## Question Paper 2023-2024 Subject- Physics Total: 100 marks

Q1. Explain Newton's First Law of Motion. 5 marks
Q2. Define kinetic energy. 5 marks
Q3. What is the formula for acceleration? 5 marks
Q4. Differentiate between mass and weight. 5 marks
Q5. Explain the concept of work in physics. 5 marks
Q6. State and explain the law of conservation of energy. 5 marks
Q7. Define impulse and its relationship with momentum. 5 marks
Q8. Discuss the work-energy theorem. 5 marks
Q9. Explain the principle of conservation of mechanical energy. 5 marks
Q10. Define power in the context of physics. 5 marks
Q11. Discuss the concept of potential energy. 5 marks
Q12. Explain the relationship between force, work, and energy. 5 marks
Q13. Define momentum and its importance in physics. 5 marks
Q14. Discuss the role of friction in energy conservation. 5 marks
Q15. Explain the concept of torque and rotational equilibrium. 5 marks
Q16. Define angular momentum and its conservation. 5 marks
Q17. Discuss the concept of elasticity and plasticity in materials. 5 marks
Q18. Explain the laws of motion in a rotational system. 5 marks
Q19. Define moment of inertia and its significance. 5 marks
Q20. Discuss the effects of external forces on rotational motion. 5 marks
end of questions