**SV - 817**

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## S.E. (Computer Science & Engineering) (Semester – IV) (New) Examination, May - 2018
## COMPUTER NETWORKS
### Sub. Code: 63532

Day and Date : Monday, 07 - 05 - 2018

Time :9.30 a.m. to 11.30 a.m.

Total Marks : 50

**Instructions :**
1) Attempt any two questions from each section.
2) Figures to the right indicate full marks.
3) Assume suitable data whenever necessary.

### SECTION-I

**Q1) a)** With neat diagram explain Store-and-Forward Packet Switching. **[6]**

**b)** With context to routing within a datagram network discuss about Implementation of Connectionless Service. **[6]**

**Q2) a)** Change the following IPv4 addresses from dotted-decimal notation to binary notation. **[6]**

　i)　128.12.12.229

　ii)　192.169.10.10

　iii)　111.56.45.78

**b)** In context to IPv6 write about **[6]**

　i)　Unicast Addresses

　ii)　Multicast Addresses

　iii)　Anycast Addresses

**Q3) a)** What is "Count to infinity" problem? How this problem is solved in link state routing? Write only names of five parts. [6]

b) With neat diagram write a short note on RSVP-The Resource reServation Protocol. [7]

**SECTION-II**

**Q4) a)** What is two-army problem? Discuss. [3]

b) Write a short note on UDP header. [4]

c) Explain the socket system call regarding socket programming. [5]

**Q5) a)** Draw the diagram for the A portion of the Internet domain name space. Explain DNS name space. [6]

b) What are the three types of keys used in cryptography? Explain in brief.[3]

c) Explain the following terms. [3]

i) Plaintext

ii) Ciphertext

iii) Key

**Q6) a)** Explain three-way handshake concept. [5]

b) Explain the following system call regarding socket programming. [8]

i) recv

ii) sendto

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