

**Question (1): Write true or false with correcting the wrong statement****(10 marks)**

- 1) The inductive load causes the current wave to lead the voltage wave.
- 2) Power factor for a resistive load is unity.
- 3) Small industrial loads are served directly from the sub transmission network.
- 4) The commercial loads are composite loads, and induction motors form a high proportion of these loads.
- 5) As the number of phases increases, as the ripple content in the DC output decreases.
- 6) The bridge rectifier is the most practical circuit used for converting DC into AC for HVDC transmission.
- 7) The homopolar lines have two or more conductors having the same polarity.
- 8) In Bipolar lines, the junction of the converters may be grounded at one end or at both the ends.
- 9) D.C transmission line requires converter at each end.
- 10) A second phase of the Feed-in Tariff scheme for PV and wind has been announced and applied in 2014.

Question (2):**(10 marks)**

A daily load on a power system varies as shown in the following table, compute the average load and the daily load factor.

Interval, hr		Load, MW
12 A.M.	— 2 A.M.	6
2	— 6	5
6	— 9	10
9	— 12	15
12 P.M.	— 2 P.M.	12
2	— 4	14
4	— 6	16
6	— 8	18
8	— 10	16
10	— 11	12
11	— 12 A.M.	6