## SARASWATI MAHILA MAHAVIDHYALAYA, PALWAL

**LESSON-PLAN** 

Class:B.sc 1st Subject:physics (mechanics) Semester: 2nd Session: 2021-22

| Lecture<br>Number | Торіс  |
|-------------------|--|
| 1                 | Introduction to properties of matter (Elasticity)      |
| 2                 | Elasticity, Hook's law, stress, strain                 |
| 3                 | Elastic constants, poisson's ratio                     |
| 4                 | Relation between elastic constants                     |
| 5                 | Torsion of a cylinder and twisting couple              |
| 6                 | Bending of beam, bending moment                        |
| 7                 | Cantilever   |
| 8                 | Centrally loaded beam                                  |
| 9                 | Introduction to kinetic theory of gases                |
| 10                | Law of equipartition of energy                         |
| 11                | Specific heats of gases                                |
| 12                | Maxwell's distribution law of speed                    |
| 13                | Maxwell's distribution law of velocity                 |
| 14                | Most probable speed, average and r.m.s speed,          |
| 15                | Transport phenomenons                                  |
| 16                | Introduction to their of relativity                    |
| 17                | Gallilian transformation, Newtown relativity principal |
| 18                | Michelson- Morley experiment                           |
| 19                | Lorentz transformation                                 |

| 20 | Length contraction, time dilation                          |
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| 21 | Velocity addition theorem, variation of mass with velocity |
| 22 | Mass- energy equivalence                                   |

Signature: anju