**Subject –Unit 4 FACTS General Consideration & Shunt Compensation**

**MCQ**

**1. FACTS devices used in**

a) Generation

b) AC transmission

c) DC transmission

d) None

**2. Voltage control means**

a) Boosting the feeder voltage

b) Reducing the line voltage under over voltage conditions

c) Keeping the voltage level within the allowable limits.

d) None

**3. Line drop compensation corrects for**

a) Line drop lagging P.F

b) voltage at leading P.F

c) Transformer voltage drop

d) voltage drop in feeder lines

**4. Which are the shunt compensation devices**

a) TCSC

b) SSSC

c) UPFC

d) SVC

**5. FACTS devices are generally used for to compensate\_\_\_\_\_\_\_\_\_\_of the transmission line**

a) reactive power

b) active power

c) apparent power

**6. Transmission efficiency increases as**

a) voltage and power factor both increase

b) voltage and power factor both decrease

c) voltage increases but power factor decreases

d) voltage decreases but power factor increases.

**7. SVC and STATCOM are\_\_\_\_\_\_\_\_\_\_\_\_\_\_ devices.**

a. series

b. series and shunt

c. shunt and series

d. shunt

**8. SVC stands for**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

a.Static Var Compensator

b. Static voltage controller

c. Static var converter

d. Static voltage converter

**9. STATCOM stands for**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**ANS:** Static Synchronous Compensator

**10. STATCOM is\_\_\_\_\_\_\_\_\_\_\_\_\_\_ regulating device.**

a. Current

b. Voltage

c. Current and Voltage

d. Power factor

**11. The main Objective of series compensation**

a) It improve the power factor

b) It reduces the fault currents

c) Reduce the voltage drop over long distance

d) None

**12. TCSC is a**

a) Shunt compensation device

b) Series compensation device

c) Both a & b

d) None of the above

**13. SSSC is a**

a) Series compensation device

b) shunt compensation device

c) combined compensator

d) loss reduction device

**14. Disadvantage with series compensation**

a) Reduce the stability

b) increase the voltage drop

c) Reduce the power factor

d) Increase in fault current

**15. SSSC stands \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**ANS**: Static Synchronous Series Compensator

**16. UPFC stands \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**ANS**: Unified power flow controller

**17. The purpose of the transmission network is to \_\_\_\_\_\_\_\_\_\_\_**

**ANS:** pool power plants and load centres

**18. Transmission Interconnection is done for\_\_\_\_\_\_\_\_**

a. economic reasons

b. to reduce the cost of electricity and

c. to improve reliability of power supply.

d. All of these

**19. FACTS controllers can enable a line to carry power closer to its\_\_\_\_\_\_\_**

a. Full efficiency

b. Dielectric rating

c. Thermal rating

**20. What limits the loading capability\_\_\_\_\_\_\_\_\_\_**

a. Thermal

b. Dielectric

c. Stability

d. All of these

**21.Basic types of FACTS controller\_\_\_\_\_\_\_\_\_\_\_**

a. Series Controllers and Shunt Controllers

b.Combined series-series Controllers

c.Combined series-shunt Controllers

d. All of these

**22.The voltage fluctuations are largely a consequence of the \_\_\_\_\_\_ in series impedances of lines, transformers, and generators.**

a. Current

b. Power

c. Voltage drop

d. None of these

**23. Unified Power Flow Controller (UPFC) is combination of \_\_\_\_\_\_\_\_\_**

a. STATCOM and TCSC

b. SSSC and TSC

c. STATCOM and SSSC

d. TSSC and TCR

**24. Load compensation is the management of \_\_\_\_\_\_\_ to improve the quality of supply in ac power systems.**

a. Active power

b. Reactive power

c. Apparent power

d. Both a & b

**25. Objectives of Load compensation\_\_\_\_\_\_\_\_**

a. Power-factor correction.

b. Improvement of voltage regulation.

c. Load balancing

d. All of these