

Distinguish, Differentiate, compare and explain what is the difference between Homosporous and Heterosporous Pteridophytes. Comparison and Differences.

## **Difference between Homosporous and Heterosporous pteridophytes**

1. In Homosporous pteridophytes only one kind of spore is produced. In Heterosporous pteridophytes two kinds of spores are produced.
2. The spores are equal in size in homosporous. The smaller spores are called microspores and the larger spores are called megaspores in heterosporous.
3. The spores are produced from the same sporangia in homosporous. The microspores are produced from the microsporangia and the megaspores are produced from the megasporangia in heterosporous.
4. In the homosporous, spores develop one kind of gameto-phyte. In the heterosporous, the microspore develops into male gametophyte whereas the megaspore develops into female gametophyte.
5. In the homosporous, Spores germinate in soil and produce independent gametophyte. In the heterosporous, Spores germinate within sporangia and produce dependent gametophyte.
6. Examples of Homosporous pteridophytes are Lycopodium. Examples of Heterosporous pteridophytes are Selaginella and Salvinia.