 4 | L1 | 1M |
|  | k) | Write accessing modes in python. | CO 4 | L4 | 1M |
|  | l) | What is index out of range error . | CO 4 | L4 | 1M |
|  | m) | List any 2 built-in functions. | CO 1 | L4 | 1M |
|  | n) | Define File? | CO 4 | L4 | 1M |
| **Unit-I** | | | | | |
| 2 | a) | Explain about iteration statements in detail with examples. | CO 1 | L3 | 7M |
|  | b) | Explain in detail about the various Operators available in Python and also discuss about Operator Precedence. | CO 1 | L3 | 7M |
| **(OR)** | | | | | |
| 3 | a) | Compare and Contrast list and tuple in python with suitable example. | CO 1 | L3 | 7M |
|  | b) | Write a Python program to generate first N Fibonacci numbers. | CO 1 | L4 | 7M |
| **Unit-II** | | | | | |
| 4 | a) | Examine Python OOPs concepts. Maximize the classes and Objects. | CO 2 | L1 | 7M |
|  | b) | Explain about Polymorphism with Example. | CO 2 | L3 | 7M |
| **(OR)** | | | | | |
| 5 | a) | Explain about Instance methods with Eample. | CO 2 | L3 | 7M |
|  | b) | Describe the use of Inheritance in Python? Explain through examples. | CO 2 | L3 | 7M |
| **Unit-III** | | | | | |
| 6 | a) | Explain About Standard Modules. | CO 3 | L3 | 7M |
|  | b) | Write a Python program using Function to find the Sum of first ‘n’ even numbers. | CO 3 | L4 | 7M |
| **(OR)** | | | | | |
| 7 | a) | Explain about parameter function Documentation. | CO 3 | L3 | 7M |
|  | b) | Write a Python program to find the Factorial of a given number without Recursion and with Recursion | CO 3 | L4 | 7M |
| **Unit-IV** | | | | | |
| 8 | a) | Explain about open and write operations in files. | CO 4 | L3 | 7M |
|  | b) | Write a python program to create a file “ theory.txt” and ask the user to write multiple lines of text by user input. | CO 4 | L4 | 7M |
| **(OR)** | | | | | |
| 9 | a) | Describe how Exceptions are handled in Python with necessary examples | CO 4 | L3 | 14M |

