

C 1275



**FOURTH SEMESTER B.TECH. (ENGINEERING) [14 SCHEME] DEGREE
EXAMINATION, APRIL 2016**

CS 14 406—MICROPROCESSOR BASED DESIGN

Time : Three Hours

Part A

1. Explain briefly about memory segmentation.
2. Discuss in detail about Minimum and Maximum mode.
3. List the various features of memory modules.
4. Define Assembly process with neat diagram.
5. Differentiate Memory decoding and I/O decoding.
6. Explain the interrupt structure of 8086 with neat diagram.
7. Discuss in detail about Peripheral interfacing.
8. Explain the need for Hex Keyboard interfacing.
9. Write short note on Addressing modes.
10. Explain the working of the Direct Memory Access controller.

(8 × 5 = 40 marks)

Part B

11. Explain in detail about the architecture of 8086 Microprocessor.

Or

12. Explain the following : (i) Signal descriptions of 8086 and (ii) Features of 80486.
13. Explain in detail about branch instructions and logical instructions in 8086 with examples.

Or

14. Discuss about the Shift and rotate instruction with examples.
15. Write short notes on hardware structure of 8086.

Or

16. Explain the following : (i) memory address decoding mechanism and (ii) BIOS 10H Functions.
17. Explain in detail about functional operation on Programmable peripheral Interface (PPI).

Or

18. Write in detail about the working of the 8253 Programmable Interval Timer.

(4 × 15 = 60 marks)