| Discipline: <br> Math \& Sc | Semester: $1^{\prime \prime}$ | Name of the teaching faculty: Satya Narayan Tripathy (Sr Lect. In Physics) |
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| Subject <br> Enge. <br> Physics <br> Lab <br> (Pr.2a) | No. of days/week class allotted: 04 | Semester from date: $\quad 25.10 .2021$ To date: 14.2.2022 No. of weeks: 15 |
| Subject <br> Course Outcomes |  | CO 1: Identify physical quantities\& represent them as scalars \& vectors to solve related problems. |
|  |  | CO 2: Understand concepts of rest, motion \& projectile motion \& hence solve related problems. |
|  |  | CO 3: Define work, Friction \& solve related problems |
|  |  | CO 4: Define \& use the concepts of gravitation, wave motion, heat \& optics to solve real life problems. |
|  |  | CO 5: Explain the concepts of electrostatics, magneto statics, current \& magnetism in the context of engineering. |
|  |  | CO 6: Understand LASER \& its Applications. |
| Week | Class Day | Practicals |
| $1^{\text {s }}$ | $1^{\text {a }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To find volume of a solid cylinder using a Vernier Calipers |
| $2^{\text {nd }}$ | $1^{\text {a }} \& 2^{\text {nd }}$ | To find volume of a solid cylinder using a Vernier Calipers |
|  | $3^{\text {rd }} \& 4^{\text {th }}$ | To find volume of a hollow cylinder using a Vernier Calipers |
| $3^{\text {rd }}$ | $1^{\text {s }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To find volume of a hollow cylinder using a Vernier Calipers |
| $4^{\text {th }}$ | $1^{\text {sf }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To find the cross sectional area of a wire using screw gauge |
| $5^{\text {th }}$ | $1^{s} \& 2^{\text {nd }}$ | To find the cross sectional area of a wire using screw gauge |
|  | $3^{\text {rd }} \& 4^{\text {th }}$ | To find the thickness and volume of a glass piece using a screw gauge |
| $6^{\text {th }}$ | $1^{\text {s }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To find the thickness and volume of a glass piece using a screw gauge |
| $7^{\text {th }}$ | $1^{\text {s }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To determine the radius of curvature of convex surface using a Spherometer |
| $8^{\text {th }}$ | $1^{\text {a }} \& 2^{\text {nd }}$ | To determine the radius of curvature of convex surface using a Spherometer |
|  | $4^{\text {th }} \& 3^{\text {rd }}$ | To determine the radius of curvature of concave surface using a Spherometer. |
| $9^{\text {th }}$ | $1^{\text {s }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To determine the radius of curvature of concave surface using a Spherometer |
| $10^{\text {th }}$ | $1^{\text {ra }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To verify Ohm's Law by Ammeter - Voltmeter method |
| $11^{\text {th }}$ | $1^{\text {a }} \& 2^{\text {nd }}$ | To verify Ohm's Law by Ammeter - Voltmeter method |
|  | $3^{\text {rd }} \& 4^{\text {th }}$ | To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points |
| $12^{\text {th }}$ | $1^{\text {tr }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral point |
| $13^{\text {th }}$ | $1^{\text {sf }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points |
| $14^{\text {th }}$ | $1^{\text {st }} \& 2^{\text {nd }}$ | To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points |
|  | $3^{\text {rd }} \& 4^{\text {th }}$ | To find the time period of a simple pendulum and determine acceleration due to gravity |
| $15^{\text {th }}$ | $1^{\text {rt }} 2^{\text {nd }} 3^{\text {rd }} \& 4^{\text {th }}$ | To find the time period of a simple pendulum and determine acceleration due to gravity |

Lect. Physics GP Kraput

