Q. The Occurance of Cloudbursts could become more frequent in various places of northern India. Explain with Suitable Examples:

→ According to the India Meteorological Department (IM) it is a weather phenomenon with unexpected precipitation exceeding 100 mm/h over a geographical region of approximately 20-30 square km. Cloudbursts are short-duration, intense rainfall events over a small area.

Recently, cloudbursts have been reported from several places in J&K, Union territory of Ladakh, Uttrakhand and Himachal Pradesh.

Reason behind frequent cloudbursts in various places of northern India:—

IMD analysed atmospheric pressure, atmospheric temperature, rainfall, cloud water content, cloud fraction, cloud particle radius, cloud mixing ratio, total cloud cover, wind speed, wind direction and relative humidity during the cloudbursts, before as well as after the cloudbursts. The result showed that during the cloudbursts, the relative humidity and cloud cover was at the maximum level with low temp. and slow winds. It is expected that because of this situation a high amount of clouds may get condensed at a very rapid rate and result in a cloudbursts.

Also, several studies show that climate Change will increase the frequency and intensity of cloudbursts. As the temperature increases, atmosphere can hold more and more moisture and this moisture comes down as a short very intense rainfall for a short duration and this will cause of floods. in mountain areas. But, still we have no technology that can predict cloudbursts. But, we can control the effect of cloudbursts because usally cloudbursts happen in the month of July and August.