B.TECH. DEGREE EXAMINATION, MAY 2016

Eighth Semester

Branch : Electronics and Communication Engineering / Applied Electronics and Instrumentation Engineering and Electronics and Instrumentation Engineering

ADVANCED MICROPROCESSORS [L A S]

(Old Scheme – Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. What are the different types of segment registers in 8086?

2. Differentiate between logical and physical address of 8086.

3. What is register relative addressing?

4. Identify the significance of stack memory addressing.

5. What are selectors?

6. What is meant by real mode of operation of 80286?

7. How is virtual memory implemented in 80386?

8. What is task switching?

9. What is a pipeline?

10. What is branch prediction logic?
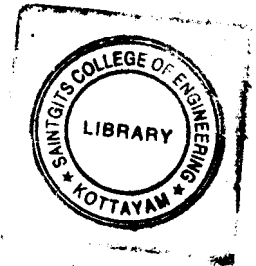
(10 × 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

11. With reference to the different signals generated, differentiate between the minimum mode and maximum mode of operation of 8086.

Or

12. With a block diagram, explain how data is transferred using DMA.

13. Write a note on data addressing mode of 8086.

Or

14. Explain program memory addressing modes.

15. With a block diagram, explain the architecture of 80286 processor.

Or

16. Describe the protected mode of operation of 80286.

17. Differentiate between real mode and protected mode of operation of 80386.

Or

18. How does a 386 processor handle multiple tasks?

19. Describe the pentium superscalar architecture.

Or

20. Briefly describe the characteristics of 80486 processor.

(5 × 12 = 60 marks)