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	Answer A	LL Ç	uesti	ons							
	PART A - (10	0 x 1	= 10	Mar	ks)						
What is the purpose of l	back up protectior	n?									CO1- R
(a) To increase the spe	ed	(b)) To i	ncre	ase t	he re	each				
(c) To leave no blind sp	pot	(d)) To g	guaro	d aga	inst	failu	re of	prin	nary	
Plug setting of an electr	Plug setting of an electromagnetic relay can be altered by varying								CO1- R		
(a) Number of ampere	turns	(b)	Air	gap	of m	agne	tic p	ath			
(c) Adjustable back stop	2	(d)	All	of th	e ab	ove					
Relay operating speed d	lepends on										CO2- R
(a) Spring tension		(b)	Rate	e of t	flux	built	up				
(c) Armature core air ga	ap	(d)	All	of tl	ne ab	ove	-				
							CO2- F				
		5									
	-										
		curr	ent								
									CO3- R		
								205 N			
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	15UE ation: Three hours What is the purpose of R (a) To increase the spe (c) To leave no blind sp Plug setting of an electr (a) Number of amperer (c) Adjustable back stop Relay operating speed d (a) Spring tension (c) Armature core air ga The torque production (a) inversely proportion (b) inversely proportion (c) Directly proportiona (d) Directly proportiona	Question P B.E. / B.Tech. DEGREE Sixth Electrical and Election (Regul ation: Three hours Answer A PART A - (14) What is the purpose of back up protection (a) To increase the speed (c) To leave no blind spot Plug setting of an electromagnetic relay of (a) Number of ampere turns (c) Adjustable back stop Relay operating speed depends on (a) Spring tension (c) Armature core air gap The torque production in induction type (a) inversely proportional to the current (b) inversely proportional to the square of (c) Directly proportional to the square of Unbalancing of an alternator may occur of (a) Single phase fault	Question Paper B.E. / B.Tech. DEGREE EXAL Sixth Seman Electrical and Electron 15UEE602–PROTECTION A (Regulation) ation: Three hours Answer ALL Q PART A - (10 x 1 free) What is the purpose of back up protection? (a) To increase the speed (b) (c) To leave no blind spot (d) Plug setting of an electromagnetic relay can bee (a) Number of ampere turns (b) (c) Adjustable back stop (d) Relay operating speed depends on (a) (a) Spring tension (b) (c) Armature core air gap (d) The torque production in induction type relay (a) inversely proportional to the current (b) inversely proportional to the square of curr (c) Directly proportional to the square of curr (d) Directly proportional to the square of curr (d) Directly proportional to the square of curr (a) Directly proportional to the square of curr (d) Directly proportional to the square of curr (a) Single phase fault (d)	Question Paper Co B.E. / B.Tech. DEGREE EXAMINA Sixth Semester Electrical and Electronics E 15UEE602–PROTECTION AND (Regulation 2015) ation: Three hours Answer ALL Questi PART A - (10 x 1 = 10) What is the purpose of back up protection? (a) To increase the speed (b) To i (c) To leave no blind spot (d) To g Plug setting of an electromagnetic relay can be alter (a) Number of ampere turns (b) Air (c) Adjustable back stop (d) All Relay operating speed depends on (a) All (c) Armature core air gap (d) All The torque production in induction type relay (a) inversely proportional to the current (b) inversely proportional to the square of current (c) Directly proportional to the square of current (d) Directly proportional to the square of current (d) Directly proportional to the square of current (d) Directly proportional to the square of current (d) Directly proportional to the square of current (a) Single phase fault (b) Un	Question Paper Code: B.E. / B.Tech. DEGREE EXAMINATION Sixth Semester Electrical and Electronics Enginer 15UEE602–PROTECTION AND SW (Regulation 2015) ation: Three hours Answer ALL Questions PART A - (10 x 1 = 10 Mar What is the purpose of back up protection? 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DEGREE EXAMINATION, DEC 202 Sixth Semester Electrical and Electronics Engineering 15UEE602–PROTECTION AND SWITCH GEAR (Regulation 2015) ation: Three hours Maximum Answer ALL Questions PART A - (10 x 1 = 10 Marks) What is the purpose of back up protection? (a) To increase the speed (b) To increase the reach (c) To leave no blind spot (d) To guard against failu Plug setting of an electromagnetic relay can be altered by varying (a) Number of ampere turns (a) Number of ampere turns (b) Air gap of magnetic p (c) Adjustable back stop (d) All of the above Relay operating speed depends on (a) Spring tension (a) inversely proportional to the current (b) inversely proportional to the current (b) inversely proportional to the square of current (c) Directly proportional to the square of current (d) Directly proportional to the square of current (a) Single phase fault (b) Unbalanced loading (b) Unbalanced loading	Question Paper Code: 56302 B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021 Sixth Semester Electrical and Electronics Engineering 15UEE602–PROTECTION AND SWITCH GEAR (Regulation 2015) ation: Three hours Maximum: 100 Answer ALL Questions PART A - (10 x 1 = 10 Marks) What is the purpose of back up protection? (a) To increase the speed (b) To increase the reach (c) To leave no blind spot (d) To guard against failure of Plug setting of an electromagnetic relay can be altered by varying (a) Number of ampere turns (b) Air gap of magnetic path (c) Adjustable back stop (d) All of the above Relay operating speed depends on (a) Spring tension (a) Spring tension (b) Rate of flux built up (c) Armature core air gap (d) All of the above The torque production in induction type relay (a) inversely proportional to the current (b) inversely proportional to the square of current (c) Directly proportional to the square of current (d) Directly proportional to the square of current (b) Unbalanced loading	Question Paper Code: 56302 B.E. / B. Tech. 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DEGREE EXAMINATION, DEC 2021 Sixth Semester Electrical and Electronics Engineering 15UEE602–PROTECTION AND SWITCH GEAR (Regulation 2015) ation: Three hours Maximum: 100 Marks Answer ALL Questions PART A - (10 x 1 = 10 Marks) What is the purpose of back up protection? (a) To increase the speed (b) To increase the reach (c) To leave no blind spot (d) To guard against failure of primary Plug setting of an electromagnetic relay can be altered by varying (a) Number of ampere turns (b) Air gap of magnetic path (c) Adjustable back stop (d) All of the above Relay operating speed depends on (a) Spring tension (a) Spring tension (b) Rate of flux built up (c) Armature core air gap (d) All of the above The torque production in induction type relay (a) inversely proportional to the current (b) inversely proportional to the square of current (c) Directly proportional to the square of current (d) Directly proportional to the square of current (a) Directly proportional to the square of current (d) Directly proportional to the square of current (a) Single phase fault

6.	A thermal pro	CO3- R					
	(a) Overload	(b) Temperature	b) Temperature (c) Short circuit				
7.	The phase con	CO4- R					
	(a) Its operation does not depend upon the direction of power flow						
	(b) Correct relay action can be obtained by using series capacitors on the line						
	(c) It can operate even for low value of fault current						
	(d) None of the	hese					
8.	The switch that	at has the fastest speed of op	peration is switch	CO4- R			
	(a) Electronic	(b) Mechanical	(c) Electro mechanical	(d) None of these			
9.	Air blast Circu	CO5- R					
	(a) Over curre	ents (b) Short duty	(c) Intermittent duty	(d) Repeated duty			
10.	The factor wh	ich influences the arc de ion	nization dominantly	CO5- R			
	(a) Line voltage (b) Magnitude of transien			t fault current			
	(c) Speed of re	e closure	(d) All of the above				
		PART - B (5 x 2= 10 Marks)				
11.	List the essent	tial features of switchgear.		CO1- U			
12.	Explain the pr	CO2- R					
13.	Classify the various bus bar faults. CO3- I						
14.	14. Mention the function of synthesis of simple impedance relay using Amplitude CO4-U Comparator.						
15.	Distinguish be	etween recovery voltage and	d re striking voltage.	CO5- R			
	PART – C (5 x 16= 80 Marks)						
16.	(a) Explain a of faults:	and draw the sequence netw	vork for the following type	CO1-U (16)			
		le-line-to-ground fault					
	., -	ble- line-to-ground fault					
	(iii) Line	e-to-line fault.					
Or							

	(b)	(i) Explain different types of earthing the neutral point of the Power system.	CO1- U	(16)
		(ii) Formulate an expression for the reactance of the peterson coil in terms of capacitance of the protected line.	CO1- U	
17.	(a)	Explain the construction and working principle of impedance type distance relay with R-X diagram.	CO2-U	(16)
		Or		

- (b) Describe the construction and principle of operation of an induction CO2-U (16) type directional over current relay.
- 18. (a) Discuss in detail about protection of transformer using differential CO3-U (16) protection which includes associated faults.

Or

- (b) Give a detailed explanation about CT's and PT's and its application to CO3-U (16) power system.
- 19. (a) Define static relay? What are the merits and demerits of static relays CO4- U (16) over electromagnetic relays also mention its applications.

Or

- (b) With a neat sketch discuss in detail about the synthesis of reactance CO4- U (16) relay using phase comparator.
- 20. (a) Explain the phenomenon of arc and arc interruption. CO5- U (16)

Or

(b) Explain the construction and working of SF6 circuit breaker and CO5-U (16) write its advantages and disadvantages.