

GYANMANJARI INNOVATIVE UNIVERSITY

GYANMANJARI INSTITUTE OF TECHNOLOGY
Diploma-Mid Semester Examination (MSE)- S2026

Enrollment No.: _____

Subject Code: DETCE14209

Subject Name: Computer Organization &
Architecture

Time: 10:30 am to 12:30 pm

Instructions:

Date: 24/03/2026

Semester: 4th

Total Marks: 60

1. Question No. 1 is compulsory.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	Marks
Q.1 (a) Explain basic structure of the CPU with a necessary diagram.	05
(અ) CPU ની મૂળ રચના જરૂરી આકૃતિ સાથે સમજાવો.	05
(b) Explain Data Bus and Address Bus.	05
(બ) Data Bus અને Address Bus સમજાવો.	05
(c) Describe various registers used in CPU and their functions.	10
(ક) CPU માં ઉપયોગ થતા વિવિધ Registers અને તેમના કાર્યો સમજાવો.	10
Q.2 (a) What is a flag register? List all flags in 8085.	05
(અ) Flag Register શું છે? 8085 ના બધા flags લખો.	05
(b) What is the instruction cycle?	05
(બ) Instruction Cycle શું છે?	05
OR	
(b) Explain Fetch, Decode and Execution.	05
(બ) Fetch, Decode અને Execution સમજાવો.	05
(c) Draw and explain the pin diagram of 8085 microprocessor and describe all pin functions.	10
(ક) 8085 માઇક્રોપ્રોસેસરનું Pin Diagram દોરી અને તમામ pins ના કાર્યો સમજાવો.	10
OR	
(c) Explain the 8085 microprocessor architecture with neat diagram.	10
(ક) 8085 માઇક્રોપ્રોસેસરનું Architecture સુંદર આકૃતિ સાથે સમજાવો.	10
Q.3 (a) What is an interrupt? List interrupts of 8085.	05