K17P 0187

Reg. No. : .....

Name : .....

Third Semester M.C.A. Degree (Regular/Supplementary/Imp.) Examination, January 2017
(2014 Admn. Onwards)
MCA3C17 : ADVANCED MICROPROCESSORS AND MICROCONTROLLERS

Time : 3 Hours Max. Marks : 80

SECTION – A

Answer **any ten** questions, **each** question carries **three** marks.

1. How interrupt vectors are differ from simple interrupt ?
2. Compare and contrast program instructions and program directives.
3. What are the differences between macro and procedure ?
4. Mention the string related instructions in 8086.
5. What are the special features of 486 processor ?
6. Mention the applications of pention process.
7. What are the key role functions of peripherals 8253 and 8257 ?
8. How microcontrollers are different from simple processor ?
9. Compare and contrast system software and application software.
10. Mention important testing tools used for software development.
11. List out the few instruction sets of 89651.
12. How PIC microcontroller is differ from standard microcontroller ? **(10×3=30)**

P.T.O.

SECTION – B

Answer **all** questions, **each** question carries **ten** marks.

13. a) With suitable diagram, explain the internal architecture of 8086. **10**

OR

b) With suitable examples explain the various addressing modes of 8086. **10**

14. a) Define assembly language directives, discuss any four assembler directives of 8086 in brief. **10**

OR

b) What are the significant features of co-processor ? Explain the architecture of co-process with suitable diagram. **10**

15. a) Explain the advanced design specification of recent trends of microprocessor. **10**

OR

b) Briefly explain importance of interfacing strategy of 8255 and 8253 peripherals with advanced 8086. **10**

16. a) With suitable examples discuss the various design issues of the embedded system. **10**

OR

b) List out the various software tools essential for embedded operating system. Explain any two of them briefly. **10**

17. a) Explain the architecture and programming concepts of 89651. **10**

OR

b) Mention the various hardware platform. Explain architecture and applications of any two of them. **10**

(5×10=50)