Enrollment	No:	Exam Seat No:	
	C.U.SHAF	I UNIVERSITY	
	Summer E	examination-2019	
Subject Nan	me: Testing and Commission	ing of Electrical Machines	
Subject Cod	le: 4TE06TCM1	Branch: B.Tech (Electric	cal)
Semester: 6	Date: 29/04/2019	Time: 10:30 To 01:30	Marks: 70
(2) Instr (3) Dray	_	any other electronic instrument is per book are strictly to be obeyed. f necessary) at right places.	prohibited.
Q-1	Attempt the following ques	etions:	(14)
b) c)	Swinburne's test can be perf (a) any load (b) (c) only half load (d) A transformer oil must be fre (a) sludge (b)	ctor made of material. (Fill the lormed at only no load any of the above ee from odour moisture	blank).
g)	The excessive temperature damage to (a) Winding Insulation (c) Core bolt	rise in the transformer causes in (b)Bushings (d)Core laminations	maximum
h) i)	(a) field resistance(b) armature resistance(c) efficiency(d) Voltage regulation.	an alternator is used to find its cuit breaker is usually expressed	in terms
j)	test		motor is



		(c) Hopkinson's (d) Swinburne			
	k)	,			
		speed is called motor			
		(a) charge (b) dc			
		(c) synchronous (d) universal			
	1)	The efficiency of a 3-phase induction motor is approximately			
		proportional to			
		(a) $(1-s)$ (b) s			
		(c) N (d) Ns			
	m)	For which among the following the current ratings are not required?			
		(a) Circuit breakers (b) Relays			
		(c) Isolators (d) Load break switch			
	n)	The dielectric strength of transformer oil is excepted to be			
		(a) 11 kV (b) 33 kV			
		(c) 100 kV (d) 330 kV			
Atter	npt any	four questions from Q-2 to Q-8			
Q-2		Attempt all questions	(14)		
	(a)	Explain the tan delta test on transformer.	(07)		
	(b)	Explain the significance of the load losses (short-circuit losses) of power	(07)		
		transformers and the method of short-circuit test for loss measurement.			
Q-3		Attempt all questions	(14)		
	(a)	Explain Hopkinson's test for determination of efficiency of DC shunt	(07)		
		machine.			
	(b)	Explain commissioning steps for DC machine.	(07)		
Q-4		Attempt all questions	(14)		
	(a)	What is polarisation index? What is its significance?			
	(b)	Explain the classification of various tests performed on induction motor.	(07)		
Q-5		Attempt all questions	(14)		
	(a)	Explain open circuit test and short circuit test on synchronous machine.	(07)		
	(b)	Explain field test on two identical dc series machines.	(07)		
Q-6		Attempt all questions	(14)		
	(a)	Explain temperature rise test on bus bar.	(07)		
	(b)	Explain process of measuring earth resistance.	(07)		
Q-7		Attempt all questions	(14)		
	(a)	State the characteristics of transformer oil. Explain the testing of	(07)		
	(b)	transformer oil. Explain drying out process of synchronous machine.	(07)		
Q-8		Attempt all questions	(14)		
Q-0	(a)	Attempt all questions Explain Murray loop test and warley loop test.	(14) (07)		
	(a) (b)	Explain testing and commissioning of lightning arrestor.	(07)		
		Daplam count and commissioning of fighting affector.	(01)		

