

UG COURSES (AIDED)
III SEMESTER

NGM COLLEGE (AUTONOMOUS) POLLACHI
END-OF-SEMESTER EXAMINATIONS: MAY – 2025

MAXIMUM MARKS: 50
TIME: 2 HOURS

PART-IV: NON MAJOR ELECTIVE PAPER-I

PRINCIPLES OF PHYSICS – II

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

MULTIPLE CHOICE QUESTIONS.

1. Remote control in television works on the basis of
 - a) Bluetooth technology
 - b) Ultrasonic waves
 - c) Laser technology
 - d) Infrared waves
2. Blinking of fluorescent tube may be an account of
 - a) Low circuit voltage
 - b) Loose contact
 - c) Defective starter
 - d) All the above
3. Static electricity is generated from
 - a) friction
 - b) resistance
 - c) chemical reaction
 - d) superconductor
4. The principle of LASER is
 - a) spontaneous emission
 - b) stimulated emission
 - c) total internal reflection
 - d) Photoelectric effect
5. Which of the following is used for bullet proof glass?
 - a) potash glass
 - b) lead crystal
 - c) lexan
 - d) flint glass

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What is meant by superconductor?
7. Expand SONAR.
8. Write any one method to check the purity of honey.
9. What is LASER?
10. Define supercomputers.

SECTION- B (5X8=40MARKS)

ANSWER ANY FIVE QUESTIONS OUT OF THE EIGHT QUESTIONS.

(K3)

11. Explain the types of battery with diagrams.
12. Write a note on optical fibers and discuss the types.
13. Describe the use of Infrared spectroscopy in various fields.
14. Explain the types of laser with examples.
15. Explain the industrial and medical applications of laser.
16. What are nuclear reactors? Explain the construction and working of the reactors.
17. Explain the construction and working of an air cooler.
18. Discuss about holograms and touch screens.