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BO—17—2016

FACULTY OF COMPUTER STUDIES

B.C.A. (Second Year) (Third Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

(Revised Course)

COMPUTER APPLICATION

Paper S3.1

(Computer Network)

(Tuesday, 22-11-2016)

Time : 2.00 p.m. to 5.00 p.m.

Time—Three Hours

Maximum Marks—80

N.B. :— (i) Attempt *All* questions.

(ii) Figures to the right indicate full marks.

(iii) Draw well labelled diagram if necessary.

1. Attempt the following : 20

(a) What is computer network ? Explain advantages of computer network.

(b) Explain data communication model.

(c) Differentiate between analog and digital signal

(d) What is transmission ? Explain synchronous transmission.

2. (a) What is transmission media ? Explain twisted pair in detail. 8

(b) What is topology ? Explain different types of topologies. 7

Or

(c) Explain connectionless and connection oriented service with example. 8

(d) What is multiplexing ? Explain TDM in detail. 7

3. (a) Explain protocol hierarchies in detail. 8

(b) Explain in detail TCP/IP reference model. 7

Or

(c) What are bridge and router ? Explain in detail. 8

(d) What is protocol ? Explain SMTP in detail. 7

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4. (a) What is internet ? Explain its applications. 8
- (b) Explain structure of telephone system. 7
- Or*
- (c) Explain in detail narrow band ISDN. 8
- (d) Explain geosynchronous communication satellite. 7
5. Write short notes on (any *three*) : 15
- (a) URL
- (b) PPP
- (c) Repeaters
- (d) Infrared
- (e) Channel capacity.

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