Roll no …………………….

**VISION INSTITUTE OF TECHNOLOGY, ALIGARH**

**Session 2019-20**

**B.Tech. 2nd Year (4th Sem.) Internal Sessional -I**

**SUBJECT NAME:** (KAG 402) **Branch: AG**

**Max. Time: 2 Hours Max. Marks: 50**

**Section-A**

**QNo-1Attempt *all* questions from the following: (2x5=10)**

1. What is Hydrology? Describe in details.
2. Why precipitation is important in aspect of crop production?
3. What is Hydrologic process?
4. What do you understand by hyetograph?
5. How to conserve water at home?

**Section-B**

**QNo-2 Attempt any *Five* questions from the following: (5X5=25)**

1. What is precipitation? & describe its forms also.
2. What do you understand by Hydrologic cycle? Draw a labeled diagram.
3. What do you understand by Hydrograph? Write its Components also.
4. What is infiltration? Which material is used to measure infiltration?
5. What is Evaporation? How to Estimation and measure the evaporation?
6. What is drizzle?
7. Write down the parameters which affect the surface runoff.
8. Describe the base flow separation method to measure direct runoff hydrograph.

**Section- C**

**QNo-3 Attempt any *two* questions from the following:** (**7.5x2=15)**

1. What is Interception loss? And also define its types.
2. How to estimate the mean rainfall? Describe its types with neat & clean diagram.
3. The following are the ordinate of the hydrograph of flow from a catchment area of 450 km2 due to a 6-h rainfall. Drive the ordinate of DRH.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Beginning of storm** | **h** | **0** | **6** | **12** | **18** | **24** | **30** | **36** | **42** | **48** | **54** |
| **Discharge** | **M3/s** | **21** | **45** | **58** | **65** | **75** | **78** | **90** | **65** | **44** | **21** |

**All the Best**