



EAST WEST UNIVERSITY
Department of Computer Science and Engineering
Fall 2021 Semester, Mini Project
CSE251 Electronic Circuits, Section-4,
Deadline: January 12, 2021 11:00 pm Full Marks: 10

Course Outcome: CO4	Program Outcome: PO1	
Cognitive Level: C3	Psychomotor Level: P2, P3	Affective Level: A2
Knowledge Profile: K1, K3	Complex Engineering Problem: EP1, EP2	

Project Statements

P1: Sinusoidal wave to amplified Square and Triangular wave converter maintaining the same frequency

P2: Triangular wave to amplified Sinusoidal and Square wave converter maintaining the same frequency

P3: AC (Sinusoidal, 220V rms, 50Hz) to DC (5V, 2A) converter

P4: Logarithmic and Exponential Amplifiers

P5: First Order Active High Pass Filter (Gain and Cut-off frequency will be set to each group)

P6: First Order Active Low Pass Filter (Gain and Cut-off frequency will be set to each group)

P7: Second order homogeneous Ordinary Differential Equation (with constant coefficient) solver

Task

- Theoretically design an electronic circuit following the problem statement
- Calculate the value of resistors, capacitors, voltage and current sources necessary for your design
- Theoretically calculate the output voltages and currents
- Simulate your circuit using PSPICE circuit simulator and obtain the output voltages and currents
- Compare the simulated results with the theoretically calculated results
- Analyze your designed circuit for various input conditions

Mark Distribution

1. Accuracy and Quality of the designed circuit (Cognitive: C3):	3
2. Analysis of the designed circuit (Psychomotor – Execute instructions: P2)	1
2. Report Quality (Cognitive: C3):	1
3. Report Quality (Psychomotor – Communication Skill: P3)	0.5
4. Presentation Quality (Cognitive: C3):	3
5. Presentation Quality (Psychomotor – Communication Skill: P3):	0.5
6. Presentation Quality (Affective: A2):	0.5
7. Question and Answer (Affective: A2):	0.5
Total:	10

SL.	Student ID	Name	Project
1	2016-3-60-032	Md. Al-Shahriar Mehedi	P1
2	2017-2-60-133	B. M. Jahidul Haque	P1
3	2018-1-60-261	Sajidur Rahman	P1
4	2019-1-60-076	Liaquat Ahmed	P2
5	2019-1-60-118	Ahsan Aftab	P2
6	2019-1-60-263	Amit Ghosh	P2
7	2019-2-60-044	Labonno Khan Bonna	P3
8	2019-2-60-048	Md. Wahiduzzaman	P3
9	2019-2-60-052	Sumaiya Binte Faruq	P3
10	2019-3-60-117	Sumiaya Ahmed	P4
11	2020-1-60-003	Ayesha Chowdhury	P4
12	2020-1-60-044	Israth Jahan	P4
13	2020-1-60-049	Lamia Haider	P5
14	2020-1-60-050	Shajia Hossain	P5
15	2020-1-60-090	Anika Tabassum Tanha	P5
16	2020-1-60-129	Subah Nuzhat	P6
17	2020-1-60-138	Sazid Hossain Saad	P6
18	2020-1-60-140	Shiekh Reshma Sultana	P6
19	2020-1-60-148	Mohd. Riyaj - Us - Salehin	P7
20	2020-1-60-154	Farhan Asfar	P7
21	2020-1-60-164	Khondoker Munim Salehin	P7
22	2020-1-60-181	Mariya Rahman Momo	P1
23	2020-1-60-197	Nowshin Tasnia	P1
24	2020-1-60-224	Shodorson Nath	P1
25	2020-1-60-267	Md. Sanim Hossain	P2
26	2020-2-60-018	Mohammad Naimur Rahman	P2
27	2020-2-60-054	Sagar Karmoker	P2
28	2020-2-60-057	Tamanna Sultana Tinne	P5
29	2020-2-60-071	Asif Rahman Bhuiyan	
30	2020-2-60-082	Tajkiratul Abida Ananna	P5
31	2020-2-60-122	Nahida Akter Ritu	P5
32	2020-2-60-126	Yusuf Salehin	P6
33	2020-2-60-136	Fakiha Rahman Soha	P6
34	2020-2-60-143	Kazi Ehsanul Haque	P6
35	2020-2-60-165	Md Rezaul Hossain	P7
36	2020-2-60-185	Sabbir Hossain Abir	P7
37	2020-2-60-193	Pulak Islam	P7
38	2020-2-60-213	Md. Farhad Billah	P7