

## Unit 9 - Week 8

Course outline
How does an NPTEL online course work?
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
<input checked="" type="radio"/> Arc Interruption Theory in Circuit Breaker-III <input type="radio"/> Arc Interruption Theory in Circuit Breaker-IV <input type="radio"/> Types of Circuit Breakers <input checked="" type="radio"/> Testing, Commissioning and Maintenance of Relays-I <input type="radio"/> Testing, Commissioning and Maintenance of Relays-II <input type="radio"/> Quiz : Assignment 8 <input checked="" type="radio"/> Solution Assignment 8
Download Videos
Feedback Link

## Assignment 8

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

**Due on 2020-11-11, 23:59 IST.**

- 1) What is the peak value of the power frequency overvoltage across contacts of a circuit breaker when an unloaded 400 kV transmission line is switched off? **2 points**
- 1230.94 kV  
 461.88 kV  
 653.19 kV  
 1131.31 kV
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: 653.19 kV
- 2) Short time current rating of circuit breaker **1 point**
- is greater than the continuous current rating  
 is less than the continuous current rating  
 may be either greater or lesser than the continuous current rating  
 none of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: is greater than the continuous current rating
- 3) Pre-insertion resistor with circuit breaker is used to **2 points**
- increase the peak of restriking voltage and the rate of rise of recovery voltage (RRRV)  
 increase the peak of restriking voltage and decrease the RRRV  
 decrease the peak of restriking voltage and the RRRV  
 decrease the peak of restriking voltage and increase the RRRV
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: decrease the peak of restriking voltage and the RRRV
- 4) A three-phase circuit breaker is rated 800A, 2000 MVA, 33 kV. What will be its making capacity? **2 points**
- 2000 MVA  
 3000 MVA  
 4000 MVA  
 5000 MVA
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: 5000 MVA
- 5) SF<sub>6</sub> gas has heat transfer rate about **1 point**
- 2.5 times of air  
 5 times of air  
 10 times of air  
 same as air
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: 2.5 times of air
- 6) Which type test is performed to carry out making and breaking operation test **1 point**
- operating value test  
 contact capacity test  
 overload test  
 none of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: contact capacity test
- 7) Temperature rise test is carried out for all relays **1 point**
- To check the withstand capability of insulation used in relays  
 To ensure integrity of the relay  
 To ascertain correct relay characteristic  
 None of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: To check the withstand capability of insulation used in relays
- 8) The typical value of insulation resistance is of the order of **1 point**
- 5–100 kΩ  
 500–1000 kΩ  
 5–50 kΩ  
 5 MΩ
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: 5 MΩ
- 9) All relay flags and semaphore indicators must be inspected **2 points**
- Daily or on every shift  
 Monthly  
 Bimonthly  
 None of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: Daily or on every shift
- 10) Primary injection test is carried out to test **2 points**
- To ensures the correct installation and operation of the protection scheme  
 To check complete sequence of tripping  
 To ascertain that the relay calibration  
 None of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers: To ensures the correct installation and operation of the protection scheme