AB-5727

M. C. A. (Sem. IV) Examination

May / June – 2015

403 : Data Communication & Networking Protocols

Time : **3** Hours]   [Total Marks : **70**

Instruction :

1 Answer the following in brief : (any seven)   **14**

   (i)   What is closed-loop congestion control ?

   (ii) What is Silly window Syndrom ?

   (iii) What is address aggregation ?

   (iv) A router with IP address 213.65.19.118 sends a packet to a host with IP address 105.63.14.35. Is the delivery direct or indirect ? Justify your answer.

   (v)   In reference to ICMP what is parameter problem.

   (vi) What is work of DNS resolver ?

   (vii) What is BGP and RIP ?

   (viii) What is DDNS ?

2 (a) Discuss in brief different forwarding techniques.   **5**

   (b) Discuss in brief the OSI model.   **5**

   (c) Explain brief MASK and CIDR Notation.   **4**

OR

   (c) Discuss in brief forwarding and routing in classless addressing.   **4**

3   (a)   Explain with proper figure ARP packet.   **5**

       (b)   Explain in brief how IP checksum is calculated ?   **5**

       (c)   Explain any two query message of ICMP.   **4**

OR

       (c)   Explain any two error reporting message of ICMP.   **4**

4   Answer any two :

       (a)   Explain in brief the services offered by TCP to application layer.   **7**

       (b)   Briefly state advantages, disadvantages and usage of UDP. Does UDP support any mechanism for error control ? Justify your answer.   **7**

       (c)   Discuss in brief different TCP timers.   **7**

5   (a)   Write short note on DNS.   **7**

       (b)   Explain in brief message transfer agent, TRACERT.   **4**

       (c)   Explain in brief BOOTP.   **3**

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