

GUJARAT TECHNOLOGICAL UNIVERSITY**PDDC - SEMESTER-V. EXAMINATION – SUMMER 2016****Subject Code: X50904****Date: 09/05/2016****Subject Name: Switchgear****Time: 02:30 PM to 05:00 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) Define the term “Switchgear”. An list equipments used as switchgear and explain any four of them in detail. **07**
(b) Explain low resistance interruption method for arc interruption . **07**
- Q.2** (a) Explain interruption of low Magnetizing current. **07**
(b) Describe phenomenon current interruption in A.C Circuit breaker. **07**
- OR**
- (b) Explain following terms **07**
(1) Rated short circuit –breaking current (2) Rated short circuit–making current
- Q.3** (a) Differentiate SF6 circuit breaker and vacuum circuit breaker **07**
(b) Explain construction and working of Air break circuit breaker. **07**
- OR**
- Q.3** (a) Explain resistance switching in ABCB. **07**
(b) Explain fault clearing process in power system .Also define “fault”. **07**
- Q.4** (a) Give merits and demerits of SF6 circuit breaker. **07**
(b) Explain arc interruption process in vacuum circuit breaker. **07**
- OR**
- Q.4** (a) Explain physical properties of SF6 circuit breaker. **07**
(b) Discuss construction and working of D.C circuit breaker. **07**
- Q.5** (a) Enlist different tests of circuit breaker, explain synthetic test on circuit beaker. **07**
(b) Explain short circuit test on circuit breaker. **07**
- OR**
- Q.5** (a) Give short note on minimum oil circuit breaker with its merits and demerits. **07**
(b) Explain Auto Reclosure of EHV circuit breaker . **07**
