

2022

GEOGRAPHY (Honours)**Paper Code : DC - 13B****[CBCS]****(SET - 1)**

Full Marks : 15

Time : One and Half Hours

The figures in the margin indicate full marks.

1. The annual peak flood discharge recorded in River Mayurakshi at Tilpara Barrage. Construct the probability curve (Weibull's method) with necessary calculation based on the given data. (Use any graph paper) 5

| Year | Annual Peak Discharge in Cumec. | Rank |
|------|---------------------------------|------|
| 2000 | 8978.6 | 1 |
| 1978 | 6988.6 | 2 |
| 2004 | 5686.4 | 3 |
| 1986 | 2612.5 | 4 |
| 2006 | 2212.3 | 5 |
| 1993 | 1273.5 | 6 |
| 1992 | 1047.1 | 7 |
| 2007 | 962.2 | 8 |
| 1997 | 912.9 | 9 |
| 1996 | 848.2 | 10 |

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2. Determine the flood years based on Annual flood level data given below and plot accordingly. 2+5=7

| YEAR | Annual Highest Flood Level (m) | Remark |
|------|--------------------------------|-------------------------------|
| 1978 | 24.38 | Warning Level=22.5m |
| 1979 | 22.85 ✓ | |
| 1980 | 22.22 ✓ | |
| 1981 | 23.05 ✓ | Danger Level=23.20m |
| 1982 | 22.04 ✓ | |
| 1983 | 23.42 ✓ | |
| 1984 | 19.96 ✓ | Highest flood level=23.80m |
| 1985 | 22 ✓ | |
| 1986 | 23.91 ✓ | |
| 1987 | 24.51 ✓ | |
| 1988 | 22.88 ✓ | |
| 1989 | 22.32 ✓ | |
| 1990 | 22.89 ✓ | |
| 1991 | 21.25 | |
| 1992 | 23.64 ✓ | |

3. Laboratory Note Book and Viva-voce.

1+2=3

GEOGRAPHY (Honours)

Paper Code : DC - 14B

[CBCS]

(SET - 1)

Full Marks : 15

Time: One and Half Hours

The figures in the margin indicate full marks.

1. A random sample of 400 students from colleges in India were classified according to the subjects studied and foreign languages known as follows :

| Subjects studied by students | Number of Students Knowing other foreign language apart from English | | | |
|------------------------------|--|----------|---------|-------|
| | French | Mandarin | Russian | TOTAL |
| English | 87 | 61 | 42 | 190 |
| Political Science | 58 | 89 | 63 | 210 |
| TOTAL | 145 | 150 | 105 | 400 |

Test whether the two attributes, subjects studied and foreign languages known are associated or not (Given $X^2_{.01} = 9.21$ for 2 degree of freedom). 7

2. Suppose that a random sample size 20, drawn from a normal population has mean $\bar{x} = 4.2$ and standard deviation 6.1. Can it be said that the sample was drawn from a

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(2)

normal population with mean 2.5 at 5% level of confidence while applying Z test? [given that $\alpha 0.05=1.96$] ^{1.25} 5

3. Laboratory Note Book and Viva-voce.

1+2=3

UG/6th Sem (H)/Pr/22/(CBCS)

2022

GEOGRAPHY (Honours)

Paper Code : DSE - 3B

(Applied Geomorphology / Human Geography)

[CBCS]

(SET - 1)

Full Marks : 15

Time : One and Half Hours

The figures in the margin indicate full marks.

Applied Geomorphology

Answer *all* the questions.

1. Make an area-height relation using percentage hypsometric curve method from the given data and state its stage in cycle of erosion. 6+1=7

| Height (m.) | <100 | 100-200 | 200-300 | 300-400 | 400-500 | 500-600 | 600-700 | >700 |
|-------------------------|------|---------|---------|---------|---------|---------|---------|------|
| Area (km ²) | 220 | 180 | 70 | 40 | 20 | 10 | 5 | 1 |

2. What is meant by geomorphological map? State the uses of it. Draw the conventional sign of a tidal channel used in a SOI toposheet. 2+2+1=5

3. Laboratory Note Book and Viva-voce. 1+2=3

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Or,

Human Geography

Answer *all* the questions.

1. Following table shows the population and distance (in km) of three urban centre.

| Urban Centre | A (Distance) | B (Distance) | C (Distance) |
|----------------------------------|-----------------|-----------------|-----------------|
| A <u>population</u> 100000 | | 80 km | 40 km |
| B <u>population</u> 75000 | 80 km | | 25 km |
| C <u>population</u> 60000 | 40 km | 25 km | |

Calculate the population potential of each centre and interpret the significance of the derived result. $7+1=8$

2. Make a short discussion on significance of Human Development Index (HDI). What is meant by population mean centre? $2+2=4$
3. Laboratory Note Book and Viva-voce. $1+2=3$
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