

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (OLD) EXAMINATION – WINTER 2018****Subject Code:150905****Date: 27/11/2018****Subject Name: Switchgear****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) Explain High resistance method to extinguish arc. **07**

(b) How Arc is initiated and maintained between CB contacts? **07**

Q.2 (a) Write a short note on “Current Chopping”. **07**

(b) Compare minimum oil circuit breaker with Bulk oil CB. **07**

OR

(b) Discuss the duties of circuit breaker. **07**

Q.3 (a) Explain any one method for power factor correction. **07**

(b) With neat diagram explain the working of Air Blast circuit breaker. **07**

OR

Q.3 (a) Discuss various types of circuit breaker in brief. **07**

(b) Differentiate between Circuit breaker, Fuse and Isolator. **07**

Q.4 (a) Compare Direct and Indirect testing of Circuit Breaker. **07**

(b) Discuss Slepian's for arc interruption in circuit breaker. **07**

OR

Q.4 (a) Describe the construction, operating principle and applications of Vacuum Circuit Breaker. **07**

(b) What do you mean by Rated Breaking capacity and Rated Making capacity of circuit breaker? **07**

Q.5 (a) Enlist and explain in brief, “The equipment used in Testing Station”. **07**

(b) Differentiate between Routine test and Type test. **07**

OR

Q.5 (a) Discuss the properties of SF₆ gas. **07**

(b) Explain any one testing arrangement for circuit breaker, with neat diagram. **07**
