Vivekanand College, Kolhapur

(An Empowered Autonomous Institute)

Department of Electronics

Internal Examination Notice

Date: 07/10/2026

All students of B.Sc. Part - I are hereby informed that their internal examination for Semester - I will be conducted in offline mode as per the schedule.

Paper Code	Section Title	Marks	Date	Time
2DSC03ELE11	Analog Electronics	10	15/10/2025	03:00 PM
2DSC03ELE12	Digital Electronics	10	15/10/2025	03:30 PM

(Prof. Dr. C. B. Patil)

HEAD

DEPARTMENT OF ELECTRONICS

VIVEKANAND COLLEGE, KOLHAPUR

(EMPOWERED AUTONOMOUS)

VIVEKANAND COLLEGE KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

Sem - I

Shri Swami Vivekanand Shikshan Sanstha's
VIVEKANAND COLLEGE, KOLHAPUR
(An Empowered Autonomous Institute)
Electronics Internal Exam Attendance
CLASS : B.Sc PART -I (NEP 2.0) YEAR 2025-2026

Date: 15/10/2025

Sr. No.	Roll No	Name of Students	2DSC03ELE11	2DSC03ELE12
1	7233	ANGANE DIVYA SHAMRAV	AB	AB
2	7234	BAGWAN HEENA HANJALA	HBagwan	HBagwan
3	7235	BODAKE SANIKA SATISH	Sanika	Sanika
4	7236	CHANDANSHIVE SIDDHARTH SANTOSH	AB	AB
5	7237	DARAGADE SRUSHTI SURESH	S.S.Daragade	S.S.Daragade
6	7238	GAIKWAD SHIVTEJ SACHIN	Sgaikwad	Sgaikwad
7	7239	GAIKWAD VIRAJ SAYAJIRAO	AB	AB
8	7240	GAVADE DIPAK BIKAJI	DGavade	DGavade
9	7241	GURAV ONKAR MAHESH	AB	AB
10	7244	JAHDAV PARTH PRAKASH	PJadhav	PJadhav
11	7245	JARALI ABHAY SHANKAR	AJarali	AJarali
12	7246	KAMBLE HARSHAD GANPATI	HKamble	HKamble
13	7247	KHARAPE ARJUN BAJARANG	Arjun	Arjun
14	7249	LAGARE AKASH ANANDA	AAlagare	AAlagare
15	7250	LOHAR SUSHANT SUBHASH	Sushant	Sushant
16	7251	MALI VIJAY HANAMANT	AB	AB
17	7252	MIRJE KAIVALYA ABHINANDAN		
18	7253	MULANI TAHIRHUSSAIN RAJU		
19	7254	PAGARE SARTHAK SANJAY		

VIVEKANAND COLLEGE, KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

Date: 15/10/2025

Sr. No.	Roll No	Name of Students	2DSC03ELE11	2DSC03ELE11
20	7255	PANDIT ADITYA MAHADEV		
21	7256	PATIL PRATHMESH SATISH		
22	7257	PATIL VIGHNESH NARAYAN		
23	7258	PATIL SAHIL DAGADU		
24	7259	POWAR MANDAR PRATAP		
25	7260	RAUT ANIKET SATISH	AB	AB
26	7261	SHAH NAMIT RAJENDRA		
27	7262	SHAIKH AYAAN FAUZAN	AB	AB
28	7263	TEVARE ADITI SADASHIV	AB	AB
29	7264	PATIL ADITI SAHEBRAO	AB	AB
30	7268	PATIL KSHITIJ RAVINDRA		
31	7283	ANGAJ OM LAHU	AB	AB
32	7284	BAVADEKAR ARYAN ANANDA		
33	7285	BHALEKAR JANHAVI SANDEEP		
34	7286	BIRANJE SUYASH UDAY		
35	7287	DEMANNA PIYUSH SURESH		
36	7288	GHADAGE ATHARV RAJESH		
37	7289	JADHAV PARAS RAMDAS		
38	7290	MANE SHREYASH YUVRAJ		
39	7291	MANE TUSHAR SANTOSH		
40	7292	MOMIN MAHAMMADANAS [illegible]		
41	7293	PATIL ANIKET NAMDE[illegible]		

Sr. No.	Roll No	Name of Students	Date: 15/10/2025	
			2DSC03ELE11	2DSC03ELE12
42	7294	PRABHU OM YASHWANT		
43	7296	AGALE SAMRUDDHI HINDURAV	S.H.Agale.	S.H.Agale.
44	7297	AWATE SARVASVI SWAPNIL		
45	7298	BEDAGE SAMRUDDHI SANJAY	AB	AB
46	7299	DESHINGE VASUNDHARA MARUTI	Deshinge	Deshinge
47	7300	HAJGULKAR SALONI SURESH	AB	AB
48	7301	HEBBALI RITISHA SANTOSH	AB	AB
49	7302	JADHAV SANJANA ASHWIN	Jadhav	Jadhav
50	7303	KALANTRE PRANALI SARJERAO	Pranali	Pranali.
51	7304	PATIL MANALI DEVAPPA	Patil	Patil
52	7305	PATIL SANSKRUTI DHIRAJ		
53	7307	SATALE PRAGATI UTTAM		
54	7308	TAMBOLI MARIYA RIYAJ		
55	7309	WADKAR NIKITA VISHWAS		
56	7310	WARKARI SRUSHTI DAGADU	Swarkari	Swarkari
57	7311	BARGE ABHILASHA BAJIRAO	A.B.Barge	A.B.Barge
58	7312	BEDAGE YASH APPASAHEB		
59	7313	BHINGARDE AARYA SANTOSH	A.S.Bhingarde	A.S.Bhingarde
60	7314	BHOSALE NAMRATA NANDKUMAR	Bhosale.	Bhosale.
61	7315	DAVARI SURAJ EKNATH		
62	7316	GAVALI JANHAVI TANAJI	J.T. Gavali	J.T. Gavali
63	7317	JAMDAR JYOTIRAJ INDRAJIT	Jamdar	Jamdar

VIVEKANAND COLLEGE KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

Sr. No.	Roll No	Name of Students	Date: 15/10/2025	
			2DSC03ELE11	2DSC03ELE12
64	7318	KORANE SHRAVANI SAKHARAM	Shravani	Shravani
65	7319	MACHALE VIRAJ SANGRAM	Vmachale	Vmachale
66	7320	PATEL RUHI HARESH	R.H.Patel	R.H.Patel
67	7321	PATIL NAKSHATRA SAMADHAN	Patil	Patil
68	7322	PATIL PRASANNA HARISHCHANDRA	Platy	Platy
69	7323	PATIL SHREYASH MARUTI	S.M.P	S.M.P
70	7324	PATIL VEDIKA DEEPAK	Patil	Patil
71	7325	PEDNEKAR ASMITA BABURAO	Apednekar	Apednekar
72	7326	TAMHANEKAR ARPITA DHANAJI	Arpita	Arpita
73	7327	TIKUDAVE SIDDHI NILESH	SNT	SNT
74	7497	PATIL AYUSH ASHOK	APatil	APatil
75	7562	PATIL KETKI AMIT	KPatil	KPatil
76	7566	JADHAV SHUBHAM RAJENDRA	S.R.J	S.R.J
77	7569	GUJAR VEDIKA DHANAJI	Vedika	Vedika
78	7571	PATIL KEDAR BABASO	KPatil	KPatil
79	7573	PATIL ATHARV DATTATRAYA	AB	AB
80	7579	KADAM PAWAN BAJIRAV	P.B.kadam	P.B.kadam
81	7583	NIGADE PARTH MANOHAR	Pnigade	Pnigade
82	7588	MUSHRIF ALFIYA KAMAAL	Mushrif	Mushrif
83	7593	SAVANT PIYUSH PUNDALIK	Savant	Savant
84	7595	NIGADE HARSHVARDHAN RAVIRAJ	Harsh	Harsh
85	7606	MALAI SHREYA SHANKAR	Smalai	Smalai
86	7264	Aditi Sahebrao patil	Patil	Patil

Sem - I

VIVEKANAND COLLEGE, KOLHAPUR
(AN EMPOWERED AUTONOMOUS INSTITUTE)
Class: B.Sc.-I, Semester-I,

Course code: 2DSC03ELE11 **Subject:** Analog Electronics- I
Date:-15/10/2025 **Time:** 03:00 to 03:30 **Marks:** 10

Q.1.Select the Correct alternative **[2M]**

i. Preset is the .....resistor.
   a) film b) fixed c) variable d) none of these
ii. Electrically operated switch is .....
   a) transformer b) relay c) fuse d) inductor

Q.2 .Attempt any Two (Four mark each) **[8 M]**

i. Explain different types of inductors..
ii. Give classification of resistors and explain carbon composition of resistor.
iii. Explain construction and working of electromagnetic relay.
iv. Write a note on Capacitor.

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur (An Empowered Autonomous Institute)

Class: B.Sc.-I, Semester-I, Internal Examination Oct- 2025-26

Course code & Name: DSC03ELE12: Digital Electronics-I

Time4.00 to 4.30 pm Date:-15/10/2025 **Marks: 15**

Q.1 Select the Correct alternative **[2]**

1) Radix of binary number system is _____.

a) 1 b) 2 c) 8 d) 10

2) ASCII code is _____ bit code.

a) 7 b) 8 c) 9 d) 10

Q.2.Attempt any Two (4 marks each) **[8]**

1) Write a note on any two number system with example
2) Explain 1's complement method of binary subtraction
3) write a note on BCD and EBCDIC code

07/10

Dipak. B. Govade.

॥ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ॥
- शिक्षणमहर्षी डॉ. बापूजी साळुंखे

VIVEKANAND COLLEGE, KOLHAPUR
(An Empowered Autonomous Institute)
Assignment

Student's Sign :	Govade
Seat No./ Roll No. :	7240
Seat No./ Roll No. In words	Digital Electronics - I
	06342

प्र. क्र.
Q. No.

Q.1.

1) Radix of Binary number system is 2.

2) ASCII code is 7 bit code.

02

VIVEKANAND COLLEGE KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

02 Section | Q. No. | Marks

प्र. क्र.
Q. No.

Q.2.

1) ① Hexadecimal system:-

The hexadecimal system is 16 digits, and from the digits is 0 to 9 no and A to F is alpha battic number system.

example :- $(3502)_{16}$

$= 3\times16^3 + 5\times16^2 + 0\times16^1 + 2\times16^0$

$= 3\times4096 + 5\times256 + 0 + 2\times1$

$= 12288 + 1280 + 2$

$= (13570)_{16}$

② Decimal system:-

The decimal system is 10 digits. are the 0 to 9 number digit.

Example :- $(1254)_{10}$

$= 1\times10^3 + 2\times10^2 + 5\times10^1 + 4\times10^0$

$= 1\times1000 + 2\times100 + 5\times10 + 4\times1$

$= 1000 + 200 + 50 + 4$

$= (1254)_{10}$

Section | Q. No. | Marks | 03

प्र. क्र.
Q. No.

3) BCD :-
The BCD code is Binary coded to Decimal code. the BCD code is 4 bit. the BCD code is 0 to 9 digit number ~~syseton~~ .

0	1	2	3	4	5	6	7	8	9
0000	0001	0010	0011	0100	0101	0110	0111	1000	1

Example :- $(4301)_2 = \ldots\ldots (10)$

$= 4 \times 2^3 + 3 \times 2^2 + 0 \times 2^1 + 1 \times 2^0$

$= 4 \times 8 + 3 \times 4 + 0 + 1$

$= 32 + 12 + 1$

$= (45)_{10}$

Pooja Prakash Jadhav

07/10

॥ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ॥
– शिक्षणमहर्षी डॉ. बापूजी साळुंखे

VIVEKANAND COLLEGE, KOLHAPUR
(An Empowered Autonomous Institute)
Assignment

Student's Sign :	Jadhav
Seat No./ Roll No. :	7244
Seat No./ Roll No. In words	Seven-thousand two hundred. Fourty-four
	06343

प्र. क्र.
Q. No.

Q1 1) Radix of binary number system is b) 2.

2) ASCII code is a) 7 bit code.

VIVEKANAND COLLEGE KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

02 Section | Q. No. | Marks

प्र. क्र.
Q. No.

Q2 a)

1) ① Hexadecimal system :-

The Hexadical system is a system is 16 and from a digits. is 0 to 9 no and 'A to F' is alphabatical number system.

example :- $(5502)_{16}$

$= 5 \times 16^3 + 5 \times 16^2 + 0 \times 16^1 + 2 \times 16^0$

$= 3 \times 4096 + 5 \times 256 + 0 + 2 \times 1$

$= 12288 + 1280 + 2$

$= (13570)_{16}$

② Decimal system :-

The Decimal system is 10 digits are the 0 to 9 number digites

Example :- $(1254)_{10}$

$= 1 \times 10^3 + 2 \times 10^2 + 5 \times 10^1 + 4 \times 10^0$

$= 1 \times 1000 + 2 \times 100 + 5 \times 10 + 4 \times 1$

$= 1000 + 200 + 500 + 4$

$= (1254)_{10}$

Section	Q. No.													03
	Marks													

प्र. क्र.
Q. No.

3) BCD.

The BCD code is Binary coded to Decimal code. the BCD code is 4 bit. BCD code is 0 to 9.

1	2	3	4	5	6	7	8	9
0001	0011	~~0000~~ 0010	0100	0101	0110	0111	1000	1001

Eg $(4301)_2$ ---- (10)

$= 4 \times 2^3 + 3 \times 2^2 + 0 \times 1 +$

Kaivalya Abhinandan Mirje

॥ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ॥
– शिक्षणमहर्षी डॉ. बापूजी साळुंखे

कोल्हापूर १९६४

VIVEKANAND COLLEGE, KOLHAPUR

(An Empowered Autonomous Institute)

Assignment

10/10

Student's Sign :	
Seat No./ Roll No. :	7252
Seat No./ Roll No. In words	06381

Subject:- Analog electronics -I

प्र. क्र. / Q. No. 1

1. Preset is the (c) Variable resistor ✓

2. Electrically opperated swith is (b) relay ✓

VIVEKANAND COLLEGE KOLHAPUR (Empowered Autonomous) ESTD JUNE 1964

02 Section | Q. No. | Marks

प्र. क्र. 2
Q. No.

ii. - Resistors are passive components as they do convert the form of elatricity. Resistors are used to resist current from a circuit, resistor protect the circuit from sudden current spike.
- The value of resistors is measure in ohm (Ω), ohm (Ω) is derived from greek word.
- Resistors value can range from Ω to MΩ and is also noted in waltage.

- 

Symbol

- There are two types of resistors i) fixed resistor and ii) Variable resistor
- Carbon composition resistor :- Resistors are widely made by diffrent compounds or elements but most common type is carbon composition resistor. Carbon composition resistor is made from a ratio of carbon and ceramic. A carbon tube is build along with two terminals or pins, It is then dipped or coated in ceramic coating. The resistance of this resistor is derived from the ratio of carbon and ceramic material used. Carbon composition resistor comes with few tolerences like 5%, 10%, 20% depending on the colour of band, the resistor's resistance is displayed by colour bands on the resistor.

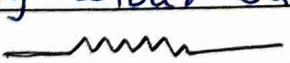
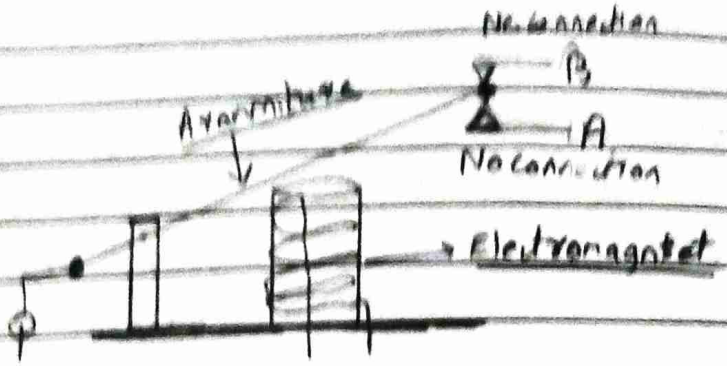


Fig:- Symbol

Fig:- resistor

Section | Q No / Marks | 03

Q. No. 11



- The electromagnetic relay consists of an electromagnet which is right beneath the Armature and the armature is connected in rest position to terminal 'B' and another terminal 'A' is placed right in front of terminal 'B'.
- The electromagnetic coil is connected to low voltage, when the coil is active or when it is connected to power supply the an magnetic field is created pulling the Armature hammer downward completing the circuit, the Armature hammer is connected to another terminal which acts as a switch.
- The electromagnetic switch is used to switch on/off high voltage using low voltage.

Samruddhi Hindurav Agale

॥ ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार ॥
- शिक्षणमहर्षी डॉ. बापूजी साळुंखे

VIVEKANAND COLLEGE, KOLHAPUR
(An Empowered Autonomous Institute)
Assignment

Student's Sign :	S.H. Agale
Seat No./ Roll No. :	7296
Seat No./ Roll No. In words	Seven thousand Two hundred and Ninety ~~Nine~~ Six
	06411

Internal Examination.

Analog Electronics - I

प्र. क्र. Q. No.

Q.1

i)

→ c) variable.

ii)

→ b) relay

Q.2

ii) Carbon Composition of resistor :-

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① Carbon composition of resistor is made from carbon powder and graphite powder. and non-conducting ceramic powder is bind to all together.

② This material molded in cyliendrical shape with a metal wire.

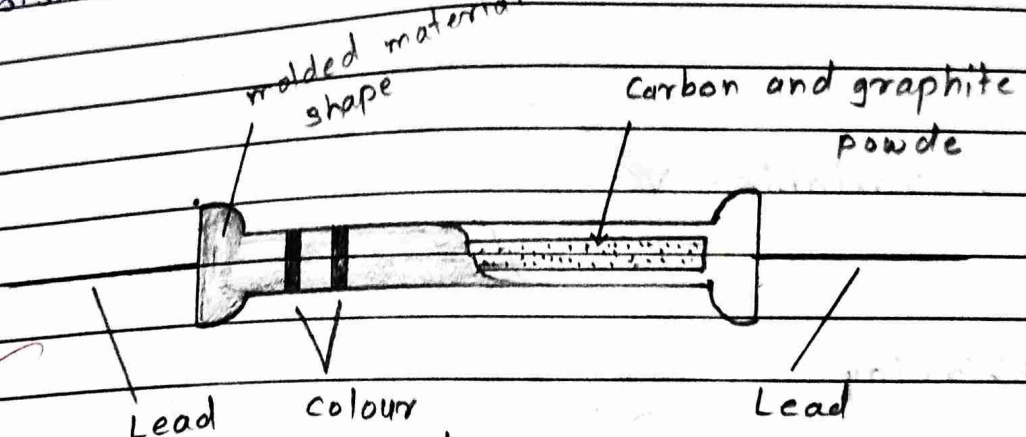
③ Carbon composition resistor with the ~~range~~

02 Section Q No. Marks

प्र. क्र. Q. No.

current rating is $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 watts. and tolerance rage ± 5 %, ± 10%, ± 20%, ± 20 %.

④ Carbon composition resistor is a widely used resistor. and resistance rage 1ohm to ~ 22 MΩ.



i) Their are three types of inductor.

① Air inductor :—

In this inductor ceramic material powder used. because of ceramic has no maigetic.