

B. N. BANDODKAR COLLEGE OF SCIENCE, THANE
F.Y.B.Sc. (INFORMATION TECHNOLOGY) SEMESTER – II ADDITIONAL EXAMINATION;
JUNE 2015
COURSE CODE– USIT205

Duration: 2½ Hrs

Marks: 75

Total

N.B. 1. All questions are compulsory.

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|-------------|---|-----------|
| Q. 1 | Answer <i>any two</i> out of following | 10 |
| | a Explain Standards in Networking with Organization? | |
| | b What are the components of Data Communication System? | |
| | c Differentiate between data & information. What are the different forms in which data can be represented? | |
| | d Explain Types of Channels in detail? | |
| Q. 2 | Answer <i>any two</i> out of following | 10 |
| | a Explain how the communication takes place between layers of OSI model? | |
| | b Explain the working of physical layer and Network layer? | |
| | c Explain the Structure of TCP/IP model? | |
| | d Explain the concept of IP addresses in detail? | |
| Q. 3 | Answer <i>any two</i> out of following | 10 |
| | a What are Sampling, Quantization and Encoding? | |
| | b Explain Representation of Different Symbols in information coding? | |
| | c Explain Parity Check in detail? | |
| | d What is CRC? Explain with Example? | |
| Q. 4 | Answer <i>any two</i> out of following | 10 |
| | a Write short note on Parallel Transmission mode? | |
| | b What is Signal Encoding? Explain in detail? | |
| | c Explain Fiber optic cables with its advantages? | |
| | d Explain Types of wired transmission Medium? | |
| Q. 5 | Answer <i>any two</i> out of following | 10 |
| | a Explain types of switching in detail? | |
| | b What is the concept of Routing? Explain Routing Metrics? | |
| | c Differentiate between Star and Mesh Topology? | |

d Explain the Categories of Networks in detail?

Q. 6 Answer *any two out of following*

10

a Explain IPv6 in detail?

b What is Auto configuration? Explain in detail?

c Explain DHCP used in IPv6 in detail?

d What are IP addresses? Explain IPv6 addresses in detail?

Q. 7 Answer *any three out of following*

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a Explain the term bandwidth of a signal?

b Explain in short the functions of every layer of TCP/IP?

c What is Error? Explain Minimization of Errors?

d Write a short note on Unguided Media?

e Explain the concept of Routing Algorithm?

f What is IPv6? Explain its Header format?

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