

B.L.D.E. Association's
S.B ARTS AND K.C.P SCIENCE COLLEGE,
VIJAYAPUR



Department of Physics & Electronics

Seminars (2017-18)

NOTICE

Date: 05.07.2017

All the Physics & Electronics opted students (for the academic year 2017-18) are here by informed to contact to your concerned staff member to prepare and deliver the seminar classes without fail.

Seminar classes are compulsory to all the semester students.

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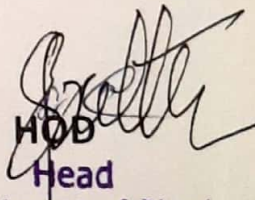
Principal

S.B. Arts & K.C.P. Sc. College
Bijapur.



IQAC Co-ordinator

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S.B.Arts & K.C.P.Science College,
Vijayapur.



HOD
Head

Department of Physics
S.B.Arts & K.C.P.Science Coi
Vijayapur-586103.

Name! → Sunil, M. Kannoli

Roll. no! → 301

Date! → 7/2/2018

Staff! → S. S. Kori

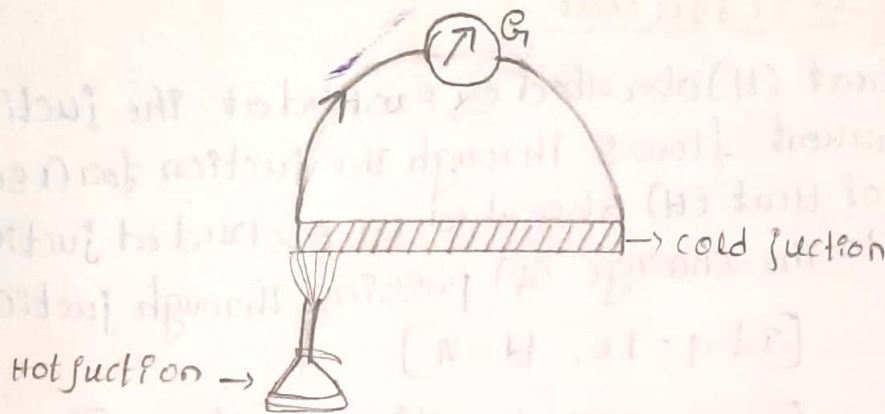
Subject! → physics

Class! → B.S.C (IVth B) Semester.

College! → S.B Arts and K.G.P. Sciences college.

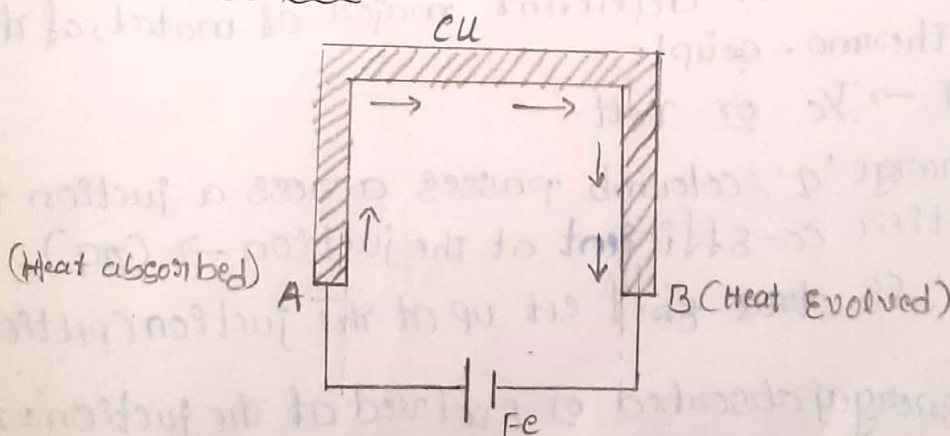
Lesson ⇒ - Thermo-Electricity :-

1) Seeback Effect :-



The production of Thermo electric emf b/w the junctions of two dissimilar metals maintained at the different temperature is called seeback effect,

2) Peltier effect.



consider a copper-iron thermocouple, when a current is allowed to pass through the thermocouple in the direction from 'A' to 'B'. Heat is absorbed at the junction (A) and Heat is rejected at a junction (B) Hence the junction

become cold, this phenomenon is known as peltier effect;

*] The peltier effect is a reversible phenomenon, If the direction of the current is reversed, there will be cooling at the junction (A), and heating, at the junction (B).

*] when an electric current is passed through a closed circuit, made up of two dissimilar metals, one junction become hot and another junction become cold this is also known as peltier-effect,

iii) → Peltier Co-efficient

The amount of heat (H) absorbed or evolved at the junction when 1 amp of current flows through the junction for (t) second or the amount of heat (H) absorbed or evolved at junction is proportional to the charge (Q) passing through junction.

the H/Q [If $q = It, H = \pi q$]

or $H = \pi q$ [$\pi \rightarrow$ a constant peltier co-efficient]

and π 's is defined as the amount of heat energy absorbed and evolved, when (unit charge coulomb) cross across the junction, it is denoted by (π); and it's value not constant it dependent major of metal, of the junction of thermo-couple.

$\pi \rightarrow \text{Vc or volt.}$

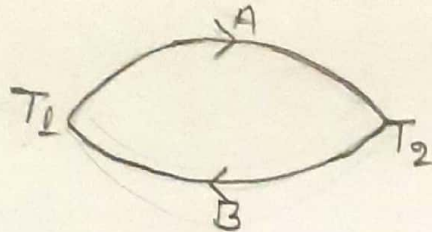
→ If a charge 'q' coulomb passes across a junction traversing a peltier co-efficient at the junction → (πq)

→ Now If 'E' is true emf set up at the junction (peltier emf)

→ then the energy absorbed or evolved at the junction = πq

→ is cool is numerically equal to (emf) set up junction,

iv) Thermo-dynamics of peltier effect:



Two dissimilar metals 'A' and 'B' whose junction are at temperature T_1 K & T_2 K, ($T_2 > T_1$)
 \rightarrow current flows in the thermo-couple \rightarrow (due to Seebeck effect)

\rightarrow In the thermo couple electric energy produced by absorbing heat at one junction at higher temperature and remaining is at lower temperature.

conversely, when electrical energy is passed through heat is absorbed junction, In ' T_2 ' junction and given out at another junction thus two effects are reversible, hence an ideal thermocouple may be compared a reversible.

$$\frac{\pi_2}{\pi_1} = \frac{T_2}{T_1}$$

$$\frac{\pi_2 - \pi_1}{\pi_1} = \frac{T_2 - T_1}{T_1}$$

$$\text{or } \pi_2 - \pi_1 = \left(\frac{\pi_1}{T_1} \right) T_2 - T_1$$

$$\therefore \boxed{E \propto (T_2 - T_1)}$$

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S.B ARTS AND K.C.P SCIENCE COLLEGE, VIJAYAPUR
DEPARTMENT OF PHYSICS & ELECTRONICS
Student Attendance of Unit Test/Seminar

Class: B.Sc-IV semester 'B'
Staff: P. S. S. Kori
Topic: Peltier effect

Subject: Physics/Electronics

Date: 7/2/2018

11.05-12.00 am.

Roll No	RCUB Seat No.	Signature	Roll No	RCUB Seat No.	Signature
232	S1622122	Haryan	141	S1622461	dt
239	S1622383	Fatih	142	S1622257	Jrambie
326	S1622170	K.s. Ambalihal	143	S1622256	Roban
297	S1622314	Seulomeli	151	S1622024	Al
325	S1622207	MUSY	299	S1622354	B
229	S1622035	Arata	161	S1622293	Panay
252	S1622186	(u)	159	S1622434	AB
253	S1622100	Devs	304	S1622160	B
129	S1622157	Haryan	306	S1622419	Bull
219	S1622355	Seetha	318	S1622464	Figali
186	S1622017	Arabi	256	S1622435	St
302	S1622374	SS	154	S1622283	Amma
241	S1622212	Mugi	140	S1622492	St
242	S1622097	Quellu	258	S1622424	Arnelin
272	S1622428	Arabi	257	S1622439	Shita
270	S1622445	Angundi	125	S1622342	RAB
220	S1622239	Omkar	1		
314	S1622093	B. Pall			
311	S1622416	Sal			
266	S1622322	Kant			
327	S1622169	Boli			
328	S1622191	Pal..			
259	S1622382	Bilhi			
260	S1622245	Psh			
198	S1622101	Bry			
199	S1622224	M&I			
128	S1622508	Arabi			
127	S1622241	Bth			

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DEPARTMENT OF PHYSICS & ELECTRONICS
Student Attendance of Unit Test/Seminar

②

Class: B.Sc- IV semester 'B'

Subject: Physics/Electronics

Staff:

Date: 7/02/2018.

Topic: Peltier effect.

Roll No	RCUB Seat No.	Signature	Roll No	RCUB Seat No.	Signature
139	S1622274	<u>Panani</u>	312	S1622009	<u>Ravati</u>
147	S1622324	<u>Devi</u>	310	S1622425	<u>Devi</u>
202	S1622210	<u>Bhargava</u>	191	S1622459	<u>Chandekar</u>
271	S1622383	SS Waghmare	174	S1622329	<u>Fus</u>
234	S1622304	<u>Dube</u>	172	S1622272	<u>Bchi</u>
230	S1622011	<u>Shed</u>	214	S1622353	S.R. Loni
216	S1622490	<u>Shah</u>	308	S1622226	<u>Ust</u>
218	S1622357	<u>Asnardi</u>	156	S1622328	<u>Rajmi R.m</u>
165	S1622253	<u>Rud</u>	283	S1622067	<u>Shah</u>
322	S1622542	Y.C. Bhargava	157	S1622055	<u>ADJ</u>
176	S1622050	A.D. Sarawad	282	S1622073	<u>ADJ</u>
196	S1622071	<u>Ashwinis</u>	305	S1622266	<u>Pati</u>
263	S1622288	<u>B</u>	244	S1622469	<u>Shah</u>
169	S1622155	<u>Shah</u>	190	S1622088	<u>Shah</u>
279	S1622090	<u>Shah</u>	246	S1622385	<u>Shah</u>
171	S1622372	<u>Shah</u>	300	S1622377	S.M. Nadakatti
149	S1622065	A.M. Bhosale	166	S1622455	<u>Shah</u>
170	S1622338	<u>Shah</u>	193	S1622455	<u>Shah</u>
177	S1622265	<u>Pesale</u>			
192	S1622356	<u>Shinde</u>			
138	S1622378	<u>Shinde</u>			
136	S1622474	<u>Shinde</u>			
137	S1622118	<u>Shinde</u>			
262	262 S1622076	<u>Shinde</u>			
291	S1622305	<u>Shinde</u>			
222	S1622370	S.S. Shrivastava			
231	S1622280	<u>Shrivastava</u>			
238	S1622025	<u>Shrivastava</u>			
237	S1622243	<u>Shrivastava</u>			

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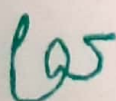
Department of Physics
S.B. Arts & K.C.P. Science College
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Total: 92

REPORT

Date: 15.03.2018

The department of Physics & Electronics conducted the seminar classes for the B.Sc odd and even semester students for the academic year 2017-18 to encourage the student and to enhance their language skills.



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