

## **N.G.M.COLLEGE COLLEGE (AUTONOMOUS): POLLACHI**

## **END-OF-SEMESTER EXAMINATIONS: JULY – 2022**

## **B.Sc. – PHYSICS**

**MAXIMUM MARKS: 50**

## VI SEMESTER

## TIME: 2 HOURS

## PART IV

## **SKILL BASED ELECTIVE PAPER-2**

## ENVIRONMENTAL INSTRUMENTATION

## **SECTION - A**

**(10 X 1 = 10 MARKS)**

## **ANSWER ALL THE QUESTIONS.**

(K1)

## **MULTIPLE CHOICE QUESTIONS:**

## SHORT ANSWER QUESTIONS

(K2)

6. What is Thermistor?
7. Define bolometer.
8. What are the two types of instruments which are employed for solar radiation measurements?
9. What you mean by Scintillation crystal?
10. Expand ppm(Unit for Pollution measurement).

(2)

(19 UPS 6S5)

**SECTION – B**

**(5 X 8 = 40 MARKS)**

**ANSWER ANY FIVE QUESTIONS OUT OF EIGHT QUESTIONS. (K3)**

11. Discuss temperature measurement by electrical effects.
12. Define blackbody radiation. Describe the different receiving elements.
13. Explain the theory of total radiation pyrometer.
14. Explain how the emissivity is measured with a neat diagram.
15. Discuss in detail Detection of nuclear radiation.
16. Describe the construction and working measurements of
  - (i) The Geiger - Muller counter
  - (ii) Scintillation counter
17. Explain general air- sampling train.
18. Write about combustion product measurements using Orsat apparatus.

