

# **University of Mumbai**

**Examinations Commencing from 17th May 2022**

**Program: Artificial Intelligence and Data Science**

**Curriculum Scheme: Rev 2019**

**Examination: SE Semester: IV**

**Course Code: CSC404**

**Time: 2 and ½ hour**

**Course Name: Microprocessor**

**Max. Marks: 80**

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<b>Q1.</b> Choose the correct option for following questions. All the Questions are compulsory and carry equal marks (20 marks)	
1.	8086 can access _____ memory addresses
Option A:	1KB
Option B:	1MB
Option C:	100MB
Option D:	1GB
2.	How many segment registers are there in 8086?
Option A:	1
Option B:	2
Option C:	3
Option D:	4
3.	Which flag is set when carry is generated from lower nibble during addition?
Option A:	CF
Option B:	ZF
Option C:	AF
Option D:	SF
4.	Which of the following address and data lines are multiplexed?
Option A:	AD0 - AD19
Option B:	AD0 - AD16
Option C:	AD0 - AD15
Option D:	AD1 - AD16
5.	How many INTA pulses will be given for one interrupt?
Option A:	6
Option B:	4
Option C:	2
Option D:	0
6.	Which flag helps to set direction for string access from memory?
Option A:	DF
Option B:	SF
Option C:	OF
Option D:	TF

7.	Find the control word for PA = out, PB = in, PCL = out, PCH = out in mode 0.
Option A:	12H
Option B:	62H
Option C:	82H
Option D:	92H
8.	80386 Segmentation unit allows segments of _____ size at maximum.
Option A:	4Gbytes
Option B:	6Mbytes
Option C:	4Mbytes
Option D:	1Mbytes
9.	Virtual Mode Flag bit can be set using _____ instruction or any task switch operation only in the _____ mode
Option A:	IRET, Virtual
Option B:	POPF, Real
Option C:	IRET, protected
Option D:	POPF, protected
10.	The unit that decodes the instructions concurrently and translate them into micro-operations is
Option A:	Trace cache
Option B:	Instruction decoder
Option C:	Execution module
Option D:	Front end branch predictor

<b>Q2</b>	<b>Solve any Four out of Six (5 marks each) 20 Marks</b>
A	
B	
C	
D	
E	
F	

<b>Q3.</b>	<b>Solve any Two Questions out of Three. ( 10 marks each) 20 Marks</b>
A	
B	
C	

<b>Q4.</b>	<b>Solve any Two Questions out of Three. ( 10 marks each) 20 Marks</b>
A	
B	
C	