



### SRI VENKATESWARA COLLEGE OF ENGINEERING DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ELECTRONICS AND COMMUNICATION ENGINEERS ASSOCIATION, THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS **STUDENTS FORUM - SVCE, ROBOTICS AND ARTIFICIAL INTELLIGENCE CLUB REPORT ON BUG HUNT**

### **Proposal Of Event:**

SWCE Sri Venkateswara College of Engineering	RAC
SRI VENKATESWARA COLLEGE OF ENGINEERING Pennalur,	
DEPARTMENT OF ELECTRONICS AND COMMUNIC in Association with ELECTRONICS AND COMMUNICATION ENGINEERS	
ELECTRONICS AND COMMUNICATION ELECTRONICS AND ELECTRONICS AND TELECOMMUNI	
ROBOTICS & ARTIFICIAL INTELLIGEN	
Proposal for conducting Pro	oject Expo
ECE Association, IETE - Students Forum and RAIC of SVCI Expo event on Wednesday, 28th September 2022 in our col be exhibited during NAAC Review on Thursday, 29th Septe	nege premises raiser i s
The event consists of 1 round. Each team must display their p Each team can consist upto 4 members. The event is aimed to students. Certificates will be awarded to the winners and pa	the truthe second s
Please accept this proposal and grant permission to conduct	this event.
Venue: ECE Department Timing: 9:30 A.M onwards Thank You	
TJJM	Duther Gun .
Signature of the Faculty Co-ordinator	Signature of the HoD Dr.Muthukumar, Professor,SVCI

Dr.T.J.Jeyap

### **REPORT ON BUG HUNT**

### ELECTRONICS AND COMMUNICATION ENGINEERS ASSOCIATION, THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS STUDENTS FORUM - SVCE, ROBOTICS AND ARTIFICIAL INTELLIGENCE CLUB

Bug Hunt was organized by the department of Electronics and Communication Engineering in association with the Electronics and Communication Engineers Association (ECEA); the Institution of Electronics and Telecommunication Engineers Student Forum of SVCE (ISF SVCE) and the Robotics and Artificial Intelligence Club (RAIC). The event was conducted exclusively for the second-year, ECE students of Sri Venkateswara College of Engineering. Bug Hunt was aimed towards making the students use their academic as well as practical knowledge for analyzing circuits. A total of 42 teams (84 students) registered for the event, out of which 5 teams (10 students) were shortlisted based on their scores in the preliminary round.

Commencement of the event	September 28 <sup>th</sup> 2022 (10AM IST)
End of the event	September 28 <sup>th</sup> 2022 (3PM IST)
Total Teams	42 Teams
Total Participants	84

### About The Event:

The event commenced with a special address by Dr.S.Muthukumar, Head of the Department, ECE. He also spoke about the importance of participating in various events apart from academics. He also gave a short note on what is debugging. The rules of the event were explained to all by the office bearers. Bug Hunt consisted of two rounds to determine the performance of the participants. In the first round, all the teams were given 20 MCQ questions with a time limit of 30 minutes. Out of 42 teams, five teams were shortlisted for the second round. In the second round, each of the shortlisted teams was given circuits with missing components and some faults, which they had to fix, and show the output. The winner was judged based on the explanation, quickness of solving, and understanding of the concept.

# BUG HUNT & PROJECT EXPO (2022-2023)

# **AGENDA:**

09.00am to 09.30am	: Registration for Project Expo
09.30am to 09.40am	: Prayer song
09.40am to 10.00am	: Welcome address by Ms.Lakshana Sasikumar, Honorary Treasurer, IETE-SF.
10.00am to 10.15am	: Special address by Dr.S.Muthukumar,HOD-ECE.
10.15am to 11.15am	: Start of Project Expo and Round 1 of Bug Hunt.
11.15am to 11.30am	: Announcement of shortlisted teams for Round 2 of Bug Hunt.
11.30am to 12.30pm	: Lunch Break.
12.30pm to 02.30pm	: Round 2 of Bug Hunt.
02.30pm to 02.45pm	: Announcement of results and distribution of certificates.
02.45pm to 02.55pm	: Vote of Thanks by Dr.T.J. Jeyaprabha, ECEA, IETE-SF, RAIC Co-ordinator.
02.55pm to 03.00pm	: National Anthem.

Dr.T.J.Jeyaprabha (ASP,ECEA, IETE-SF, RAIC Co-ordinator) (AP,ECEA, IETE-SF, RAIC Co-ordinator)

Mr.S.Elangovan

Dr.S.Muthukumar (HOD-ECE)









# SRI VENKATESWARA COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

in Association with

ELECTRONICS AND COMMUNICATION ENGINEERS ASSOCIATION

Along with

THE INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS &

**ROBOTICS AND ARTIFICIAL INTELLIGENCE CLUB** 

# BUG HUNT

# Exclusively for 2nd years!!!

TEAM OF 2



WIN EXCITING CASH PRIZES !!!

Convenor: Dr.S.Muthukumar, HOD, ECE

**Coordinators:** Dr.T.J.Jeyaprabha, Associate Professor, ECE Mr. S Elangovan, Assistant Professor, ECE

**VENUE: ECE Department** 

**REGISTER** @

https://forms.gle/UFsZjBX3W7R8qbox6



PRITHVI RAJ V S Secretary ECEA,9789854546

MRDULLA V NAARAYAN Honorary Secretary IETE,8903870875

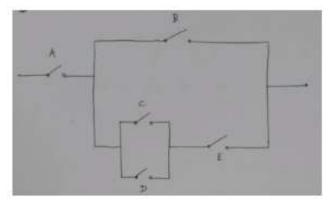
Flyer for the event:

# Round 1 sample question:

# **BUG HUNT ROUND 1 MCQ**

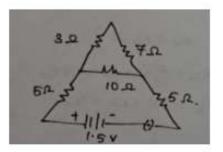
### Questions:

1) The equivalent boolean expression for the following diagram is:



- a) A+B(CD+E)
- b) A+B+(C+D)E
- c) A(B+(C+D)E)
   d) A(B(C+D)+E)
- d) A(B(C+D)+E)

2)



The current flowing through the 5 ohm resistor:

- a) 0.1 AMPERES
- b) 0.3 AMPERES
- c) 0.4 AMPERES
- d) 1 AMPERES

3) Two wires of the same materials have the same length but their radii are in the ratio 5:3. They are combined in series where the resistance of the thicker wire is 12ohms. Calculate the resistance of the combination.

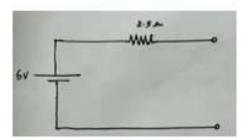
- a) 40
- b) 12
- c) 32
- d) 20

 The amount of photoelectric emission current depends on (A)frequency of incident radiation

- (B)intensity of incident radiation
- (C)both frequency and intensity of incident radiation
- (D)none of the above

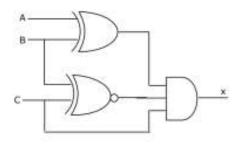
5) A resistor has the following color bands: yellow, violet, green and silver. Its nominal value is

- A)  $4700 \text{ k}\Omega \pm 10\%$ B)  $47 \text{ k}\Omega \pm 10\%$ C)  $4.7 \text{ k}\Omega \pm 10\%$ D)  $4700 \Omega \pm 10\%$
- 6) The equivalent current source network for the following network is:



- a) 2.4 A current source series with 2.5Ω resistor
- b) 2.4 A current source parallel with 2.5Ω resistor
- c) 15 A current source series with 2.5Ω resistor
- d) 15 A current source parallel with 2.5Ω resistor
- The AND gate IC is:
- a) IC7402
- b) IC7408
- c) IC7404
- d) IC7432

#### 8) For the following logical circuit to have output x=1 the inputs A,B,C should be:

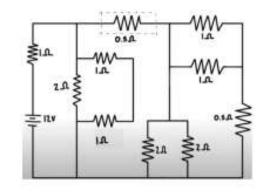


- a) 1,0,1
- b) 0,0,1
- c) 1,1,1
- d) 0,1,1

9) \_\_\_\_\_ type of diode which exploits reverse bias junction of PN voltage to exhibit an electrical phenomenon which uses an electric field to store energy?

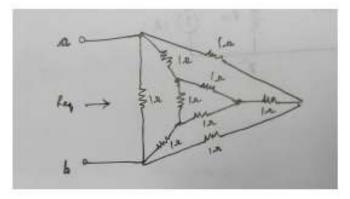
- a) Varactor diode
- b) Zener diode
- c) Tunnel diode
- d) PIN diode

10) Find the current flowing through the highlighted 0.5Ω resistor.



Answer: \_\_\_\_\_

 Find the equivalent resistance across the terminals a and b if each resistor has a value equal to 1 ohm.



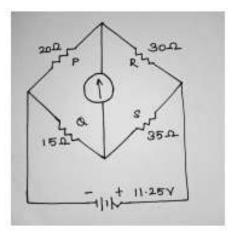
a) 8/3 ohms

b) 1/3 ohms

c) 9/20 ohms

d) 8/15 ohms

12) Calculate the current flowing through the battery



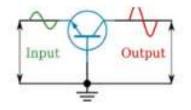
a) 0.36 A
b) 22.22 A
c) 0.25 A
d) 0.45 A

13) Convert the given number to its binary equivalent:

 $(4.47)_{10} \rightarrow ()_2$ 

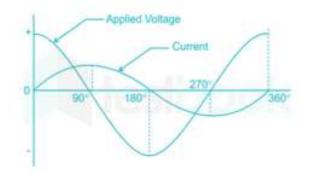
- a) 100.010
- b) 100.011
- c) 100.100
- d) 100.110

14) The above circuit configuration of transistor has



- a) A high input resistance and low output resistance
- b) A high input resistance and high output resistance
- A low input resistance and high output resistance
- d) A low input resistance and low output resistance

15) In the given figure, the waveforms of the voltage and current in a AC circuit. Which electrical components does this AC circuit contain?



- a) R only
- b) R and L in series
- c) Lonly
- d) R and L in parallel

16) How should a switch be installed in a circuit to ensure proper operation?

- a) Parallel to the load
- b) Series with the load
- c) Either way possibled) At the ground point
- 17) What voltage will an AC voltmeter display?

Answer: \_\_\_\_\_

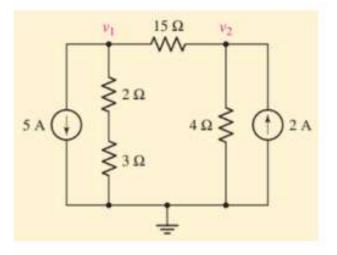
#### 18)

Match the following:

	List I (Network Theorems)		List II (Most distinguished property of networks)
Α.	Reciprocity	1.	Impedance Matching
Β.	Tellegen's	2.	Bilateral
C.	Superposition	3.	$\sum_{k=0}^{\frac{b}{2}} v_k(t_1) l_k(t_2) = 0$
D,	Maximum power transfer	4.	Línear
		5.	Non-linear
A-	1,B-2,C-3,D-4		
A-	1,B-2,C-3,D-5		

- a)
- b)
- A-2,B-3,C-5,D-1 A-2,B-3,C-4,D-1 C) d)

19) For the below given circuit, determine the nodal voltages v1 and v2.

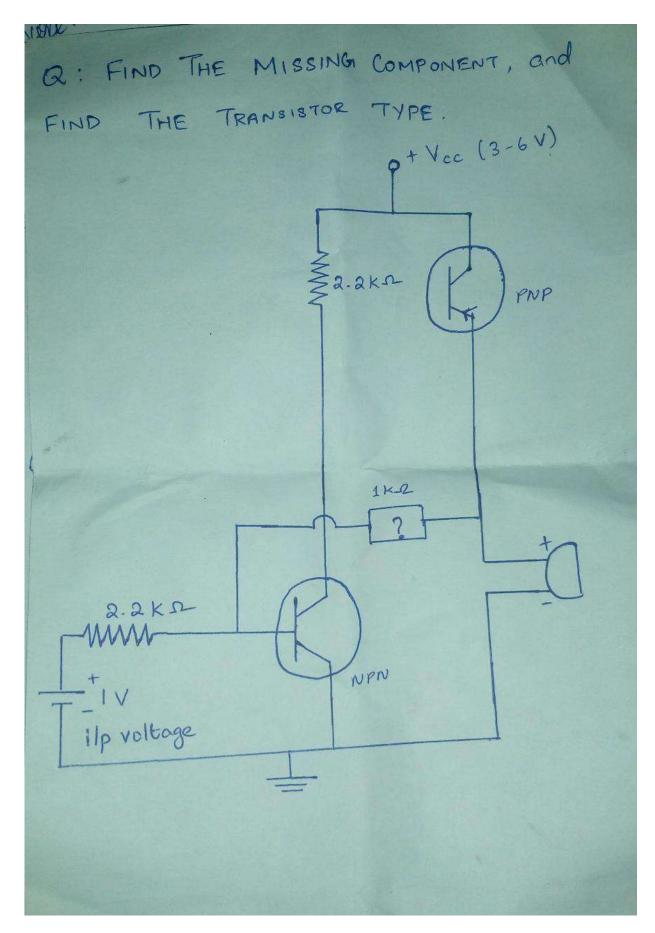


- a) v1= 145/8 V ; v2= 5/2 V
- b) v1= -145/8 V ; v2= 5/2 V
- c) v1= 145/8 V ; v2= -5/2 V
- d) v1= -145/8 V ; -v2= 5/2 V

20) The impurity commonly used for realizing the base region of an NPN transistor

- a) Boron
- b) Phosphorous
- c) Gallium
- d) Indium

Round 2 sample question:



Snaps Of The Event



Sri Venkatesw College of Eng Google Food Court, Svce College, Tamil Nadu 602 Lat 12.988153° Long 79.974503° 28/09/22 09:55 AM GMT +05:30



# Winners of Bug Hunt:

1st place	R Parvesh& A. Ram Solaiappan
2nd place	S K Kavya& P Mahisha
3rd place	S Mukesh and B Nithish Kumar

The winners were awarded a cash prize of Rs 1200/- for the first place, Rs.500/- for the second place, and Rs.300/- each for the third place. And all participants were given participation certificates.

Participation List:

3	Timestamp	Email Address	Team Lead Name	Participant 2 Name
2	9/25/2622 19:06:01	2021ec0740@svce.ac.in	Madhay b	V kiran yadav
3	9/25/2022 19:07:22	rameshparvesh@gmail.c	PARVESH R	RAM SOLAIAPPAN A
4	9/25/2022 19:27:24	jeevalatha.d2004@gmail	Jeevalatha D	Akshaya Nethra N
5	9/25/2022 19:34:53	skk0521128@gmail.com	S. K. Kavya	P. Mahisha
6	9/26/2022 19:44:27	princediraj@gmail.com	Diraj A	Arthiya N G
7	9/25/2022 19:51;57	2021ec0648@svce.ac.in	R.Sridevi	K.J.Yazhini
8	9/25/2022 20:02:33	suryaprakashpw@gmail.	Suryaprakash.S	SriVarshini S
9	9/25/2022 20:11:59	2021ec0839@svce.ac.in	S Bharath Kumar	Karupasamy
10	9/25/2622 20:15:38	ashish010603@gmail.co	Ashish S	Aadhithya Narayanan B
11	9/25/2022 20:26:45	ashoklogeshwar@gmail.	Logeshwar, A	Manikandan .RM
12	9/25/2022 20:51:31	sdpka2020@gmail.com	Deepika S	Akash B
13	9/25/2022 21:38:10	2021ec0107@svce.ac.in	Kiran sekar S	Rahul A
34	9/25/2022 23:21:12	bhuvansankar2809@gm	Bhuvan Sankar.S	Charan kumar.A
15	9/25/2022 23:23:52	2021ec0655@svce.ac.in	SV Karthikeyaan	Abhishek N
16	9/26/2022 10:18:01	yogeswaripalanivel@gm.	Varsha S	Yogeswari P
17	9/26/2022 10:24;44	aspnpraveen@gmail.con	A.S.PRAVEEN	Rahul, K
12	9/26/2022 12:31:59	tanyaramesh19@gmail.c	TANYA R J	SASRIKA U
19	9/26/2022 14:53:09	2021ec0431@svce.ac.in	Sri Sandhiya R	Tamizharasi PM
20	9/26/2022 16:29:24	2021ec0679@svce.ac.in	Lathikaa Shri S	Saambovi PU
23	9/26/2022 18:30:24	umeshanandh08@gmail	UMESH ANANDH S	THARUN K R
22	9/26/2022 17:26:08	2021ec0264@svce.ac.in	Priya dharshini S	Madhu vanthi
29	9/26/2022 17:35:58	2021ec0239@svce.ac.in	Tarun kumar.S	Sivalakshmi B
24	9/26/2022 18:17:50	2021ec0002@svce.ac.in	Akshaya Nettira, N	Kavitha
25	9/26/2022 19:12:25	dhanshrepriya@gmail.cc	Dhanshrepriya P C	Gogulapriya A
25	9/26/2022 19:18:34	2021ec0127@svce.ac.in	AJAYKUMAR A J	BALASAKTHI S
27	9/26/2022 19:33:01	tulasisrinivassrinivas@gr	THULASI SRINIVAS M	VIGNESH KUMAR A
28	9/26/2022 20:20:36	abarajitha2809@gmail.co	M ABARAJITHA	Dhanushri J K
29	9/26/2022 20:24:03	2021ec0052@svce.ac.in	Aruma D	Haripriya J
38	9/26/2022 20:46:00	anishaasb1@gmail.com	Anishaa.S	Angelin stieju
31	9/26/2022 21:36:20	raaj66778@gmail.com	Raaikumar S	Rajeshwaran R
32	9/26/2022 21:42:55	Kamilah1625@yahoo.co	Kamilah	Jeevalatha
33	9/26/2022 21:44:06	2021ec0409@svce.ac.in	Anish Krishnan	Ajay Kumar A.S
34	9/26/2622 21:45:58	2021ec0129@svce.ac.in	Lokranjan P	Keerthivaasan A
35	9/26/2022 23:44:34	2021ec0769@svce.ac.in	RAM SURETH KUMAR	MARITH
36	9/27/2022 12:30:34	lovelypraveen961@gmai	Praveen kumar .R	Liskshmi Narayanan k.s
37	9/27/2022 12:39:06	jaikrishnan456@gmail.cc	Jaikrishnan S	Jagadeshwaran
38	9/27/2022 15:17:00	2021ec0283@svce.ac.in	Diraj A	Jenny Celesta
39	9/27/2022 15:55:34	2021EC1077@SVCE.AC	Mukesh S	Nithish Kumar
40	9/27/2022 16:06:09	2021ec0691@svce.ac.in	Thibagaran	Udhaya k
41	9/27/2022 18:06:39	nishadharshinibek@gma	Nishadharshini N	Priyadharshini S
42	9/27/2622 19:07:29	2021ec0686@svce.ac.in	Mani kandan m	Kavin amuthan k
43	9/27/2022 19:38:39	2021ec0234@svce.ac.in	Koushika S	Ramya A



<b>Chief Patron</b>	:Dr.S.GaneshVaidyanathan, Principal	
Convenor	:Dr.S.Muthukumar, Professor & HOD, ECE	
Faculty Co-ordinators: Dr.T.J.Jeyaprabha ECEA, ISF SVCE and RAIC Co-ordinator		
	Mr.S.Elangovan ECEA, ISF SVCE and RAIC Co-ordinator	

# ECEA comprising of:

President	: Mr. Guganesh. R (IV Year ECE A)
Vice-President	: Mr. SangeethKanna. P (IV Year ECE C)
Secretary	: Mr. V.S.Prithiviraj (III Year ECE C)
Treasurer	: Ms.SahanaBalasubramaniam (III Year ECE C)
Executive Members	: Mr. Aakash (III Year ECE A)
	Mr. Ganeshan H (III Year ECE A)
	Mr. PratoshKarthikeyan (III Year ECE B)
	Mr. Pranav.A (III Year ECE B)
	Mr. Raswanth U (III Year ECE C)
	Mr. Sowndhar R (III Year ECE C)
Joint Secretary	: Ms. Dharani. A (II Year ECE A)
Mr.Parvesh. R (II Year	ECE B)

Mr. UmeshAnandh. S (II Year ECE C)

# IETE SF SVCE comprising of:

Chairman	: Mr. Sivasubramanian .R (IV Year ECE C)
Vice Chairman	: Mr.DeepakAkash Raj .T
Honorary Secretary	: Ms. Mrdulla V Naarayan (III Year ECE B)
Honorary Treasurer	: Ms. LakshanaSasikumar (III Year ECE B)
Executive Members	: Mr. Arvindh. G (III Year ECE A)
	Mr. Avinash. P (III Year ECE A)
	Mr. Nirmal Kumar T .K (III Year ECE B)
	Mr. Nithish . P (III Year ECE B)
	Ms. SakthiMaheswari. M (III Year ECE C)
	Mr. Shashidar .G (III Year ECE C)

Joint Secretary	: Mr. Ashish. S (II Year ECE A) Ms. Nivetha .D .R (II Year ECE B) Mr. Tharun . K .R (II Year ECE C)
RAIC comprising of	
PRESIDENT VICE PRESIDENT	: Ms. Krishna Priya .S (IV Year ECE B) : Mr. Hari Prasad.P(IV Year ECE A)
SECRETARY JOINT SECRETARY	<ul> <li>Mr. Sanjay Lokesh.A .M (III Year ECE C)</li> <li>Mr. Anish Krishnan (II Year ECE A)</li> <li>Mr. Mahith .I .K (II Year ECE B)</li> <li>Mr. L. Sharad(II Year ECE C)</li> </ul>
MENTORS	<ul> <li>Mr. T.R.HariPrasanna(IV Year ECE A)</li> <li>Mr. M.Kishore(IV Year ECE B)</li> <li>Ms. Subashree, B</li> <li>Mr. Ganeshan .H (III Year ECE A)</li> <li>Mr. Magesh.S (III Year ECE B)</li> <li>Mr. Rajeshvar, M Swamy(III Year ECE C)</li> <li>Ms. Snehalatha .M (III Year ECE C)</li> <li>Ms. Srivani .M (III Year ECE C)</li> <li>Ms. Vishnu Priya .V .T (III Year ECE C)</li> </ul>

TJJA

Dr. T. J. JeyaprabhaDr. ASP ECE; ECEA, ISF, RAIC Coordinator

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Dr. S. Muthukumar Professor & HOD – ECE

REPORT BY: ASHISH.S (II Year Joint Secretary, IETE, SVCE) MRDULLA V NAARAYAN (III Year Honorary Secretary, IETE, SVCE)

DATE: 7/10/2022