PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.TECH MIDSEM EXAMINATION WINTER 2021-22

SUBJECT NAME (CODE):Embedded System (203107429)　　　　　BRANCH:ECE

DATE: 08/08/2021　　　　　　TIME: 10:30 AM to 12:00 PM　　　　　TOTAL MARKS: 40

Sr.No.		Marks
Q.1	(A) Compulsory Question (5 MCQ)	05

(1) Which of the following is the design in which both the hardware and software are considered during the design?

a) platform based design　　　　　　　　b) memory based design

c) software/hardware code sign　　　　　　d) peripheral design

(2) What does API stand for?

a) address programming interface　　　　b) application programming interface

c) accessing peripheral through interface　　d) address programming interface

(3) Which design activity helps in the transformation of the floating point arithmetic to fixed point arithmetic?

a) high-level transformation　　　　　　b) scheduling

c) compilation　　　　　　　　　　　d) task-level concurrency management

(4) Which type of memory is suitable for low volume production of embedded systems?

a) ROM　　　　b) Volatile　　　　c) Non-volatile　　　　d) RAM

(5) How an embedded system communicate with the outside world?

a) Peripherals　　　b) Memory　　　　c) Input　　　　d) Output

	(B) Compulsory Question (5 Answer in one line)	05

(l)What is the full form ofDAS design?

(2) What do you mean by Volatile memory?

(3) What is the input for ADC and DAC?

(4) What is the need of ADC?

(5) What is the NVRAM?

Q.2	Attempt any four(Short Questions)	12

(1) Write sophisticated embedded system characteristics?

(2) Define RTOS?

(3) Define the types of embedded system and its application areas?

(4) Write the Constrains of an embedded system design?

(5) Define the resolution terms in the ADC?

Q.3	Attempt any two	08

(l) Give the type of ADC and describe anyone of them with diagram?

(2) Give the classification of the memory system used in the embedded systems?

(3) What is the difference between the RISC and CISC?

Q.4	(A) Describe the processors used in the embedded system	05
	(B) Write the functions, assigned to the internal, external and buffer RAM	05

OR

	(B) Describe the hardware units of embedded systems.	05