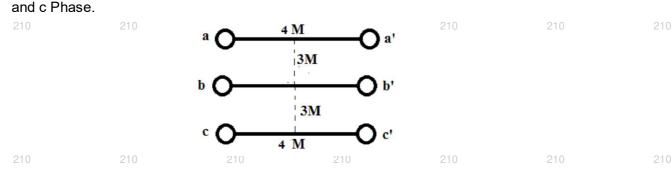
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An	SW	er Question No).1 (Part-1)	which is compul Part-		ight from Part-II	and any t	wo from
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				Part	- 1			
Q1	a)			Questions (Answer	All-10)	210	210	(2 x 10)
	b)	Resistance in AC is more than DC Justify.						
	c)	Why the transmission line is transposed? What is stringing chart?						
	d) e)	Draw the Phasor diagram for nominal-π network of medium transmission line.						
	f) g)	How to reduce the conductor vibration? What is Proximity effect?						
	h)	State the factors	s affecting sa	9	210 11 7 11	240 0	210	
	i)	what are the type		used in transmissio			210	
	j)	What factors de	cide the rise	in temperature in u	nderground t	able?		
	j)	What factors de	cide the rise	in temperature in u	nderground t	able?		
0 2	j)			Part-	I		wolvo)	/6 v 9)
Q2	j) a)	Only Focused-	Short Answ	·	l s- (Answer A	Any Eight out of T	•	(6 x 8)
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Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Classify overhead transmission line according to its performance and derive the A,B,C,D Q3 (16)constant of long transmission line.

Q4 Find the expression for flux linkages due to a single current carrying conductor and (16)evaluate the inductance per phase per km of a double circuit 3 phase line as shown in the fig. The conductors are transposed and are of radius 0.75 cm each. Where a,b& c are go conductor and corresponding a',b' and c' are return conductor for corresponding a,b

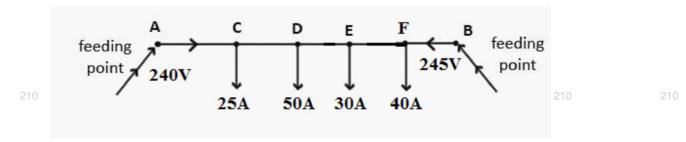


Q5 Describe the different types of D.C distributers.A 2-wire D.C distributor AB is fed from (16)both ends. At the feeding point A the voltage is maintained at 240 V and at B is 245 V. The total length of the distributor is 200 meters and loads are tapped off as under: 25A at 50 meters from A; 50A at 75 meters from A; 30A at 100 meters from Aand 40A at 150 meters from A. If the resistance per Km of one conductor is 0.3\(\overline{1}\), calculate:

i) The currents in the various sections of the distributor

ii) The minimum voltage and the point at which it occurs.

iii) The power dissipated in the distributor



Q6 Derive the equation of sag when supports are at equal levels and discuss the effect of ice (16)loading and wind pressure on sag.