Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/BMS(H)/SEM-3/MMS-305/2010-11
2010-11
INFORMATION AND COMPUTER TECHNOLOGY

Time Allotted : 3 Hours   *Full Marks :* 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A
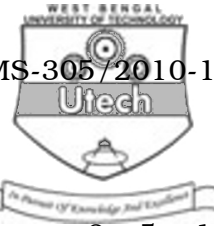### (Objective Type Questions)

1. Answer the following questions :   10 × 1 = 10

    i)   UTP stands for

          a)   Unguided Twisted Pair

          b)   Unreliable Twisted Pair

          c)   Unknown Twisted Pair

          d)   Unprotected Twisted Pair.

    ii)   The extension of Microsoft Word file is

          a)   **.**txt   b)   **.**doc

          c)   **.**ppt   d)   **.**xls

    iii) Communication system is a combination of

          a)   Hardware   b)   Software

          c)   Data transfer links   d)   All of these.

3223   [Turn over

iv)   What is the full form of OSI ?

v)   What is analog data ?

vi)   Which type of the following files can a user send as an attachment ?

    a)   Text file   b)   Document file

    c)   Video file   d)   All of these.

vii) Which one of the following is system software ?

    a)   Microsoft Office   b)   Adobe Photoshop

    c)   Operating Systems d)   Oracle.

viii) LAN stand for

    a)   Limited Area Network

    b)   Local Area Network

    c)   Long Area Network

    d)   Local Audiovisual Network.

ix)   Every web page has a unique address, called a

    a)   Hyperlink

    b)   Map

    c)   HTTP

    d)   Uniform resource locator.

x)   The expression mbps stands for

    a)   ten thousand bits per second

    b)   megabits per second

    c)   gigabits per second

    d)   microbits per second.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.   3 × 5 = 15

2. What are the differences between analog and digital transmissions ? What are the five components of a data communication system ?   3 + 2

3. What do you mean by multiplexing ? Discuss the basic difference between TDM & FDM.   2 + 3

4. Describe about the different types of cables used in networking.

5. Describe about the different types of cables used in networking.

6. What do you mean by network ? Explain various types of network.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.   3 × 15 = 45

7. What are the advantages of optical fibre over twisted pair and coaxial cable ? What are the advantages of shielded twisted pair over unshielded twisted pair ? What is the purpose of cladding in an optical fibre as a transmission medium ? What is TCP ?   4 + 4 + 3 + 4

8. What are the major advantages and disadvantages of radiowave transmission ? What are AM, FM, ASK, FSK, PSK ? 5 + 10

9. What is synchronous and asynchronous transmission ? What is the difference between the two ?

10. Write short notes on any *three* of the following : 3 × 5

   a) Router

   b) Firewall

   c) Frequency modulation

   d) LAN, MAN & WAN.

11. a) What is Network Topology ? Describe at least three examples.

   b) Describe OSI model in detail with diagram.