

Unit 7 - Week 6

Course outline

How to access the portal

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

 Operation and Control of AC Microgrid-II

 Operation and Control of DC Microgrid -I

 Operation and Control of DC Microgrid -II

 Operation and Control of AC-DC hybrid Microgrid -I

 Operation and Control of AC-DC hybrid Microgrid -II

 Quiz : Assignment 6
 Solutions for Assignment - 6

Week 7

Week 8

DOWNLOAD VIDEOS

WEEKLY FEEDBACK

Assignment 6

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-09-11, 23:59 IST.

1) Which of the following hierarchical control facilitates an economically optimal operation? **1 point**

- Local control
- Secondary Control
- Central Emergency Control
- Global Control

No, the answer is incorrect.
Score: 0

Accepted Answers:
Global Control

2) Which of the following control is essentially works in the decentralized fashion? **1 point**

- Local control
- secondary control
- central/emergency control
- global control

No, the answer is incorrect.
Score: 0

Accepted Answers:
Local control

3) In which of the following modes the energy storage operates in constant power mode in the case of Mode Adaptive Droop Control? **1 point**

- Mode 1 Only
- Mode 2 Only
- Mode 3 Only
- Mode 1 and Mode 3 Only

No, the answer is incorrect.
Score: 0

Accepted Answers:
Mode 1 and Mode 3 Only

4) Which of the following types of distributed control ensures that the storage devices does not have energy deficit at any point of time? **1 point**

- Digital Average Current Sharing
- Average Voltage Sharing with Pilot Bus Regulation
- Distributed Co-operative Control
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Distributed Co-operative Control

5) In a typical DC microgrid, Hybrid storage system is a combination of **1 point**

- Lead acid battery and Lithium ion battery
- Lead acid battery and capacitor
- Lead acid battery and ultracapacitor/Supercapacitor
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Lead acid battery and ultracapacitor/Supercapacitor

6) PV is allowed to operate in MPPT during **1 point**

- Grid connect mode only
- During islanded mode only
- During all the time of grid connect and islanded modes
- During all the time of grid connected mode and till the battery is completely charged during islanded mode

No, the answer is incorrect.
Score: 0

Accepted Answers:
During all the time of grid connected mode and till the battery is completely charged during islanded mode

7) In case1, the PV that was connected to the DC bus was injecting 20 KW of power constituting to 1KW of loss and in the case2, the same PV is connected to the AC bus constituting to 1.5 KW of loss. Please find out the change in efficiency from case1 to case2? **1 point**

- 2.5% increase
- 2.5% decrease
- 5% increase
- 5% decrease

No, the answer is incorrect.
Score: 0

Accepted Answers:
2.5% decrease

8) In which of the following power management strategy of the AC-DC hybrid microgrid the DGs at both AC and DC bus operate on MPPT control mode? **1 point**

- Dispatched power output mode
- Undispatched power output mode
- DC bus voltage control
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Undispatched power output mode

9) Which of the following types of loading pattern are prone to cause voltage instability in the microgrid? **1 point**

- Constant power loads
- Voltage dependent loads
- Frequency dependent loads
- All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

10)In which of the following dispatched power mode, DG's output voltage is controlled to regulate its output power? **1 point**

- Current control mode
- Voltage control mode
- Both current control and voltage Control modes
- None of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Voltage control mode