B.TECT-III-SEM-1 MID EXAMINATIONS-I

PRINCIPLES OF PROGAMING LANGUAGE

**Note:** Question paper contains two parts, Part-A and Part- B. Part-A is compulsory which carries 10 marks.

Answer all questions in part-A.

Answer anyone full question from each unit. Each question carries5 marks.

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|  | | **PART-A** | **5X2M=10M** |
|  | |  | **BTL** |
|  | | 1, List the principal phases of compilation. | **1** |
|  | | 2. What is a variable? What are the attributes of a variable? | **1** |
|  | | 3. Explain the scope and life time of a variable. | **2** |
|  | | 4. Explain the features of denotation semantics. | **2** |
|  | | 5. Define derivation and a parse tree. | **2** |
|  | **PART-B**   1. What are the potential benefits of studying programming language concepts? 2. What is an array? Explain about various array operations with an example. 3. Explain the Basic primitives of LISP. Give suitable examples. 4. Discuss the applications of functional languages. 5. Explain how subprogram names are passed as parameters. Illustrate with examples. 6. Explain how? Give subprogram is overloaded examples. | | **4X5M=20M**    **1**  **2**  **1**  **2**    **3**  **3** |

**Scheme of Evaluation (PartA&PartB)**

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| **PART-A** | |
| 1. List the principal phases of compilation. | 2 |
| 1. What is a variable? What are the attributes of a variable? | 2 |
| 1. Explain the scope and life time of a variable. | 2 |
| 1. Explain the features of denotation semantics. | 2 |
| 1. Define derivation and a parse tree. | 2 |
| **PART-B** | |
| 1. What are the potential benefits of studying programming language concepts? | 5 |
| 1. A, What is an array?   B, Explain about various array operations with an example. | 2  3 |
| 1. Explain the Basic primitives of LISP. Give suitable examples. | 5 |
| 1. Discuss the applications of functional languages. | 5 |
| 1. A. Explain how subprogram names are passed as parameters.   B. Illustrate with examples. | 3  2 |
| 1. A. Explain how subprogram is overloaded?   B Give examples | 3  2 |