



GOA COLLEGE OF ENGINEERING
Affiliated to Goa University
DEPARTMENT OF COMPUTER ENGINEERING
Course: EMBEDDED SYSTEM DESIGN

Semester: VI semester

Year: Jan-May. 2020

Scheme: RC2016-17

SECOND TEST

Total Marks: 25

Instructions:

- 1) Email your Scanned Answer sheets to both the Ids**
 - i) melina@gec.ac.in**
 - ii) geccompit2@gmail.com**
- 2) Save your file as “name_rollno”**

SR. No	Questions	Marks
1	What are the various registers and pins provided in 8051 microcontroller for serial communication? List them and mention their functions.	4
2	<ol style="list-style-type: none">i) With XTAL = 12 MHz find the TH1 value needed to have baud rates 9600 and 1200.ii) With XTAL = 11.0592 MHz find the TH1 value needed to have baud rates 9600 and 1200.iii) What is the reason XTAL = 11.0592 MHz is preferred in serial communication.	3
3	Explain how to obtain baud rate 4800 with XTAL = 11.0592 MHz: <ol style="list-style-type: none">a) Without doubling the baud rateb) With doubling the baud rate	4
4	Write an assembly level language program to generate a square wave of 75Hz frequency on pin P1.2 using Interrupts. Write comments for each statement. Assume XTAL = 11.0592 MHz.	6
5	Differentiate between edge triggered and level triggered interrupts and specify the assembly instructions used to indicate the same.	5
6	Why RI and TI flags should be cleared before the RETI instruction?	3