(i) **Printed Pages : 2**      Roll No. ...................................

(ii) **Questions    : 9**

Sub. Code : | 0 | 3 | 8 | 5 |

Exam. Code : | 0 | 0 | 0 | 4 |

## B.A./B.Sc. (General) 4th Semester

### 1046

## INFORMATION TECHNOLOGY

### Paper–B : Data Networks and Web Based Application

**Time Allowed : Three Hours]**      **[Maximum Marks : 65**

Note :   Attempt five questions in all including the compulsory question and taking one question each from Sections A-D.

### (Compulsory Question)

1.    Write short notes on the following :

|     |                                                              |   |
|-----|--------------------------------------------------------------|---|
| (a) | What is a star topology ?                                     | 2 |
| (b) | What is Java Bytecode ?                                       | 2 |
| (c) | How can you perform file transfer ?                          | 2 |
| (d) | How do you insert an image in HTML webpage ?                | 2 |
| (e) | What is difference between cell padding and cell spacing ?  | 2 |
| (f) | Write a note on IEEE standards.                              | 3 |

### SECTION–A

2.    Discuss in detail the OSI reference model and function of each layer.

13

3.  (a) Discuss the various switching techniques.

    (b) Explain error detection codes.                    13

## SECTION–B

4.  Discuss in detail shortest path routing and flooding algorithm in detail.

                                                          13

5.  Write notes on :

    (a) Congestion control

    (b) Internetworking

    (c) Cryptography.                                     13

## SECTION–C

6.  Discuss the various services provided by Internet and the internet access methods.                                13

7.  What is HTML ? How do you create different types of lists in HTML ? Explain with example.                        13

## SECTION–D

8.  (a) Write an HTML code for creating the following frame window in HTML webpage :

| FRAME 1 | FRAME 2 |
|---------|---------|
| FRAME 3 |         |

    (b) Write a detailed note on CSS positioning.          13

9.  What are constructors ? Why are they required ? Explain the different types of constructors used in Java with appropriate Java code.

                                                          13