

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
MCA DEGREE EXAMINATION MAY 2019  
(Fourth Semester)

Branch - **COMPUTER APPLICATIONS**

**COMPUTER NETWORKS**

Time: Three Hours

Maximum: 75 Marks

**SECTION -A (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a Write short notes on data communication in network.  
OR  
b Explain about the internet protocols and standards in Network.
- 2 a Explain about analog and digital signals in physical layer.  
OR  
b Describe about differences between guided media and unguided media.
- 3 a Explain about the principles of checksum in Error Detection and Error Correction.  
OR  
b Explain about cyclic codes in Error Detection and Error Correction.
- 4 a Write short notes on the role of IPV6 addresses in network layer.  
OR  
b Explain the unicast routing protocols in Network layer.
- 5 a Explain the concepts of congestion control in transport Layer.  
OR  
b Explain about the principles of TCP in detail.

**SECTION -B (45 Marks)**

Answer any **THREE** questions

**ALL** questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 Discuss the OSI model in Network Architecture.
- 7 Explain the concepts of Multiplexing techniques in detail.
- 8 Describe the Random Access and Controlled Access in Data Link Layer.
- 9 Describe the functioning of multicast routing protocols.
- 10 Explain the basics of Domain Name System in application layer.

Z-Z-Z

END