



Shri Shivaji Education Society Amravati's  
**SCIENCE COLLEGE,**  
CONGRESS NAGAR, NAGPUR



## Department of Electronics

**Session 2020-21**

**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 2020-21. The aim of the Bridge course was to bridge the gap between the syllabus covered in the 12th 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 12th 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.



					16/09	17/09	18/09	19/09	23/09	24/09	25/09	26/09	01/10	03/10	07/10	08/10	09/10	11/10	14/10	15/10	17/10	20/10	21/10
20		AVANTIKA GURUDAS LOKHANDE			P								P	P	P	P	.	P	.	P	.	P	P
21		SHARVARI SANJAY CHAUDHARI			P	P	P	.	.	.	.	.	P	P	P	P	.	P	.	P	.	P	P
22		HIMANSHU JAGESHWAR BACHALE				P	P	P	.	P	P		P	.	P	P	.	P	.	P	.	P	P
23		JANHAVI PRABHAKAR PARDHI			P	P	P	P	.	P	P		.	.	P	P	P	P	.	P	.	P	P
24		SAMRUDHI SANJAY PADMAWAR			P	.	P	P	P	P	.	P	.	.	P	P	.	.	.	.	P	P	.
25		TANMAY PRADIPRAO MASKE			.	P	.	P	.	P	P	P	P	P	.	P	P	.	.	.	P	P	.
26		HARSHAL YUVRAJ GHAGRE			P	P	P	.	P	P	P	P	P	P	.	P	P	P	.	P	.	P	P
27		ROHAN RAMBHAU BANSOD			.	.	P	P	P	P	P	P	P	P	.	P	P	.	P	P	P	P	.
28		DNYANESH JAYANT PIMPARKAR			P	.	P	.	.	P	P	P	P	.	P	.	P	P	.	P	.	P	.
29		TANISHQ ARVIND KORDE			.	P	.	P	P	P	P	P	.	P	.	P	.	P	P	P	.	P	P
30		KALYANI PANDHARI GHUGAL			P	P	.	P	.	P	.	P	P	P	.	P	.	P	P	P	.	P	P
31		KETKI SHIVDAS UPASE			P	P	.	P	.	P	.	P	P	P	.	P	.	P	.	P	.	P	P
32		SAMIDHA ABHAY BHENDE			P	P	P	P	P	P	.	.	.	.	.	.	.	P	P	P	P	P	P

Bridge  
course

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