

Course outline

How does an NPTEL online course work?

Module 1 - Overview of Electric Vehicles in India

Module 2 - Vehicle Dynamics

Module 2 and 3 - Vehicle Dynamics and EV Subsystems

Module 4 - Storage for EVs

Module 4 - Storage for EVs (contd)

Module 5 - Fundamentals of battery pack design

Module 5 and 6 - Battery Pack Design, Motors and Controllers

Module 6 - EV Motors and Controllers

Module 7&8 - Battery Charging and Swapping, Analytics

Module 9: Renewable Energy - Introduction

Module 10: Renewable

Module 10: Renewable Energy - Solar and Wind Energy

- Solar Photovoltaic
- Solar Cell and its Characteristics
- Solar Cells to Modules
- Wind Energy
- The War of Currents
- The birth of Solar - DC

Quiz: Week 11: Assignment 1

Quiz: Week 11: Assignment 2

Quiz: Week 11: Assignment 3

Quiz: Week 11: Assignment 4

Week 11: Feedback form: Electric Vehicles and Renewable Energy

Week 11: Lecture notes

Week 11: Solutions

Module 11: Renewable Energy

Live Session

DOWNLOAD VIDEOS

# Week 11: Assignment 3

The due date for submitting this assignment has passed.

**Due on 2021-10-13, 23:59 IST.**

As per our records you have not submitted this assignment.

Three modules as shown below are connected in series. Find the resultant VM and IM of the setup.

Modules	VM (Volts)	IM (Ampere)
A	15	4.5
B	15.2	4.0
C	15.6	3.8

1) VM = \_\_\_\_\_ V

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Numeric) 45.8

1 point

2) IM = \_\_\_\_\_ A

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Numeric) 3.8

1 point

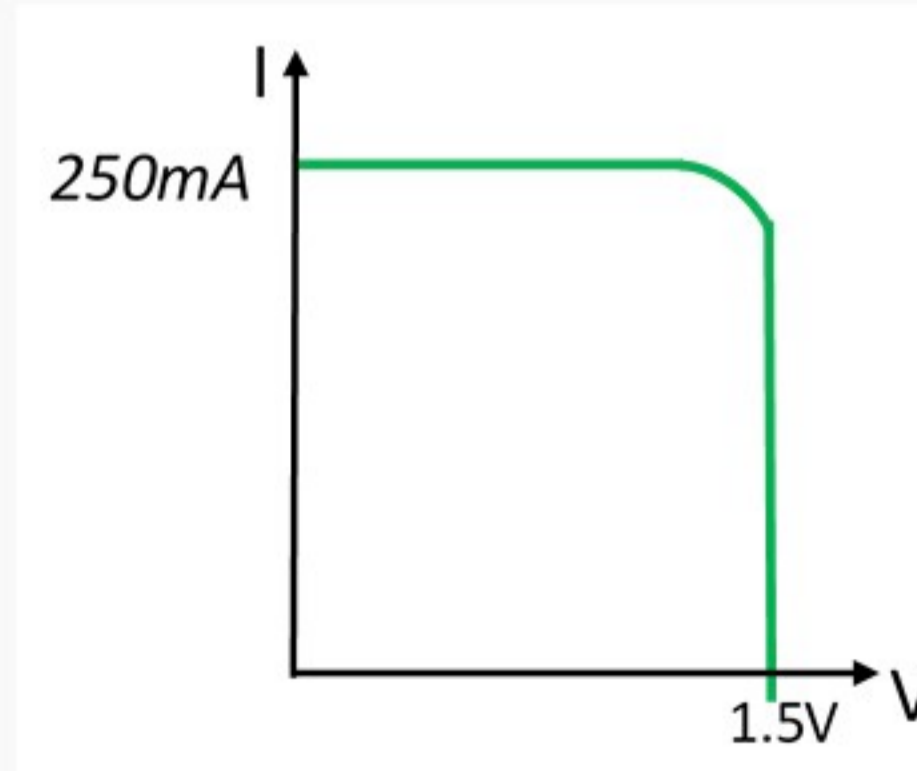
3) A solar module of dimension (80 cm x 80 cm) produces a voltage of 4.5 V and a current upto 18 A. If the solar insolation is  $1000 (W/m)^2$ , then calculate the efficiency of solar panel.

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Range) 12,14  
(Type: Range) 0.12,0.14

1 point

4) The figure below shows the IV characteristics of a solar cell illuminated uniformly with solar power of  $100 mW/cm^2$ . The solar cell has an area of  $12 cm^2$  and a fill factor of 0.7. The maximum efficiency (%) of the module is \_\_\_\_.




No, the answer is incorrect.  
Score: 0

Accepted Answers:  
(Type: Range) 20,23

1 point