

## Unit 2 - Week 1

Course outline
How does an NPTEL online course work?
Week 1
<input type="radio"/> Fundamentals of Protective Relaying-I
<input checked="" type="radio"/> Fundamentals of Protective Relaying-II
<input type="radio"/> Fundamentals of Protective Relaying-III
<input type="radio"/> Fundamentals of Protective Relaying-IV
<input type="radio"/> Fundamentals of Protective Relaying-V
<input type="radio"/> Quiz : Assignment 1
<input checked="" type="radio"/> Solution Assignment-1
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## Assignment 1

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

**Due on 2020-09-30, 23:59 IST.**

- 1) Selectivity, which is one of the requirements of protection system, is also known as 1 point
- Dependability  
 Relay Coordination  
 Security  
 None of these
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Relay Coordination*
- 2) Electromechanical relays are still used by the utilities due to their 1 point
- ruggedness and withstanding capacity of voltage spikes  
 lower cost  
 simple construction  
 all of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*all of the above*
- 3) The cost of the protection system should not exceed 1 point
- 5% of the cost of the equipment to be protected  
 10% of the cost of the equipment to be protected  
 15% of the cost of the equipment to be protected  
 20% of the cost of the equipment to be protected
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*5% of the cost of the equipment to be protected*
- 4) A thermal relay is used for the protection against 1 point
- Overload  
 Short circuit  
 Overvoltage  
 All of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Overload*
- 5) The VA rating of a CT is decided by considering 2 points
- Resistance of a relay  
 Reactance of a relay  
 Burden of a relay  
 None of the above
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Burden of a relay*
- 6) The operating time of modern digital relay is of the order of 2 points
- 0 – 10 ms  
 10 – 30 ms  
 100 – 200 ms  
 None of these
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*10 – 30 ms*
- 7) The torque produced in shaded pole structure induction type relay is 2 points
- Proportional to the current  
 Proportional to the square of the current  
 Inversely proportional to the current  
 Inversely proportional to the square of the current
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Proportional to the square of the current*
- 8) Least number of faults are generally reported for 2 points
- Transmission lines  
 Cables  
 Switchgears  
 Transformers
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Cables*
- 9) The purpose of backup protection is 1 point
- To increase the speed  
 To increase the reach  
 To leave no blind spot  
 To guard against failure of primary
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*To guard against failure of primary*
- 10) The protective relay is provided to 2 points
1. Provide additional safety by limiting arcing current during circuit breaker operation  
2. Close the contacts when the actuating quantity attains a certain predetermined value
- Only 1  
 Only 2  
 Both 1 and 2  
 None of these
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
*Only 2*