**18EED13**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular) DEGREE EXAMINATION** | | | |
| **August, 2021** | **Electrical & Electronics Engineering** | | |
| **Sixth Semester** | **Power Distribution Systems** | | |
| **Time:** Three Hours | | **Maximum:** 50 Marks | |
| ***Answer question 1 compulsory.*** | | | **(10X1 = 10Marks)** |
| ***Answer one question from each unit.*** | | | **(4X10=40Marks)** |

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|  |  |  | CO | BL | M |
| 1 | a) | Write the objectives of distribution system planning | CO1 | L1 | 1M |
|  | b) | List any two factors effecting load forecasting. | CO1 | L1 | 1M |
|  | c) | What is the difference between feeder and busbar. | CO1 | L3 | 1M |
|  | d) | What are the factors affecting substation location? | CO2 | L1 | 1M |
|  | e) | What is secondary banking? | CO2 | L2 | 1M |
|  | f) | Identify the requirements of line sectionalizers. | CO2 | L2 | 1M |
|  | g) | Write purpose of recloser in distribution systems | CO3 | L2 | 1M |
|  | h) | Summarize the economic benefits from the capacitor installations. | CO3 | L3 | 1M |
|  | i) | List of methods used for voltage control. | CO3 | L2 | 1M |
|  | j) | What is the main idea of using capacitor bank? | CO4 | L2 | 1M |
| **Unit-I** | | | | | |
| 2 | a) | Explain various factors affecting the distribution planning. | CO1 | L1 | 5M |
|  | b) | How computers play a major role in Present and future of distribution system planning. | CO1 | L2 | 5M |
|  |  | **(OR)** |  |  |  |
| 3 | a) | Illustrate the Load characteristics in distribution system. | CO1 | L2 | 5M |
|  | b) | Discuss the Diversified demand method. | CO1 | L2 | 5M |
| **Unit-II** | | | | | |
| 4 | a) | Examine the various distribution transformers used in distribution systems. | CO2 | L3 | 5M |
|  | b) | Analyze various sub-station bus schemes in the distribution substations. | CO2 | L2 | 5M |
| **(OR)** | | | | | |
| 5 | a) | Determine optimum location of sub-station in rural distribution networks using network flow techniques. | CO2 | L3 | 5M |
|  | b) | Illustrate distribution factors – KW KVA Method of determining regulation. | CO3 | L2 | 5M |
| **Unit-III** | | | | | |
| 6 | a) | Explain the design consideration of radial type distribution feeder. | CO3 | L2 | 5M |
|  | b) | Define secondary banking and explain different connections of secondary banking. | CO3 | L3 | 5M |
| **(OR)** | | | | | |
| 7 | a) | Explain in detail about recloser to fuse coordination. | CO3 | L2 | 5M |
|  | b) | Discuss in detail about Line sectionalizers and circuit breakers. | CO3 | L3 | 5M |
| **Unit-IV** | | | | | |
| 8 | a) | Explain the procedure to determine best capacitor location in Distribution systems. | CO4 | L2 | 5M |
|  | b) | Discuss the methods for voltage control. | CO4 | L3 | 5M |
| **(OR)** | | | | | |
| 9 | a) | Explain the effect of series and shunt capacitors used in distribution system. | CO4 | L2 | 5M |
|  | b) | Discuss about line drop compensation. | CO4 | L3 | 5M |

