MSBTE CLASS TEST-I

Program Code **: CW**   **Scheme: K**   **Semester: Fourth**

Course Title **: MIC**   **Course Code: 314321**

Max Marks **: 30**   **Time: 01:30 Hour**

Instructions:

1. All questions are compulsory.

2. Illustrate your answers with neat sketches wherever necessary.

3. Figures to the right indicate full marks.

4. Assume suitable data if necessary.

5. Use of non-programmable calculator is permissible

Q.1 Attempt any FIVE out of seven.   **(5*2=10 Mark)**

     a) List any four salient features of 8086 microprocessor.

     b) Define **memory segmentation** in 8086.

     c) Name the **two major units** of 8086 architecture.

     d) Define **physical memory address**.

     e) Define **assembly language**.

     f) State the function of an **assembler**.

     g) Define **debugger**.

Q.2 Attempt any FIVE out of seven.   **(5*4=20Mark)**

     a) Explain the **register organization of 8086** with suitable diagram.

     b) Describe the **concept of pipelining** in 8086.

     c) Describe the functions of **BIU and EU** in 8086.

     d) Explain the functions of **Editor, Assembler, Linker, and Debugger**.

     e) Explain the role of an **assembler** in detail.

     f) Explain the **program development steps** in assembly language.

     g) Explain the importance of **flowcharts** in program development.