



SUBJECT: PHYSICS (CLASS 12th)

MM:40

Q:1 choose the correct option.

1X5=5

1.the SI unit of capacitance is.

(1)stat farad (2)farad (3)coulomb (4)stat coulomb

2.the specific resistance of a wire depends upon.

(1) Length (2) diameter (3) mass (4) material

3. Dimensional Formula Of Resistivity

(1) $ML^3T^{-3}A^{-2}$ (2) $ML^2T^{-3}A^{-2}$ (3) $ML^3T^{-2}A^{-2}$ (4) $ML^2T^{-3}A^{-1}$

4.which of the following is ohmic resistance

(1) junction diode (2) transistor (3) LED (4) copper wire

5.the angle between equipotential surface and electric force of line

(1) 90° (2) 45° (3) 180° (4) 0°

Write answer of any 7 questions

5X7=35

Q:2 prove that potential at a point due to dipole in broadside position is zero $V=0$

Q:3 derive an expression for electric potential due to point charge.

Q:4 find capacity of parallel plate capacitor.

Q:5 what is drift velocity find its formula.

Q:6 prove that $\frac{1}{r} = \frac{1}{r_1} + \frac{1}{r_2}$

Q:7 if 'n' cell are connected in series then find formula for resulting current

Q:8 establish relation between $r = R \left(\frac{1}{n} - 1 \right)$

Q:9 write Kirchhoff first and second law.

Q:10 derive an expression for capacitance of spherical capacitor.



Q:1 choose the correct option.

1X5=5

1.the SI unit of force is.

- (1)N-m (2) N (3) N/m (4) joule

2. Dimensional Formula of force

- (1) ML^3T^3 (2) MLT^{-2} (3) MLT^{-1} (4) ML^2T^{-3}

3. Dimensional Formula of momentum

- (1) ML^3T^3 (2) MLT^{-2} (3) ML^3T^{-2} (4) ML^2T^{-3}

4.which of the following is not vector quantity

- (1) velocity (2) force (3) speed (4) displacement current

5.the significant figure in no. 2.303 is

- (1) 3 (2) 5 (3) 4 (4) 2

Write answer of any 7 questions

5X7=35

Q:2 prove that = + -

Q:3 derive an expression for horizontal range in projectile motion.

Q:4 state and prove newton's second law.

Q:5 derive an expression for vertical height in projectile motion.

Q:6 find time of flight if angle made by horizon is 60 and initial velocity is 30 m/s

Q:7 define linear momentum

Q:8 write and explain newton's 3rd law

Q:9 explain apparent weight in lift.

Q:10 a lift has mass of 4000 kg if upward force is 48000 N find its acceleration and distance covered in 3 second.



Mehnat se
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TOPIC OF PHYSICS TEST CLASS 11th

1. SIGNIFICANT FIGURE.
2. PROJECTILE MOTION.
3. NEWTONS LAWS OF MOTION.
4. APPARENT WEIGHT IN LIFT.
5. NEWTONS EQUATION OF MOTION.

TOPIC OF PHYSICS TEST CLASS 12th

1. POTENTIAL IN AXIAL AND BROADSIDE POSITION.
2. PARALLEL PLATE CAPACITOR.
3. INTERNAL RESISTANCE.
4. COMBINATION OF CELL.
5. CAPACITANCE, DRIFT VELOCITY, AND KIRCHOFF LAW.