

Roll No.

Total No. of Questions : 8] [Total No. of Printed Pages : 3

EGS-228

B.E. 6th Semester (CGPA) CSE (Zero Sem.)

Examination - 2018

COMPUTER NETWORKS

Paper-CS-605

Time : 3 Hours]

[Maximum Marks : 60

Note : Attempt all questions. Each question carries equal marks.

1. (a) Define Multiplexing. Explain its type in detail.
- (b) Explain the following:
 - (i) Channel capacity
 - (ii) Bandwidth
 - (iii) Sampling
2. (a) What is the need of OSI model? Explain the functions of different layers of OSI model.
- (b) Define Data Transmission media. Explain Guided and unguided media with Example.

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(1)

Turn Over

3. (a) How does selective repeat- ARD protocol differ from Go- Back- NARQ? Discuss with suitable example.
- (b) Derive an expression for the throughput of a slotted ALOHA system and compare it with pure ALOHA system.
4. (a) What is Routing? Explain Adaptive and non-adaptive routing with example.
- (b) Explain header frame format of UDP and also explain the function of each field.
5. (a) Explain HOLC in detail.
- (b) What do you mean by static and dynamic channel allocation? Explain.
6. (a) What is the need of DNS System? When IP address can be directly used?
- (b) Draw the frame format of IEEE 802.11 standard and briefly discuss the function of each field.
7. (a) What do you understand by congestion? Explain different techniques of congestion control.
- (b) Explain DES Algorithm in detail.

8. Write a short note on any **four** of the following:
- (i) Asynchronous and Synchronous transmission
 - (ii) Error control technique
 - (iii) Internetworking
 - (iv) Bluetooth
 - (v) UDP Protocol