

Vivekanand College, Kolhapur (Autonomous)

B.Sc. Part- II (Electronics) (Sem-III)

Surprise Test

Course Code: DSC - 1005 C

Section-I: Electronic Communication

Date: 01/10/2022

Marks: 20

Q1. Multiple choice Questions

[4 marks]

1. Communication technique using modulation is referred to as -----
A) Only Voice B) base band signal
C) Only video D) broad band.
2. The electronic components such as resistor, diode and transistor are main sources of----- noise.
A) external B) internal
C) thermal D) shot
3. ATM machine is example of ----- communication.
A) Full duplex B) half duplex.
C) Both A and B D) simplex
4. The portion of the electromagnetic spectrum occupied by a signal is called as -----
A) Bandwidth B) Wavelength
C) Frequency D) all of these

Q2. Attend the following questions

[4 marks]

1. Define the term signal to noise ratio
2. Define the attenuation concept in communication.

Q3. Attempt any two.

[12 marks]

1. Define the noise. What is mean by external noise? Describe its different types.
2. Draw the basic block diagram of electronic communication system. Explain the function of each block in short.
3. Explain simplex and duplex modes of communication with example.



Shri Swami vivekanand Shikshan Santha's
VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)
B.Sc . - II (Sem-III)-2022-23
Electronics Department
Surprise Test on Electronics Communication

Date:01/10/2022

Sr. No.	Roll No.	Student Name	Sign
1	7722	ANCHI SIDDHARTH VIKAS	<u>siddharth</u>
2	7723	ATIGRE SARTHAK SUJIT	<u>S.S.A</u>
3	7724	BUCHADE VIVEK VASANT	<u>Buchade</u>
4	7725	CHAVAN SNEHAL BHIKAJI	<u>CSB</u>
5	7726	CHOUGULE ROHIT ANAND	<u>Chougule</u>
6	7727	DANGAR NOOR SANAULLA	<u>Dangar</u>
7	7728	Desai Sejal Anil	<u>Desai</u>
8	7729	GADKARI SOURAV SHARAD	<u>Gadkari</u>
9	7730	Jadhav Ananya Netaji	<u>Jadhav</u>
10	7731	KUMBHAR TRUPTI ARVIND	<u>Kumbhar</u>
11	7732	PATIL DIPTI DILIP	<u>PDP</u>
12	7733	Patil Sudarshan Rajaram	<u>Patil</u>
13	7734	PAWAR SHUBHAM SUDHIR	<u>Pawar</u>
14	7735	PENDHARI SAMIR BAKASH	<u>Pendhari</u>
15	7736	PIRJADE SAHAD MAKSUD	<u>-AB-</u>
16	7737	SHINDE AJIT BABAN	<u>Shinde</u>
17	7738	SHINDE SHIVAM FIROJ	<u>Shinde</u>
18	7739	SWAMI YASH ANIL	<u>-AB-</u>
19	7740	TERANI AKSHATA SANJAY	<u>Terani</u>
20	7777	SHAIKH ADNAN MOHAMMADYASIN	<u>Shaikh</u>
21	7778	BERAD ROHIT BHALCHANDRA	<u>Bherad</u>
22	7779	BHAPKAR SAI SANTOSH	<u>-AB-</u>
23	7780	BHOSAKE ADITYA AJIT	<u>-AB-</u>
24	7781	Bhosale Asleshiya Dhanawant	<u>-AB-</u>
25	7782	CHOUGULE SIDDHESH SURESH	<u>Chougule</u>
26	7783	Jadhav Rajdeep Uday	<u>Jadhav</u>



27	7784	Jadhav Rutuja Sunil	
28	7785	KADAM PREM BABASAHEB	P. B. Kadam
29	7786	Kagude Darshan Sanjay	- Ab -
30	7787	MANER MOHAMMED TAQUEE MOHAMMED SHAFI	
31	7788	Modak Mussaddique Firoz	M. M. Firoz
32	7789	Patil Akshata Ashok	
33	7790	PATIL ATHARV SHAHAJI	
34	7791	PATIL OMKAR SANJAY	
35	7792	PATIL PARTH PRAVIN	P. Patil
36	7793	PATIL PRATIK SURESH	
37	7794	PATIL SAKSHI RANGRAO	- Ab -
38	7795	PATIL SANIKA ANANDA	
39	7796	Patil Sayali Sampat	
40	7797	PATIL SHAKTI PRAKASH	
41	7798	PATIL SHUBHAM JANARDAN	S. J. Patil
42	7799	PATIL VAISHNAVI KRISHNAT	- Ab -
43	7800	PATIL VIPUL Ashok	
44	7801	Pawar Vaishnavi Subhash	
45	7802	Rathod Snehal Ramesh	- Ab -
46	7803	SAVARATKAR ONKAR HARIBHAU	
47	7804	SHINDE AARY ANIL	
48	7805	SUTAR SHRADDHA NAGESH	
49	7806	Upadhye Suyash Bahubali	- Ab -
50	7807	WAWARE SHIVANJALI SANJAY	

51 8994 Pratik Mahesh Desai

P. R. Bagade
Examiner's Sign



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Marksheet

Sr. No.	Roll No.	Student Name	Marks out of 20
1	7722	ANCHI SIDDHARTH VIKAS	8
2	7723	ATIGRE SARTHAK SUJIT	6
3	7724	BUCHADE VIVEK VASANT	6
4	7725	CHAVAN SNEHAL BHIKAJI	5
5	7726	CHOUGULE ROHIT ANAND	9
6	7727	DANGAR NOOR SANAULLA	5
7	7728	Desai Sejal Anil	11
8	7729	GADKARI SOURAV SHARAD	8
9	7730	Jadhav Ananya Netaji	7
10	7731	KUMBHAR TRUPTI ARVIND	10
11	7732	PATIL DIPTI DILIP	5
12	7733	Patil Sudarshan Rajaram	8
13	7734	PAWAR SHUBHAM SUDHIR	7
14	7735	PENDHARI SAMIR BAKASH	7
15	7736	PIRJADE SAHAD MAKSUD	Ab
16	7737	SHINDE AJIT BABAN	8
17	7738	SHINDE SHIVAM FIROJ	6
18	7739	SWAMI YASH ANIL	Ab
19	7740	TERANI AKSHATA SANJAY	13
20	7777	SHAIKH ADNAN MOHAMMADYASIN	7
21	7778	BERAD ROHIT BHALCHANDRA	5
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28	7785	KADAM PREM BABASAHEB	4
29	7786	Kagude Darshan Sanjay	Ab
30	7787	MANER MOHAMMED TAQUEE MOHAMMED SHAFI	5
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49	7806	Upadhye Suyash Bahubali	Ab
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51	8984	Pratik Mahesh Desai	9


 P.R. Bagade
 Teacher Sign


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Name - Desai Sejal Anil.

"ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार"

-शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha Kolhapur's

11/20 J

VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

SUPPLIMENT

Suppliment No. :

Roll No. : 1728

Class : Bsc IT

Signature
of
Supervisor

Subject : Electronics

Test / Tutorial No. :

Div. : C

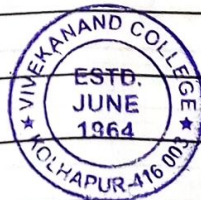
Q.1

1)

Communication tech. B) base band signal

2) a) external.

3) A) Full duplex.



- Q.2 1) 1) Signal to noise ratio, denoted by SNR indicates the relative strength of signal and noise.
- 2) If signal is strong and noise is weak then SNR ratio will be high.
- 3) If signal is weak and noise is strong then SNR ratio will be low.
- 4) The electronic equipment operates a SNR high as high as possible.
- 5) The signal term signal is indicates the voltage and ~~current~~ ^{power}. Hence, SNR ratio indicates that

$$\frac{S}{N} = \frac{Sv}{Nv} \quad \text{OR} \quad \frac{S}{N} = \frac{Sp}{Np}$$

Here,

e) ① The loss of strength of signal propagation through a communication channel is known as attenuation.

② The strength of signal fall off with a distance.



Q.3

1) Noise : In common use, the word noise means any unwanted sound. The noise is unwanted signal presented in wanted signal due to fluctuation of a electronic signal and circuit characteristics.

② Noise is introduced in transmitting media is term as external noise.

③ External noise occur due to following

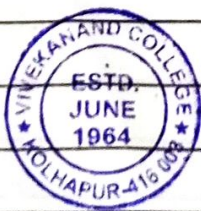
a) Home-made noise :

Home-made noise produced spars by spark producing system such as engine ignition system, fluorescent signal and electric motors. The home-made noise frequency is randomly up to ~~500~~ around 500 MHz.

b) Atmospheric noise : It is caused by naturally occurring disturbance in the earth atmospheric because of lightning discharge, thunderstorm, etc.

The frequency content spread over the radio spectrum.

c) Space noise - Noise arise due to sun is called as sun noise, which is pick at reach 11 year. The other star causes a space noise is known as cosmic noise. The frequency range is 8 MHz to 1.5 GHz.



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SUPPLIMENT

Suppliment No. : 1

Roll No. : 7728

Class : Bsc II

Signature
of
Supervisor

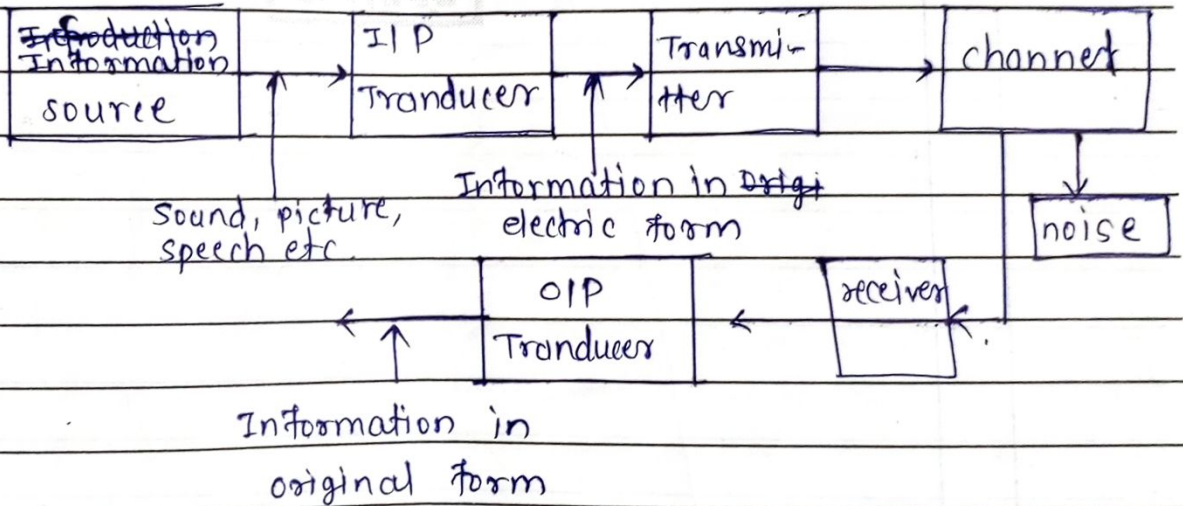
Subject :

Test / Tutorial No. :

Div. :

Q.3

2)



4

The above figure shows block diagram of electronic communication system.

Electronic communication system consist of three main parts ① Transmitter ② a communication channel ③ a receiver

The real human or source generates a signal that contain a information and that



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SUPPLIMENT

Signature of Supervisor

Suppliment No. : Teupti Revind Kumbhar

Subject :

Roll No. : 7731

Test / Tutorial No. :

Class :

Div. :

1. Communication technique using modulation is referred to as Base + broad band

(A) only voice

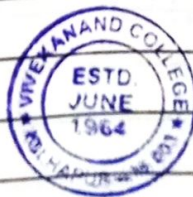
(C) only radio

(B) Base band signal

(D) Broad band

2. The electronic communication components such as resistor, diode & transistor, are main sources of external

3. ATM machine is eg of full duplex communication



Q2 Attend following questions.

① Define the term signal to noise ratio.

→ The term signal to noise ratio is the S/N ratio in which strength of signal and noise in communication called as S/N ratio. If signal is.

1/2

② Define attenuation concept in communication.

→ Attenuation :- It is the concept in which the strength of signal is decreased during the transformation of information.

1/2

Q3. Any two.

① Define noise. What is meant by external noise? Describe its types.

② Explain simplex & duplex modes of communication with eg.



→ 1) Noise is defined as "It is word which is used in the daily life, i.e. the noise means the disturbance in the original sound/communication." There are two types of noise

a) External communication.

b) Internal communication.

d) External communication: In external communication there are three types.

i) Human noise.

ii) Natural noise.

iii)

1) Human noise = In human noise, there are disturbance up to 500 MHz. It is due to lights, televisions, etc. by humans.

ii) Natural noise = In it happens because of the nature. The noise of thunder, etc. It happens naturally.

iii) Space noise = It happens solar system. The noise of sun is called as solar noise.

Q2 →

1) Simplex mode of communication:-

① It is very simple type of communication.

② It is one way communication.

③ In this we can take information only.

④ eg. TV, radio, etc.



2) Duplex mode of communication :-

① It is ⁱⁿ two types i.e. half duplex & full duplex

② In half duplex we can

