

Seat No.	
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**S.E. (Computer Science and Engineering) (Semester - IV) (Revised)**  
**Examination, May - 2019**  
**COMPUTER NETWORKS**  
**Sub. Code : 63532**

**Day and Date : Thursday, 16 - 05 - 2019**

**Total Marks : 50**

**Time : 02.30 p.m. to 04.30 p.m.**

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

**SECTION - I**

- Q1)** a) Write a short note comparison of virtual-circuit and datagram networks. [7]  
b) Explain count-to-infinity problem. [5]
- Q2)** a) Write a short note on classful addressing. [6]  
b) Explain following with reference to classful addressing. [6]  
i) Subnetting  
ii) Supernetting  
iii) Address Depletion
- Q3)** a) In brief explain any two following regarding congestion control in datagram subnets. [6]  
i) The Warning Bit  
ii) Choke Packets  
iii) Hop-by-Hop Choke Packets  
b) With neat diagram explain leaky bucket algorithm. [7]

**SECTION - II**

- Q4)** a) Explain the Berkeley socket primitives for TCP. [7]  
b) Discuss the connection establishment procedure in transport protocol. [6]

**P.T.O.**

- Q5) a)** Draw and explain architecture of WWW. [6]  
b) Describe DNS message in detail. [6]
- Q6) a)** Explain the symmetric key encryption algorithm. [6]  
b) Explain rotation cipher. In asymmetric-key cryptography, how do you think two persons can establish two pairs of keys between themselves? [6]

