

NGM COLLEGE (AUTONOMOUS) POLLACHI  
END-OF-SEMESTER EXAMINATIONS: MAY – 2024  
UG COURSES (AIDED) MAXIMUM MARKS: 50  
IV SEMESTER TIME: 2 HOURS

PART-IV: NON-MAJOR ELECTIVE PAPER-II  
PRINCIPLES OF PHYSICS - II

SECTION – A (10 X 1 = 10 MARKS)

ANSWER ALL THE QUESTIONS. (K1)

MULTIPLE CHOICE QUESTIONS.

- \_\_\_\_\_type of battery is known for its high energy density and is commonly used in laptops and smart phones. (K1)  
(a) Nickel-Cadmium (NiCd) (b) Nickel-Metal Hydride (NiMH)  
(c) Lead-Acid (d) Lithium-Ion (Li-Ion)
- RADAR stands for \_\_\_\_\_. (K1)  
(a) Rapid Deployment and Recognition (b) Radio Detection and Ranging  
(c) Radar is not an acronym (d) Remote Analysis and Display of Aerial Reconnaissance
- GPS constellation usually consists of \_\_\_\_\_satellites. (K1)  
(a) 12 (b) 24 (c) 36 (d) 48
- The principle of laser operation is based on\_\_\_\_\_. (K1)  
(a) Spontaneous emission (b) He- Stimulated emission  
(c) Absorption (d) Reflection
- The primary function of a refrigerant in a cooling system is \_\_\_\_\_. (K1)  
(a) To provide electrical insulation (b) To act as a fuel source  
(c) To absorb heat from the environment (d) To lubricate the compressor

SHORT ANSWER QUESTIONS

- What vanishes in superconductivity? (K2)
- Which gas is used in fluorescent lamp? (K2)
- In a three pin plug which pin ensures safety by grounding the plug? (K2)
- What type of light does a laser emit? (K2)
- Where is Cockpit Voice Recorder (CVR) located in an airplane? (K2)

SECTION - B

(5 X 8= 40 MARKS)

ANSWER ANY FIVE QUESTIONS.

- Describe nuclear reactor. (K3)
- Write a note on RADAR. (K3)
- Explain how to find the purity of honey. (K3)
- Write a brief note on applications of LASER. (K3)
- Discuss the basics of computer. (K3)
- Explain cell phones and their uses. (K3)
- Write a detailed explanation on splitting of white light. (K3)