UG/5th Sem (H)/Pr/23/(CBCS)
2023

## GEOGRAPHY (Honours)

## Paper Code : GEOH DC-12B

(Hydrology and Oceanography)

## (Practical)

## Set - I

Full Marks : 15
Time : One Hour Thirty Minutes
The figures in the margin indicate full marks.

1. Plot an Annual Hydrograph for river Brahmaputra at Pandu, Assam (1977), using the data provided in the following table :

| SI.No. | Month | Discharge $\left(\mathrm{m}^{\mathbf{3}} / \mathbf{s}\right)$ |
| :---: | :---: | :---: |
| 1 | January | 5470 |
| 2 | February | 7349 |
| 3 | March | 13634 |
| 4 | April | 20513 |
| 5 | May | 31005 |
| 6 | June | 37476 |
| 7 | July | 44583 |
| 8 | August | 35111 |
| 9 | September | 24935 |
| 10 | October | 12381 |
| 11 | November | 10470 |
| 12 | December | $\mathbf{8 7 2 0}$ |

$$
\text { ( } 2 \text { ) }
$$

2. Draw a T-S Diagram using the following data :

| Sl. No. | Depth $(\mathbf{m})$ | Temperatu $\mathbf{e}\left({ }^{\circ} \mathbf{C}\right)$ | Salinity (\%) |
| :---: | :---: | :---: | :---: |
| 1 | 10 | 29.131 | 35.118 |
| 2 | 30.3 | 28.281 | 35.211 |
| 3 | 50 | 23.755 | 35.229 |
| 4 | 90.7 | 17.813 | 35.221 |
| 5 | 149.7 | 14.817 | 35.235 |
| 6 | 180.2 | 13.45 | 35.111 |
| 7 | 210 | 12.463 | 35.039 |
| 8 | 400.1 | 10.061 | 34.862 |
| 9 | 550.5 | 8.487 | 34.782 |
| 10 | 900.2 | 6.932 | 34.809 |
| 11 | 1050.4 | 5.991 | 34.798 |
| 12 | 1200.1 | 5.301 | 34.799 |
| 13 | 1400.5 | 4.312 | 34.767 |
| 14 | 1700.1 | 3.305 | 34.752 |
| 15 | 1962.9 | 2.55 | 34.749 |

3. Laboratory notebook \& Viva-voce.
$11 / 2+1 \frac{1}{2}=3$

UG/5th Sem (H)/Pr/23/(CBCS)
2023

## GEOGRAPHY (Honours)

Paper Code : GEOH DC-12B
(Hydrology and Oceanography)
(Practical)
Set - II
Full Marks : 15
Time: One Hour Thirty Minutes
The figures in the margin indicate full marks.

1. Plot an Annual Hydrograph for river Damodar at Rhondia, West Bengal (1978), using the data provided in the following table and briefly interpret the diagram.

$$
6+1=7
$$

| SI. No. | Month | Discharge $\left(\mathbf{m}^{\mathbf{3}} / \mathbf{s}\right)$ |
| :---: | :---: | :---: |
| 1 | January | 8.00 |
| 2 | February | 7.00 |
| 3 | March | 5.00 |
| 4 | April | 51.00 |
| 5 | May | 247.00 |
| 6 | June | 409 |
| 7 | July | 367 |
| 8 | August | 1839 |
| 9 | September | 1183 |
| 10 | October | 136 |
| 11 | November | 43 |
| 12 | December | 7.0 |

P.T.O.

$$
\text { ( } 2 \text { ) }
$$

2. Draw a T-S Diagram using the following data :

| Sl. No. | Depth (m) | Temperature ( ${ }^{\circ} \mathbf{C}$ ) | Salinity (\%) |
| :---: | :---: | :---: | :---: |
| 1 | 25.4 | 27.345 | 35.287 |
| 2 | 50.4 | 24.33 | 35.247 |
| 3 | 100.3 | 17.059 | 35.081 |
| 4 | 200.5 | 13.02 | 35.058 |
| 5 | 399.4 | 10.538 | 34.912 |
| 6 | 850.4 | 6.91 | 34.808 |
| 7 | 1200.1 | 4.992 | 34.791 |
| 8 | 1349.9 | 4.469 | 34.782 |
| 9 | 1700.4 | 3.282 | 34.761 |
| 10 | 2007.5 | 2.661 | 34.758 |

3. Laboratory notebook and Viva-voce.
$11 / 2+11 / 2=3$
