Seat No.: _____ Enrolment No._____

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 (1)Rated short circuit –breaking current (2) Rated short circuit–making current	**07**
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**

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