

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc.Physics - END SEMESTER EXAMINATIONS - NOV'2024

SEMESTER - V

24UPHET5B01 - Organic Solar Cells

Total Duration : 1 Hrs. 30 Mins.

Total Marks : 40

Section B

Answer any **TEN** questions ($10 \times 2 = 20$ Marks)

1. What are organic solar cells?
2. What do you mean by donor in energy gap?
3. What is meant by bandgap?
4. List the first generation solar cells.
5. What is meant by Acceptor?
6. Define short circuit current.
7. What is open circuit voltage?
8. What is the effect of solar cell efficiency?
9. Define stability & degradation of solar cells.
10. What is decay curve in solar cells?
11. What are the primary materials used in solar cells?
12. Define power conversion efficiency.

Section C

I - Answer any **FOUR** questions ($4 \times 5 = 20$ Marks)

13. Explain the mechanism of organic solar cells.
14. List the materials used for the fabrication of organic solar cells.
15. Explain any two technique used for the study of organic solar cells.
16. What do you mean by coating in organic solar cell? Explain any two coating methods.
17. Write a short note on solar park.
18. How does the active layer in an organic solar cell converts sunlight into electricity?
