Test NO.6
UNIT NO. 14

(Class :- 10th) -2020

PHYSICS
Time Allowed: 15 Minutes

Paper: (Objective Type)
Maximum Marks: 12

Note : You have four choices for each objective type question as A,B,C and D. The choice which you think is correct fill that circle in front of that question number. Use marker or pen in fills this circle. Cutting or filling two or more circles will result in zero mark in that question.

Q. 1	QUESTIONS	(A)	(B)	(C)	(D)
1	The formula to find the magnitude of current is.	I = J/Q	I = W/Q	I = W/t	T= Q/I
2	An electric current in conductors is due to the flow of.	Positive ions	Negative ions	Positive charges	Free electrons.
3	Mathematical equation of Ohm's law is.	V = I/R	V=R/I	I=2VR	V = IR
4	What happens to the intensity or the brightness of lamps connected in series as more and more lamps are added.	Increases	Decreases	Remains the same	Cannot be predicted
5	What is the power rating of a lamp connected to 12 v source when it carries 2.5A?	4.8 W	14.5 W	30 W	60 W
6	The unit of electric power is.	Ampere	Watt	Joule	Volt
7	1 kWh is equal to.	3.6 MJ	3.6 KJ	3.6J-1	3.6 J
8	When we double the voltage in a simple electric circuit, we double the.	Current	Power	Resistance	Both A and B
9	The electric power of washing machine in watt is.	50	750	100	800
10	If 0.5 C charge passes through a wire in 10 seconds, then current will be.	20 A	5 A	50 mA	5 mA
11	SI unit of resistance is.	Ampere	Volt	Ohm	Farad
12	Specific resistance of copper is	1.62	1.69	2.75	5.25

	A B C D		A B C D		A B C D		A B C D		A B C D
1	Ⓐ Ⓑ Ⓒ Ⓓ	4	Ⓐ Ⓑ Ⓒ Ⓓ	7	Ⓐ Ⓑ Ⓒ Ⓓ	10	Ⓐ Ⓑ Ⓒ Ⓓ	13	Ⓐ Ⓑ Ⓒ Ⓓ
2	Ⓐ Ⓑ Ⓒ Ⓓ	5	Ⓐ Ⓑ Ⓒ Ⓓ	8	Ⓐ Ⓑ Ⓒ Ⓓ	11	Ⓐ Ⓑ Ⓒ Ⓓ	14	Ⓐ Ⓑ Ⓒ Ⓓ
3	Ⓐ Ⓑ Ⓒ Ⓓ	6	Ⓐ Ⓑ Ⓒ Ⓓ	9	Ⓐ Ⓑ Ⓒ Ⓓ	12	Ⓐ Ⓑ Ⓒ Ⓓ	15	Ⓐ Ⓑ Ⓒ Ⓓ

نوٹ: معروضی سوال نامے کو توجہ سے پڑھیں اور ہر MCQ کی درست آپشن A,B,C,D کو پین کی سیاہی یا مارکر سے اس طرح پُر کریں کہ سیاہی دائرے سے باہر نہ نکلے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

TEST NO. 6

CH NO. 14

PHYSICS **Paper: (Essay Type)**

Time Allowed: 1:45 Hours **Class: -10th -2020** **Maximum Marks: 48**

(PART – I)

2. Write short answers to any Five (5) questions: **10**

(i) Define electric Current and write its mathematical form.
(ii) What is conventional current?
(iii) Which instrument is used for measurement of current?
(iv) Define potential difference and write the name of unit.
(v) What is Ohm's law and mathematically form.
(vi) Difference between Conductors and Insulators.
(vii) How many watt-hours are there in 1000 joules?
(viii) What is meant by e.m.f?

3. Write short answers to any Five (5) questions: **10**

(i) Define resistance and give the name of its unit.
(ii) State Joule's Law.
(iii) Can current flow in a circuit without potential difference?
(iv) What are Insulators? Give their one example.
(v) Why diamond is an insulator for electricity but conductor for heat?
(vi) Define electric power and its unit.
(vii) How galvanometer is converted into ammeter?
(viii) Define kilowatt hour.

4. Write short answers to any Five (5) questions: **10**

(i) What is difference between Fuse and circuit breaker?
(ii) What will be affected on specific resistance if length of wire is halved?
(iii) How galvanometer is converted into voltmeter?
(iv) Write two safety measures that should be taken in connection with the household circuit.
(v) Differentiate between Electric power and Kilowatt hour.
(vi) Why diamond does not conduct electricity.
(vii) Difference between DS.C and A.C.
(viii) Prove that : 1 kWh = 3.6 MJ

(PART – II)

Note: Attempt any TWO questions:

5. (a) Discuss the main fectures of parallel combination of resistors. **4**

(b) By applying a potential difference of 10 V across a conductor a current of 1.5 A passes through it. How much energy would be obtained from the current tin 2 minutes? **5**

6. (a) Define specific resistance and prove that $R = \rho \frac{L}{A}$ **4**

(b) Length of copper wire is 1 meter and its diameter is 2mm. then find the resistance of this copper wire. Specific resistance copper is 1.69×10^{-8} **5**

7. (a) Define Ohm's Law also write its mathematical equation. **4**

(b) The resistance of a conductor wire is 10 M Ω. If a potential difference of 100 volt is applied across its ends, then find the value of current passing through it in mA. **5**