

# SPPU-TE-COMP-CONTENT – KSKA Git

Total No. of Questions : 8]

SEAT No. :

P-7540

[Total No. of Pages : 2

[6180]-48

**T.E. (Computer Engineering)**

**COMPUTER NETWORKS AND SECURITY**

**(2019 Pattern) (Semester - I) (310244)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

**Instructions to the candidates:**

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data if necessary.

**Q1) a)** Give short note on : [6]

- i) ARP
- ii) RARP

b) Explain Distance vector routing. [6]

c) Differentiate between Circuit Switching, Message Switching and Packet Switching. [6]

OR

**Q2) a)** Give short note on : [6]

- i) ICMP
- ii) IGMP

b) Explain Link state routing. [6]

c) 192.168.5.51 / 26 for given address find out the i. subnet mask?  
ii. what is first ip address for given series?, iii. what is last ip address  
for given series? [6]

**Q3) a)** Draw and explain TCP header format. [6]

b) List and explain transport layer services. [6]

c) e2 a7 00 0D 00 20 74 9e 0e ff 00 00 00 01 00 00 00 using this UDP  
hexadecimal dump find out in decimal numbers i. Source port no.,  
ii. Destination port no., iii. Total length of user datagram. [6]

**P.T.O.**

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OR

- Q4)** a) Draw and explain UDP header format. [6]  
b) What is socket? What are different types of socket? Explain socket functions used in connection oriented services with diagram. [6]  
c) Explain SCTP protocol in detail. [6]

- Q5)** a) What is DNS? Explain DNS working. [9]  
b) Write short notes on FTP and TELNET. [8]

OR

- Q6)** a) What is SNMP? Explain SNMP working. [9]  
b) What is HTTP? Explain HTTP request and reply messages. [8]

- Q7)** a) Draw and explain ITU-T X.800 Security Architecture for OSI. [6]  
b) Give short note on HTTPS. [6]  
c) Give short note on IDS. [5]

OR

- Q8)** a) Differentiate between Symmetric and Asymmetric Key Cryptography. [6]  
b) Explain SSL in detail. [6]  
c) Give short note on Firewalls. [5]

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