Reg. No. :

PART A - (10 x 1 = 10 Marks)

1. Accumulator based microprocessor example are: CO1- R

   (a) Intel 8085   (b) Motorola 6809   (c) A and B   (d) None of these

2. The _____ stores data used by a program and also the   CO1- R
   instructions of the program.

   (a) Cache Memory   (b) RAM   (c) ROM   (d) EPROM

3. Pentium processor is a_____ bit microprocessor.   CO2- R

   (a) 16   (b) 32   (c) 64   (d) 60

4. The Address Error pin of Pentium II processor is used to check for an   CO2- R

   (a) Address error   (b) Address parity error   (c) Data error   (d) Instruction error

5. What is meant by FSR in a PIC microcontroller?   CO3- R

   (a) File Screening Register   (b) File Select Register

   (c) File Source Register   (d) File Scan Register

6. How many interrupt sources are present in a PIC microcontroller?   CO3- R

   (a) 10   (b) 14   (c) 16   (d) 15

7. The STM instruction in ARM is used for _____ CO4- R

   (a) Push   (b) Pop   (c) Move   (d) Save

8. Which of the following statements is true? CO4- R

   (a) Memory faults are available in ARM
   (b) Unused instruction space is present in ARM
   (c) Thumb instruction set is available in ARM
   (d) All the above

9. The PSoC 4 features a ____ bit Cortex – M0 CPU CO5- R

   (a) 8   (b) 16   (c) 32   (d) 64

10. The first digital computer built with IC chips was known as CO5- R

   (a) IBM 7090   (b) Apple – 1
   (c) IBM System / 360   (d) VAX-10

PART – B (5 x 2= 10Marks)

11. What are the difference between 80386 SX and 80386 DX? CO1- R

12. Can execute Pentium three instructions simultaneously?explain. CO2- R

13. What is the function of CCP module in PIC microcontroller? CO3- R

14. List the instruction set in ARM. CO4- R

15. Write a short note on GPIO pins. CO5- R

PART – C (5 x 16= 80Marks)

16. (a) With a neat block diagram explain in detail about the internal architecture of a 80286 microprocessor. CO1- U (16)

Or

   (b) (i) Compare 80186, 80286, 80386 and 80486 processors. CO1- U (10)

   (ii) Explain virtual addressing modes of 80286. CO1- U (6)

17. (a) Write in detail about the internal structure of the Pentium Pro microprocessor with a neat diagram and also brief the different pins available in the processor. CO2- Ana (16)

Or

   (b) (i) Compare the Pentium II, Pentium III and Pentium IV microprocessors in detail. CO-2 Ana (10)

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(ii) Write short notes on special purpose registers of Pentium processor.   CO-2 Ana   (6)

18. (a) (i) Explain the various addressing modes of PIC microcontroller.   CO3- U   (10)

     (ii) Discuss in detail the organization of program and data memory of PIC microcontroller.   CO3- U   (6)

<div align="center">Or</div>

(b) (i) Discuss the core architectural features of PIC microcontroller.   CO3- U   (8)

     (ii) Describe the interrupt structure of PIC microcontroller.   CO3- U   (8)

19. (a) Explain in detail about addressing modes in the ARM processor with suitable examples.   CO4- U   (16)

<div align="center">Or</div>

(b) Briefly explain about the ARM organization and Implementation.   CO4- U   (16)

20. (a) Explain the basic concepts of PSOC 3 in detailed manner.   CO5- U   (16)

<div align="center">Or</div>

(b) Draw the architecture of PSOC microcontroller with detailed explanation   CO5- U   (16)

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