

BA (Honours Examination) 2021
Semester III (CBCS)
Geography
CC5 (Climatology)

Time: 3 hours

Full Marks: 60

Questions are of value as indicated in the margin.
Attempt any three questions selecting one from each unit.

Unit I
(Elements of Atmosphere)

1. What are the constituents of the atmosphere? Mention the meteorologically important constituents of the atmosphere and how they influence the weather and climatic characteristics of the atmosphere. 10+10=20
2. Define lapse rate. What are the different types of lapse rates? Distinguish between wet and dry adiabatic lapse rates. How are atmospheric stability and instability related to lapse rates? 2+2+8+8=20

UNIT II
(Atmospheric phenomena)

3. Define air masses and mention the source region of air masses. Describe the characteristic of an ideal source region. Attempt a broad classification of air masses. 3+2+5+10=20
4. Discuss the mechanism of the origin of the tropical cyclones. How are they different from the temperate cyclones? 15+5=20

Unit III
(Classification of climates and climate change)

5. Describe the Koppen's system of climatic classification. 20
6. Define climate change and discuss the causes and consequences of climate change. 20

B.A. (Honours) Examination 2021
Semester-III (CBCS)
Geography
Course/Paper: CC-6
(Geography of India)

Time: 3 Hours

Marks: 40

Questions are of value as indicated in the margin

Answer **three** questions selecting **one** from each unit

UNIT-I
(Physical Aspects)

1. Discuss briefly the factors causing the Indian monsoon. Comment on the spatial distribution of monsoon rainfall in India. **10+10=20**
2. Write notes on the followings: **10+10= 20**
 - a) Relationship between distribution of rainfall and vegetation types of India
 - b) Distribution of soil types of India and its relation with topography and surface geology of India.

UNIT-II
(Economic Aspects)

3. Write a concise account on progress of agriculture in India since 1951. Mention the major constraints that hamper the growth of agricultural sector in India. **12+8=20**
4. Give an outline on distribution of minerals and mineral belts in India. Briefly discuss the salient features of Chotanagpur Industrial Region. **12+8=20**

UNIT-III
(Socio- cultural Aspects)

5. Distinguish between population density and distribution. Define different types of sex ratio. Write a note on the population problem in India. **5+6+9=20**
6. Differentiate settlement types from settlement patterns. Define census town. Explain major rural settlement patterns commonly found in India. **4+4+12=20**

B.A. (Honours) EXAMINATION 2023
SEMESTER-III
GEOGRAPHY
CORE COURSE: 5 (CC 5)
Climatology

Full Marks 60

Time 3 hours

Questions are of value as indicated in the margin
Answer any *three* questions selecting *one* from each Unit

Unit I
(Elements of Atmosphere)

- ✓ 1. Mention the meteorologically important constituents of the atmosphere and explain how they influence weather phenomenon. Explain and describe the Global Energy Budget. 10+10=20
2. Write notes on any Two of the following 10
 - a) Inversion of temperature 10
 - b) Barotropic and Baroclinic atmospheric conditions 10
 - c) Normal and Adiabatic Lapse rates

Unit II
(Atmospheric Phenomena)

- ✓ 3. Describe the three cell model of planetary wind circulation with suitable illustrations. 20
4. Bring out the differences between Fog and Cloud. Give a typology of the different types of clouds. 5+15=20

Unit III
(Classification of Climate and Climate Change)

- ✓ 5. Critically discuss the scheme of climatic classification as given by Thornthwaite. Discuss about any one climatic division in detail. 10+10=20
6. Appraise the importance of Ozone gas for the existence of life on earth. Explain how climate change is anthropogenic and discuss its consequences in detail. 8+12=20

B. A. (Hons) Examination 2023
Semester III
Geography
Paper: CC6
Geography of India

Time: 3 hours

Full Marks: 60

*Questions are of values as indicated in the margin.
Attempt any **three** questions selecting **one** from each unit.*

Unit-I
(Physical Aspects)

1. Mention the major physical divisions of India. Describe the relief features and structures of at least two physical divisions of India at length. 5+15=20
2. Discuss the seasonal and regional variation of rainfall caused by South-west monsoon and North-east monsoon in India. 10+10=20

Unit-II
(Economic Aspects)

3. Explain various types of transportation networks with suitable illustrations. Write a note on road transport network in India. 12+8=20
4. a) Name the major industrial regions of India and discuss any two of them with their advantages and disadvantages. 10+10=20
b) Narrate the place of agriculture in the Indian Economy.

Unit-III
(Socio-Cultural Aspects)

5. Discuss demographic transition model and explain its applicability with respect to India's population since 1900. 10+10=20
6. What do you understand by the term urban? Describe various types of urban settlements. Discuss patterns of rural settlements. 3+7+10=20

B.A. Hons. Examination, 2023

Semester III

Geography

Paper: CC 7

(Practical) Statistical Methods in Geography

Full Marks: 60

Time: 3 hours

1. Classify the statistical data with suitable examples. What are scales of statistical data measurement? (4+6=10)

2. The following data are the age of internet users obtained from a sample:

41 15 31 25 24 23 21 22 22 18
30 20 19 19 16 23 27 38 34 24
19 20 29 17 23

Prepare a frequency distribution table with a class interval of 5 from the above data. Which age group has the maximum number of users? What is the average age of the users? (5+1+4=10)

3. Refer to the following table:

Marks (%)	No. of candidates
55 - 60	7
60 - 65	17
65 - 70	51
70 - 75	79
75 - 80	89
80 - 85	97
85 - 90	100

a) Calculate the median and mean deviation from the above table. (3+5)

b) Mention the characteristics of coefficient of variation. (2)

4. Define sampling. Describe Purposive, random, systematic and stratified sampling techniques with suitable examples. (2+8=10)

5. Eight cities have been randomly ranked by the judges against climatic energy and environmental equality performances. Ranks obtained by them are given below.

Cities	A	B	C	D	E	F	G	H
Environmental quality rank	1	2	3	5	7	8	6	4
Climatic energy rank	3	1	2	7	8	6	4	5

Calculate the Spearman's rank correlation and interpret the result.

(8+2=10)

6. Practical file evaluation and Viva-voce

(5+5=10)

**DEPARTMENT OF GEOGRAPHY
VIDYA BHAVANA
VISVA-BHARATI**

**B.A. Honours Examination- 2023
Semester-III
Geography
Course: SECC-1**

(Practical: Computer Basics and Computer Applications)

Time: 2 Hours

Full Marks: 25

Questions are of values as indicated in the margin
Answer all questions

1. Highlight the different numbering system used in computer application. 4
2. Write short notes of the following: 2 x 3=6
 - (a) Drawing of histogram using MS Excel.
 - (b) Different types of trend lines in MS excel.
3. Calculate the mean monthly temperature and rainfall of the given station and represent it with application of suitable graphical method through MS Excel spreadsheet programme and interpret. 6

Rainfall & Temperature Distribution, Sriniketan

Month	Minimum Temperature (°C)	Maximum Temperature (°C)	Rainfall (mm)
January	6.5	13.6	20
February	9.5	25.6	40
March	14.8	35.9	70
April	23.5	37.8	96
May	32.6	44.8	123
June	31.5	42.5	350
July	30.8	39.8	468
August	34.5	37.5	645
September	31.2	34.2	585
October	24.2	32.2	258
November	16.8	23.5	25
December	8.9	13.5	12

4. Briefly explain how web browser helps to extract the information in geographical studies with suitable examples. 4
5. Viva-voce 5