**14EI705C**

**Hall Ticket Number:**

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| **IV/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **Jan/Feb, 2021** | **Electronics & Instrumentation Engineering** | | |
| **Seventh Semester** | **Computer Networks** | | |
| **Time:** Three Hours | | **Maximum :** 60 Marks | |
| *Answer* ***All*** *Questions from Part - A.* | | | (1X12 = 12 Marks) |
| *Answer Any FOUR Questions from Part - B.* | | | (4X12=48 Marks) |
| **Part - A** | | | |

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| 1 | Answer all questions | | (1X12=12 Marks) | |
|  | a) | Define computer network. | |  |
|  | b) | What is the purpose of layer? | |  |
|  | c) | Uses of twisted pair. | |  |
|  | d) | Write various error detection methods. | |  |
|  | e) | A bit string 0111101111101111110, needs to be transmitted at the data link layer. What is the string actually transmitted after bit stuffing. | |  |
|  | f) | What is meant by piggybacking? | |  |
|  | g) | State optimality principle. | |  |
|  | h) | List Network layer design Issues. | |  |
|  | i) | What is subnet? Give Example. | |  |
|  | j) | Write primitives for simple transport service. | |  |
|  | k) | Uses of POP-3 and NNTP protocols. | |  |
|  | l) | What is meant by upward multiplexing? | |  |
| **Part - B** | | | | |
| 2 | a) | Find out what networks are used at your college or place of work. Describe network types, topologies and switching methods used there. | | 6M |
|  | b) | Explain TCP/IP Reference Model in detail. | | 6M |
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| 3 | a) | Explain Coaxial cable with figure. | | 6M |
|  | b) | Explain about wireless transmission media. | | 6M |
|  | | | | |
| 4 | Illustrate error correcting codes with relevant example. | | | 12M |
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| 5 | a) | Explain about stop-and-wait protocol in detail. | | 6M |
|  | b) | Describe dynamic channel allocation in LAN’s and MAN’s. | | 6M |
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| 6 | a) | Describe general principles of Congestion control. | | 6M |
|  | b) | Explain Hierarchical Routing algorithm in detail. | | 6M |
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| 7 | a) | Explain various Techniques for Achieving Good Quality of Service. | | 6M |
|  | b) | Describe IP Protocol in detail. | | 6M |
|  | | | | |
| 8 | a) | Explain about TCP protocol in detail. | | 6M |
|  | b) | Explain leaky bucket algorithm. | | 6M |
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| 9 | a) | Explain Domain Name System with relevant figures. | | 6M |
|  | b) | Explain about E-Mail. | | 6M |

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