

No. of Printed Pages : 03

Roll No. ....

**AA64**

**M.Tech. EXAMINATION, May 2019**

(First Semester)

(B. Scheme) (Re-appear)

(ECE)

MTEC507B

ADVANCED MICROPROCESSOR AND  
APPLICATION

*Time : 3 Hours]*

*[Maximum Marks : 75*

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Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

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**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

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**P.T.O.**

### Unit I

1. (a) Differentiate between parallel processing and co-processing.  
(b) Explain the various types of buses in microprocessor. Discuss their role as well.  
 $7\frac{1}{2}+7\frac{1}{2}$

2. (a) What is the need of input, output port of microprocessor ?  
(b) Explain in detail DMA.  $7\frac{1}{2}+7\frac{1}{2}$

### Unit II

3. (a) What do you mean by paging ? What are its advantages and disadvantages ?  
(b) Enlist the salient features of 80486.  
 $7\frac{1}{2}+7\frac{1}{2}$
4. (a) Explain the cache management in 80846.  
(b) Explain swapping in and swapping out.  
 $7\frac{1}{2}+7\frac{1}{2}$

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### Unit III

5. (a) Discuss the role of segmentation in Pentium.  
(b) Explain various addressing modes of Pentium processor of with examples.  
 $7\frac{1}{2}+7\frac{1}{2}$

6. Discuss various instruction types of Pentium.  
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### Unit IV

7. (a) Differentiate between parallel and serial communication.  
(b) How implementation and testing of Pentium processor based is done ?  
 $7\frac{1}{2}+7\frac{1}{2}$
8. Write short notes on the following :  
(a) D/A interface  
(b) Design tool for development  
(c) Special I/O devices. **5+5+5**

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