2021   **SET-1**

GEOGRAPHY (Honours)
(CBCS)
(Practical)

Full Marks: 30   **Duration: 3 Hours**

Paper: GEOH -DC-11B

Full Marks: 15   Duration: 1.5 Hours

The figures in the margin indicate full marks.

Answer all questions

1. Determine the available nitrogen (N) of the given soil sample using the provided apparatus and reagents.   5

OR

Briefly discuss the different steps to prepare a true soil sample.
Mention the apparatus required in colorimetric method of soil-pH determination.   3+2=5

2. Using data provided in the following table:

   a) Draw a graph showing the annual variation in the number of Tiger population in Western Ghat.

   b) Compute and draw the trend by 3-year moving average.   3+4=7

Year	Tiger population
2006 – 2007	402
2007 – 2008	436
2008 – 2009	435
2009 – 2010	534
2010 – 2011	589
2011 – 2012	579
2012 – 2013	662
2013 – 2014	776
2014 – 2015	801
2015 – 2016	922
2016 – 2017	933
2017 – 2018	981

Source: Tiger Census 2018

3. Laboratory Note Book & Viva-voce   3

2021   **SET-1**

Paper : GEOH - DC-12B(CBCS)

Full Marks: 15   Duration: 1.5 Hours

The figures in the margin indicate full marks.

1. A date-wise discharge measurements have been made at Kangsabati river gauging station along with simultaneous stage observations. Plot on a simple/ordinary graph to show the rating curve based on the following data.

                                                                     7

Date	RL (m)	Discharge (m^3/s)
18/08/1997	147.71	39.34
19/09/1997	146.61	28.12
20/09/1997	146.67	35.074
21/09/1997	146.87	40.565
22/09/1997	147.67	76.12
23/09/1997	147.37	55.41
24/09/1997	147.65	145.56
25/09/1997	147.66	88.51
26/09/1997	147.78	135.14
27/09/1997	149.33	389.52

2. Draw annual hydrograph from the following month wise discharge and gauge height data of a river.   5

Month	Discharge in cusecs	Gauge height in feet
January	320	21.90
February	350	21.92
March	650	22.93
April	545	22.70
May	540	22.70
June	650	22.95
July	6200	27.65
August	7420	33.16
September	15945	34.60
October	7100	33.05
November	2850	25.00
December	480	21.98

3. Laboratory note book and viva-voce   3