

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023**(Regular/Improvement/Supplementary)****COMPUTER SCIENCE****GBCS4A04T: SENSORS AND TRANSDUCERS****Time: 2 ½ Hours****Maximum Marks: 80****SECTION A: Answer the following questions. Each carries *two* marks.****(Ceiling 25 Marks)**

1. What is Dielectric Constant?
2. What is level transducer?
3. Comment on Photodiode.
4. What is Capacitive Transducers?
5. Comment on impeller meter.
6. What is intrinsic photoresistors?
7. Give an account on thermostat.
8. Write a note on thermister.
9. What is a Sound Level Meter?
10. Define pressure.
11. What is transducer?
12. Mention the function of thermal sensor.
13. What is a Flow Meter?
14. Mention the use of an anemometer.
15. Define LVDT

SECTION B: Answer the following questions. Each carries *five* marks.**(Ceiling 35 Marks)**

16. What are the different characteristics of sensor?
17. Describe the different types of manometers.
18. What is Photovoltaic cell?
19. Explain the working of RTD.
20. What are Sound Transducers?
21. What is a potentiometer? How does it work?
22. Explain Bernoulli's principle.
23. What are Float Element Type Level Transducers?

SECTION C: Answer any *two* questions. Each carries *ten* marks.

24. What are inductive transducers? Explain its type and working principle.
25. What is a radiation detector? Explain different types of radiation detectors.
26. What are Electromagnetic Flow Meters? Explain its working principle
27. Explain about Hall effect transducer. What are the advantages and disadvantages of Hall effect transducer?

(2 × 10 = 20 Marks)