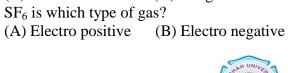
Enrollment No:				
	C.U	SHAH U	UNIVERSITY	
	Su	mmer Exa	amination-2017	
-	ct Name: Switchgear ct Code: 4TE06SGP		Branch: B.Tech (EE,EE)	E)
Semes	ster: 6 Date:	13/04/2017	Time: 02:30 To 05:30	Marks: 70
(2)	Use of Programmab Instructions written	on main answer be and figures (if ne	y other electronic instrument is pook are strictly to be obeyed. cessary) at right places.	orohibited.
Q-1	Attempt the follo	wing questions:		(14)
á	called(A) recovery volta	age (B) rest		rc is zero is
7	(A) Differential re	e (D) non igher than 500 KV elay (B) impay (D) non	A, which protection will be prefordance relay	erred?
((A) distance protection	on pilot wire is use ection (B) unit (D) bac	d? type	
(l) Plug setting of a r	elay can be altered gnetic path (B		
(ts in a circuit breal en alloy (B		
Í	(A) steady short c	sually operate und ircuit current	•	circuit current
!	What is the purpo(A) To increase the	se of back up prote the speed (B)	ection? To increase the reach	nory
1	(C) To leave no b Mhat is the mak breaker?	<u> </u>) To guard against failure of prin urrent ratio for an extra high v	_



(D) a negative value

(B) equal to 1

(A) more than 1

(C) less than 1

i)

	m)	Define the term: breaking capacity	
	n)	Define the term: restriking voltage	
Attemp	ot any f	Four questions from Q-2 to Q-8	
Q-2		Attempt all questions	(14
	(a)	Explain construction, working and advantages of SF ₆ circuit breaker.	(07
	(b)	Describe about static relay in detail with neat sketch.	(07
Q-3		Attempt all questions	(14
	(a)	Describe about Merz price protection of transformer.	(07
	(b)	Explain construction, working and advantages of minimum oil circuit breaker.	(07
Q-4		Attempt all questions	(14
	(a)	What are the requirements of C.T. & P.T.? Explain construction of C.T. & P.T	(07
	(b)	Explain the Buchholtz relay with the help of sketch.	(07
Q-5		Attempt all questions	(14
•	(a)	Explain the basic trip circuit of relay.	(04
	(b)	An over current relay has current setting of 150% and time setting multiplier is 0.7. Relay is supplied by ratio of 500/5 current transformer. If the value of fault current is 4000 A then find plug setting multiplier.	(05
	(c)	Give the classification of relay.	(05
Q-6		Attempt all questions	(14
	(a)	What do you mean by "Arc Interruption"? Explain the two methods of arc interruption.	(07
	(b)	Explain the protective scheme used for bus-bar.	(07
Q-7		Attempt all questions	(14
	(a)	Explain protection of small induction motor.	(07
	(b)	Explain protection of transmission lines by over current relays.	(07
Q-8		Attempt all questions	(14
	(a)	Explain importance of numerical relay.	(04
	(b)	Why neutral grounding is required? Explain any one method of neutral grounding.	(05
	(c)	Explain the different types of faults in generator.	(05

(D) None of these

What is the value of dielectric strength of SF₆ gas?

Define the term : rate of restriking voltage

Define the term: protective device

(C) Both (a) and (b)

j)

k)

l)

