

# VISWABHARATI - GUDIVADA

## WORK SHEET-3 [ $\frac{1}{2}$ , 1 Mark questions]

### Chapters: Electric Current

Class: X

Subject: Physics

Name \_\_\_\_\_


Class/Sec: \_\_\_\_\_

Time: 1 ½ Hr

Max.Marks: 50 M

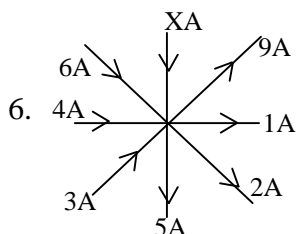
Roll No: \_\_\_\_\_

### ½ Mark Questions

1. What connection is used in domestic appliance in our home.
2. What is the electric potential of the earth
3. Name the two semi conductors
4. On what law, loop law is based on?
5. What is the reason for the tungsten filament bulb is filled with inert gas because?
6. What is the value of 1KWH
7. Three resistors of values  $2\Omega$ ,  $4\Omega$ ,  $6\Omega$  are connected in parallel. What is the equivalent resistance of combination of resistors.
8. In  $R = \rho \frac{l}{A}$  formula. What "A" indicates
9. What is the value of melting point of tungsten?
10. What is S.I unit of Resistance
11. What is the commercial unit of electric power consumption.
12. Which are called high resistivity materials
13. What is the main use of fuse
14. Write S.I unit of current
15. Three resistors of values  $2\Omega$ ,  $4\Omega$ ,  $6\Omega$  are connected in parallel. What is the equivalent resistance of combination of resistors in parallel
16. Joule / Coloumb is same as \_\_\_\_\_
17. Give two factors of specific resistance
18. Write Ohm's law equation
19. The work done per unit charge is called
20. What we call the reciprocal of resistivity
21. Current : ampere : : Resistivity : \_\_\_\_\_
22. What is the name of symbol  \_\_\_\_\_
23. Name the electrical measuring instrument designed to measure voltage (or) current over a wide range of values.
24. Name the laws which are applicable d.c circuits
25. The product of electric power and time is called

### 1 Mark:

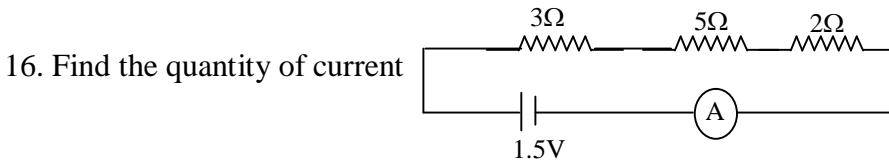
1. What are the metals contains in nichrome wire
2. How voltmeter and Ammeter are connected in electric circuits
3. Calculate the resistance of the circuit, when 12V battery is connected and 2A current passing through it.
4. Why do we consider tungsten as suitable material for making filament of a bulb
5. Silver is a better conductor of electricity than copper. Why do we use copper wire conduction.



Find the value of "X" Amperes

7. Find the effective resistance of the circuit R, When  $R_1$ ,  $R_2$  and  $R_3$  resistance connected in series in the circuit
8. Why alloys are more preferable as heating elements in electrical appliances
9. State Ohms law
10. What is drift speed

11. Define Ohmic and Non-Ohmic materials
12. What is minimum and maximum and maximum currents to our house hold appliances
13. Mention two limitations of ohms law
14. How does the resistance of wire vary with area of cross-section.
15. Nichrome is used to make the element of electric heater. Why?

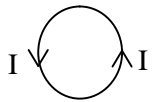


17. Why resistance is more in series combination
18. What is the use of resistor in electric circuits
19. Write the apparatus required for V-I experiment
20. Draw V-I graph for ohmic and Non-Ohmic material

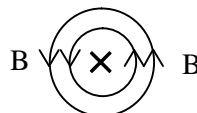
### Electromagnetism

#### $\frac{1}{2}$ Mark Question

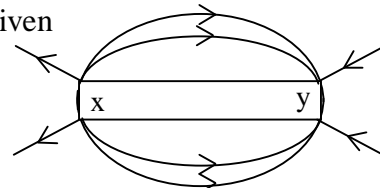
1. Write S.I unit of magnetic flux density
2. Name the instrument is used to convert electrical energy to mechanical energy.
3. What is the main difference between AC and DC Dynamo's
4. In right hand rule, direction of thumb indicates?
5. What is the principle used in working of Generator
6. Write the formula for induced emf
7. What is the use of commutation in DC generator
8. Name the magnetic pole facing the coil when the current flowing in the coil is anticlockwise



9. Name the scientists who is origin for electromagnetism. Who discovered Electromagnetic induction
10. What is dynamo
11. On what law, Faraday law of electromagnetic induction depends
12. What is conclusion of oersted experiment.
13. What is magnetic field
14. Write the formula for centripetal force
15. What is the basic cause of induced emf
16. What is the magnitude of force on a charge q moving n along the direction of magnetic field.
17. Give examples of electric motor in our daily life
18. Name two sources of direct current
19. What is the direction of current in the given figure



20. Anand appreciated the law behind the making of generator. Name the law
21. Which is North and South pole in the bar magnet of figure given

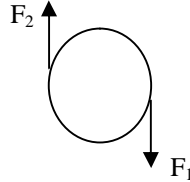


22. Write the formula for magnetic fluoc
23. Name the scientist who given the direction of induced current in the coil.
24. The device used for producing electric current is?
25. How we express magnetic flux in units

#### 1 Mark Questions

1. State lenz law
2. Mention two applications of electromagnetic induction in daily life
3. Write the uses of solenoid
4. draw the magnetic field lines in solenoid
5. What is the function of split rings in the motor
6. Magnetic lines of forces are endless. Comment

7. What is solenoid
8. What is the principle of motor
9. What is called induced emf
10. What are the apparatus required for oersted experiment
11. Why T.V screed distorted when we bring bar magnet close to T.V
12. Name the material is used to make electromagnet
13. Draw the AC and DC current graphs
14. What is the net force in the following diagram



15. Difference between magnetic flux, magnetic flux density
16. The value of magnetic field induction is 2T. What is the flux passing through a surface area 1.5 m<sup>2</sup> perpendicular to the field.
17. What is the main variation for Faradays law and Lenz law

18. Name the magnetic poles of A and B

19. Complete the following cases

- i) Magnetic flux  $\phi = \text{_____} \times \text{Area of cross-section}$
- ii) Motional emf  $\epsilon = B / X \text{_____}$

20. Write the direction of force in the following figure  $F = ?$

