Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2017**

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| **Code :** | **17CS3021** | **Duration :** | **3hrs** |
| **Sub. Name :** | **NETWORK MANAGEMENT** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the general OSI network management with neat diagram. | CO1 | 15 |
| b. | Why are some vendors hesitant to incorporate an SNMP agent on their devices? | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Distinguish client server model and distributed computing model? | CO1 | 13 |
| b. | What is the principle difference between the SGMP and SNMP? | CO2 | 7 |
| 3. | a. | Illustrate the differences between database of a network management system and its MIB. How do you implement each in a network management system? | CO3 | 12 |
|  | b. | Briefly explain the virtual path and circuit. | CO3 | 8 |
| (OR) | | | | |
| 4. | a. | Elaborate the five types of applications in SNMPv3. | CO2 | 12 |
|  | b. | Assuming that remote network management is important, write down three reasons that a network management strategy is needed. | CO3 | 8 |
| 5. | a. | Draw the architecture of ATM RMON MIB framework and explain | CO4 | 12 |
|  | b. | Do you think that the use of SNMPv3 will increase the use of network management over the Internet? If so, justify your answer. | CO2 | 8 |
| (OR) | | | | |
| 6. |  | Assume that the network comprises ten subnetworks, an RMON monitoring each subnet.   1. Design a heartbeat monitoring system, using RMONs that indicate failures to the NMS within a minute of a failure. 2. If the NMS is still expected to detect any failure within minute of occurrence, what is the overhead on the LAN to which the NMS is connected due to this traffic? | CO4 | 20 |
| 7. | a. | List out some of the popular tools under the three categories of status monitoring, traffic monitoring and route monitoring. | CO3 | 15 |
|  | b. | Define protocol analyzer? Compare the basic protocol analyzer with RMON probe. | CO4 | 5 |
| (OR) | | | | |
| 8. | a. | Explain in detail various Network Statistics Measurement Systems. | CO5 | 10 |
|  | b. | Generalized the various strategy solution adopted in Object Oriented Approach to MIB Engineering. | CO5 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Analyze various requirements to design NMS Client design for an Enterprise of telecommunication network. | CO6 | 10 |
|  | b. | Examine the architecture and major design aspects of the NMS server. | CO6 | 10 |