



Shri Shivaji Education Society Amravati's

**SCIENCE COLLEGE,**

**CONGRESS NAGAR, NAGPUR**



## Department of Electronics

**Session 2022-23**

**B.Sc. First Year Semester-I**

**BRIDGE COURSE: ELECTRONICS**

**Report: Bridge Course Conducted by Electronics Department, S.S.E.S. Amravati's Science College, Congress Nagar, Nagpur**

The Electronics Department of S.S.E.S. A's Science College, Nagpur, conducted a Bridge course as per the RTMNU (Rashtrasant Tukadoji Maharaj Nagpur University) notification for B.Sc. First-year Sem-I students in the academic year 2022-23. The aim of the Bridge course was to bridge the gap between the syllabus covered in the 12<sup>th</sup> Std. and the detailed curriculum of B.Sc. Sem - I.

The B.Sc. Sem - I RTMNU syllabus encompassed fundamental topics such as:

- Importance of Electronics.
- Need for Electronics literacy in society.
- Electronics in the 21st Century.
- Importance of Electronics in daily life.
- Carrier opportunities in Electronics.
- Miracles from Electronics.

Students enrolled in B.Sc. Sem I after successfully qualifying for their 12<sup>th</sup> Exam, and the Bridge course served as a foundational step in transitioning them from the Std. 12<sup>th</sup> curriculum to the rigorous academic demands of B.Sc. studies.

## **Syllabus:**

### **Electronics paper-I:**

- 1) Basic components: Resistors, Capacitors, Inductors, Transformers, etc.
- 2) Semiconductor basics: Atomic structure, classification of materials, semiconductor, PN junction, types of diodes.
- 3) Circuit analysis: Ohm's law, Kirchoff's current law, Kirchoff's voltage law and power supply.

### **Electronics paper-I:**

- 1) Difference between Analog and Digital circuits, difference between AC and DC circuits.
- 2) Digital Electronics: Positive logic and Negative logic system, study of basic logic gates.
- 3) Switching circuits: Representation of LOW voltage level and HIGH voltage level in digital circuits.

### **Course Outcome:**

- Learners will develop interest in the subject of Electronics and it will also be useful to fill the gap.
- To make the students familiar with the basic concepts of Electronics.
- To encourage and motivate the students for the technical education.
- To make the students aware towards the various branches of Electronics. For example: Circuits, Networks, and Communication and Embedded systems.

Class :- B. Sc. - I (V & II Sem)  
 Subject :- PEM  
 Theory / Practical

Shri Shivaji Education Society Amravati; Month  
 Science College, Congress Nagar, Nagpur. Name of Teacher :- *S.M. Ghokale*  
 2022-23

Month : July/August  
 Name of Teacher :- *S.M. Ghokale*

Sr. No	Roll	Students Full Name	Total upto last Month		Periods	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total		
			Deli	Att		Date / Contact No.	25/07	26/07	27/07	28/07	29/07	30/07	01/08	02/08	03/08	04/08	05/08	06/08	08/08	10/08	11/08	12/08	13/08	17/08	18/08	Current Month	Progressive Month	
1		VISHAL VISHWANATH MONDHE				P	P	P	P	P	P		P		P	P	P	P	P	P	P	P	P	P	P	P		
2		KIRANPREET KAUR CHANIANA				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
3		SHASHWAT RAMAKANT MISHRA				P	P	P	P	P							P	P	P	P	P	P	P	P	P	P		
4		ISHA ROSHAN DUBEY				P	P	P	P	P				P	P		P	P	P	P	P	P	P	P	P	P		
5		KAJAL PURUSHOTTAM GOWARDIPE				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
6		BHAGYASHREE C. SONWANE				P		P	P	P				P	P		P	P	P	P	P	P	P	P	P	P		
7		ANIKET SANJEEV CHAKRE					P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	P		
8		OM GAJANAN BORKAR				P	P							P	P	P	P	P	P	P	P	P	P	P	P	P		
9		MAYANK HEMANTKUMAR KHOTELE					P	P	P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	P		
10		ACHAL RUSHI KANGALE				P		P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
11		SHEETAL AZAD SINGH					P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
12		UNNATI RAJU PANDE				P	P		P	P			P	P	P	P	P	P	P	P	P	P	P	P	P	P		
13		TAMANNA VIJAY YADAV				P	P		P	P							P	P	P	P	P	P	P	P	P	P		
14		DHIRAJ RAJENDRA HEDAO						P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
15		KASHISH GAJENDRA FULZELE				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
16		KASHISH NAGENDRA SINGH						P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
17		MOHIT PRADIP CHAUHAN				P	P		P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
18		SHRUTI MAHENDRA JAMBHULKAR					P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
19		MANISH SUDARSHAN VISHWAKARMA				P		P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
20		DEVANSHU SANJAY PUNDE					P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
21		SHRUTI MAHARAJ SINGH CHAUDHARY				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
22		GAGAN MAROTI NAGPURKAR				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
23		SUHANI RAJU VAIDYA				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		
24		NAYAN ASHOK KAMBLE				P	P	P	P	P				P	P	P	P	P	P	P	P	P	P	P	P	P		

Bridge Course

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