



**BALUCHISTAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY**  
**KHUZDAR**  
**DEPARTMENT OF ELECTRICAL ENGINEERING**  
**M.E Fourth Semester Examination 2021**

<b>Department:</b>	<b>EED</b>	<b>Examination:</b>	<b>Mid Examination 2021</b>
<b>Subject:</b>	<b>Flexible AC Transmission</b>	<b>Code:</b>	<b>EE- 508</b>
<b>Max. Marks:</b>	<b>60</b>	<b>Time Allowed:</b>	<b>02(hours):20(minutes)</b>
<b>NOTE: ATTEMPT ALL QUESTIONS</b>			<b>Marks</b>
<b>Question No. 1</b>	(i) What is the meaning of Compensation?	02	
	(ii) Explain the Difference between Series and Shunt Compensation.	04	
	(iii) Draw the equivalent circuit diagram of Shunt Compensation?	03	
	(iv) Draw the Phasor Diagram of Series and Shunt Compensation?	06	
<b>Question No. 2</b>	(i) Define STATIC VAR Compensator and its advantages	05	
	(ii) Explain the Working Principle of the STATIC VAR Compensator	05	
	(iii) Draw the circuit diagram and VI characteristics curve of STATIC VAR Compensator	05	
<b>Question No. 3</b>	(i) Briefly explain Thyristor Switched Capacitor (TSC)?	05	
	(ii) Draw the basic architecture of TSC?	05	
	(iii) Write the formula and simple derivation of Thyristor Switched Capacitor (TSC)	05	
	(i) Explain the main purpose of Mid Point Voltage Regulation method?	05	
	(ii) Draw the Phasor diagram of Mid Point Voltage method	05	
	(iii) Fill in the blanks		
	(a) IPFC stands for .....	05	
	(b) TCSC stands for .....		
	(c) UPFC stands for .....		
	(d) GUPFC stands for .....		
	(e) HPFC stands for .....		

\*\*\*\*\*BEST OF LUCK\*\*\*\*\*