Section-2

Ans-02

Ans. **Design flood** ⇒ It is the value of the instantaneous peak discharge adopted for the design of a particular project or any of its structure the term design flood is used to denote the maximum flood flow that could be passed without damage or serious threate to the stability of engineering structure.

i- Physiographic factors
ii- Climatic factors
iii- Shape of the Basin
iv- Size
v- Slope
vi- Drainage density
vii- Climatic factor

ii- Pan Shaped, ie. nearly Semi Circular Shaped Catchment give high Peak and narrow hydrographic.

4. Size :-

i- Small basins behave different from the large ones in terms of the relative importance of various phases of the runoff Phenomenon.

ii- In small Catchment the overland flow phase is predominat over the Channel flow.

5- Slope :-

i- The Slope of the main stream Controlls the velocity of flows in the Channel.

ii- The basin slope is important in small catchment where the overland flow is relatively more important.

6- Drainage Density :-

i- The drainage density is defined as the ratio of the total Channel length to the total drainage area.

ii- This fast response is reflected in a pronounced peaked discharge

7- Climate factor :-⇒

i- Among climatic factor the intensity, duration and direction of storm movement are the three important ones affecting the shape of a flood hydrograph.