

U.G. 1st Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-01****(Geotectonics and Geomorphology)****[New Syllabus under CBCS]**

Full Marks : 60

Time : $2\frac{1}{2}$ Hours*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I****(Geotectonics)****[Marks : 20]**

1. Answer any **three** from the following: $2 \times 3 = 6$
 - a) What is asthenosphere?
 - b) What is nappe?
 - c) What is homoseismal line?
 - d) What is anticlinorium?
 - e) What is volcanic fissure?
2. Answer any **one** from the following: $4 \times 1 = 4$
 - a) Differentiate SIAL from SIMA.

[Turn Over]

- b) Distinguish between normal fault and reverse fault.

3. Answer any **one** from the following: $10 \times 1 = 10$
 - a) Explain the formation of folded mountains in the light of plate tectonic theory.
 - b) Discuss the Pratt's model on isostasy with suitable diagram.

UNIT-II**(Geomorphology)****[Marks : 40]**

4. Answer any **seven** from the following: $2 \times 7 = 14$
 - a) What is carbonation?
 - b) What is solifluction?
 - c) What is pediplain?
 - d) What is antidip stream?
 - e) What is blind valley?
 - f) What is abrasion?
 - g) What is fault scarp?
 - h) What is shoreline?
 - i) What is bajada?

j) What is nunatak?

k) What is piedmont glacier?

5. Answer any **four** from the following: $4 \times 4 = 16$

a) Explain granular disintegration of rocks.

b) Distinguish between earthflow and mudflow.

c) Explain the formation of inversion of relief.

d) Specify the essential conditions for the development of karst topography.

e) State the formation of wave-cut platform.

f) Outline the different types of moraines.

6. Answer any **one** from the following: $10 \times 1 = 10$

a) Describe the major erosional landforms produced by aeolian processes with suitable diagrams.

b) Illustrate the landscape evolution model after Davis.

U.G. 1st Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-02****[New Syllabus under CBCS]**

Full Marks : 40

Time : $2\frac{1}{2}$ Hours*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** questions from the following: $2 \times 5 = 10$

- Define true dip.
- Write two identifying characteristics of sandstone.
- What is graticules?
- Distinguish between perspective and non-perspective projections.
- What is strike line?
- Mention any two uses of vernier scale.
- What is hade?
- Differentiate chorochromatic from choropleth maps.

*[Turn Over]*2. Answer any **two** questions from the following: $5 \times 2 = 10$

- Highlight the distinctive features of open series toposheet of SOI.
- State about false easting and northing in UTM.
- What is unconformity and non-conformity in geological study?
- Specify the salient characteristics of rectangular coordinate systems.

3. Answer any **two** questions from the following: $10 \times 2 = 20$

- Discuss the concept of Cartography and Communication and state about the ethics in Cartography. $6 + 4 = 10$
- Give an account on classification of maps with suitable examples. 10
- Illustrate the properties and uses of Conical projection mentioning its demerits. $5 + 3 + 2 = 10$
- Bring out the advantages and disadvantages of comparative linear scale over simple linear scale with necessary illustration. $5 + 5 = 10$

GEOGRAPHY

Course Code : GEO-H-CC-P-02

[New Syllabus under CBCS]

Time : 4 Hours

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

- a) Draw a linear scale to show 2 miles on primary division and 0.5 mile on secondary division when the R.F. is 1:63,360. 4
 - b) Write down the scale, latitudinal and longitudinal extensions of the following reference numbers of toposheets (SOI).

(1+1+1+1)=4

i) 73 ii) 73A iii) 73A/16
iv) 73A/SE
 - c) Bring out the properties of Bonne's Projection. 2
- Laboratory Note Book and Viva Voce 5+5=10

U.G. 1st Semester Examination - 2021**GEOGRAPHY****[PROGRAMME]****Course Code : GEO-G-CC-T-01****(Geotectonics and Geomorphology)****[New Syllabus under CBCS]**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

2×5=10

নিম্নলিখিত যে-কোনো পাঁচটি প্রশ্নের উত্তর দাও :

a) Name the constituent materials of the earth's core.

পৃথিবীর কেন্দ্রমণ্ডল গঠনকারী উপাদানগুলির নাম লেখ।

b) Distinguish between weathering and denudation.

আবহবিকার ও নগ্নীভবনের পার্থক্য কর।

c) What is transform fault?

ট্রান্সফর্ম চ্যুতি কাকে বলে?

d) What is Gour?

গৌর কাকে বলে?

e) What is delta?

ব-দ্বীপ কাকে বলে?

f) What is continental shelf?

মহীসোপান কাকে বলে?

g) What is sargasso sea?

শৈবাল সাগর কি?

h) What are infiltration in hydrological cycle?

জলচক্রে অনুপ্রবেশ বলতে কি বোঝায়?

2. Answer any **two** from the following questions:

5×2=10

নিম্নলিখিত যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) Define moraine and describe briefly the different types of moraines.

গ্রাবরেখা কাকে বলে এবং সংক্ষেপে বিভিন্ন প্রকার গ্রাবরেখার বর্ণনা দাও।

b) Highlight the geological events and landforms related with convergent plate margins.

অভিসারী পাতসীমান্তের সঙ্গে সম্পর্কিত ভূতাত্ত্বিক ঘটনাসমূহ ও ভূমিরূপের বর্ণনা দাও।

- c) Describe any two processes related to chemical weathering.

রাসায়নিক আবহবিকারের যে-কোনো দুটি পদ্ধতির বর্ণনা দাও।

- d) Highlight any four landforms developed due to wind erosion.

বাতাসের ক্ষয়কার্য দ্বারা উদ্ভূত যে-কোনো চারটি ভূমিরূপের বর্ণনা দাও।

3. Answer any **two** of the following: $10 \times 2 = 20$

নিম্নলিখিত যে-কোনো দুটি প্রশ্নের উত্তর দাও :

- a) Explain the internal structure of the earth with respect to seismic waves.

ভূমিকম্প তরঙ্গের সাপেক্ষে পৃথিবীর অভ্যন্তরীণ গঠন ব্যাখ্যা কর।

- b) Describe the bottom relief features of the Pacific Ocean.

প্রশান্ত মহাসাগরের তলদেশের ভূপ্রকৃতির বর্ণনা দাও।

- c) Critically evaluate the model of cycle of erosion as proposed by Davis.

ডেভিস প্রবর্তিত ক্ষয়চক্র মডেলটি সমালোচনাসহ বিবৃত কর।

- d) Discuss the major processes of physical weathering with suitable illustrations.

চিত্রসহ ভৌত আবহবিকারের বিভিন্ন প্রক্রিয়াগুলির বর্ণনা দাও।

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UG/3rd Sem/GEO-H-CC-T-05/21

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[HONOURS]

Course Code : GEO-H-CC-T-05

(Climatology)

[New Syllabus under CBCS]

Full Marks : 60 Time : 2½ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

UNIT-I

(Elements of the Atmosphere)

(Marks : 20)

1. Answer any **three** of the following questions:

2×3=6

- a) What is thermal equator?
- b) What is Van Allen belt?
- c) What is solar constant?
- d) Differentiate homosphere from heterosphere.
- e) State the significance of mesosphere.

[Turn over]

2. Answer any **one** from the following: 4×1=4

- a) Bring out the significance of Ozone Layer.
- b) Specify the salient features of vertical distribution of temperature in earth's atmosphere.

3. Answer any **one** from the following: 10×1=10

- a) Explain the heat budget of the atmosphere with necessary illustrations.
- b) Discuss the causes and consequences of inversion of temperature.

UNIT-II

(Atmospheric Phenomena, Climate Change and Climatic Classification)

(Marks : 40)

4. Answer any **seven** of the following questions:

2×7=14

- a) What is Ferrel's law?
- b) What is occlusion?
- c) Define dew point.
- d) What is shrieking sixties?
- e) State the significance of baroclinic conditions determining the state of atmosphere.

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- f) Differentiate the *Af* climate from *Df* climate.
- g) Distinguish between hail and sleet.
- h) What is tornado?
- i) Define latent heat.
- j) What is azores high?
- k) Distinguish between cloud and fog.

5. Answer any **four** of the following questions :

$4 \times 4 = 16$

- a) Distinguish between stability and instability.
- b) Mention the major modifications of air mass.
- c) Specify the salient structure of a mid-latitude cyclone with necessary illustration.
- d) Compare westerlies and jet stream.
- e) State the bases of climatic classification of Thornthwaite.
- f) Discuss the determining factors of frontogenesis.

6. Answer any **one** of the following questions :

$10 \times 1 = 10$

- a) Critically evaluate the Bergeron-Findeisen theory of precipitation.
- b) Discuss the monsoon circulation and mechanism with reference to India.

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UG/3rd Sem/GEO-H-CC-T-06/21

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[HONOURS]

Course Code : GEO-H-CC-T-06

(Statistical Methods in Geography)

[New Syllabus under CBCS]

Full Marks : 40

Time : $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

UNIT-I

1. Answer any **three** of the following questions :

2×3=6

- a) What are nominal data?
- b) What are ordinal data?
- c) What are meant by interval data?
- d) What is frequency distribution?
- e) What are secondary data?

[Turn over]

2. Answer any **one** of the following questions : 4×1=4

- a) Specify the methods of purposive sampling with examples.
- b) Draw a graph for the standard normal distribution and label it appropriately.

3. Answer any **one** from the following questions:

10×1=10

- a) State the different methods of primary data collection.
- b) Elaborate the methods of systematic and stratified sampling with suitable examples.

UNIT-II

4. Answer any **three** from the following questions:

2×3=6

- a) What is coefficient of variation?
- b) What is standard deviation?
- c) What is mean deviation?
- d) What is central tendency?
- e) What are partition values?

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5. Answer any **one** from the following questions:

$$4 \times 1 = 4$$

- a) Highlight the basic properties of correlation coefficient.
- b) Differentiate correlation from regression.

6. Answer any **one** from the following questions:

$$10 \times 1 = 10$$

- a) Compare the arithmetic mean, median and mode as measures of central tendency.
 - b) Discuss the significance of time series analysis in Geography.
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U.G. 3rd Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-07****(Geography of India)****[New Syllabus under CBCS]**

Full Marks : 60

Time : $2\frac{1}{2}$ Hours*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-1****(Geography of India)****[Marks : 40]**1. Answer any **seven** of the following questions:

2×7=14

- i) What is unconsolidated sediment?
- ii) What is region?
- iii) Where is desert vegetation observed in India?
- iv) Name the principle soil types in Maharashtra.
- v) Narrate geologic characteristics of Aravalli hills.
- vi) Mention any eight Indian Constitution recognized languages.

[Turn over]

vii) What is Green Revolution in India?

viii) Name the petroleum producing places in India.

ix) Define race.

x) What is meant by information technology?

xi) What is footloose industry?

2. Answer any **four** questions from the following:

4×4=16

- i) Highlight the natural physiographic characteristics of Indian *Marusthali*.
- ii) Why is Himalayan belt significant in India?
- iii) Illustrate the types of Indian coastal region.
- iv) Write a short note on distribution of tribes in India.
- v) Bring out the population distribution characteristics in India.
- vi) Why are iron ore and coal significant for economic development of India?

3. Answer any **one** question from the following:

10×1=10

- i) Discuss physiographic divisions of India after R. L. Singh with necessary illustrations.
- ii) Describe the climatic characteristics of India with necessary illustrations.

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UNIT-2
(Geography of West Bengal)

[Marks : 20]

4. Answer any **three** questions from the following:

$2 \times 3 = 6$

- i) What is *bajada*?
- ii) Where is *Dooars* region found in West Bengal?
- iii) What types of vegetation is observed in Bankura district?
- iv) Name two Irrigation and *Hydropower* Projects in West Bengal.
- v) Specify any four major economic activities of Nadia district.

5. Answer any **one** question from the following:

$4 \times 1 = 4$

- i) Bringout the natural physiographic characteristics of Darjeeling hills.
- ii) Why is Purba Bardhaman agriculturally prosperous?

6. Answer any **one** question from the following:

$10 \times 1 = 10$

- i) Discuss the present scenarios and challenges of industries in West Bengal.
- ii) Illustrate the challenges and prospects of regional development in Sundarban delta region.

U.G. 3rd Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEOH-CC-P-06****(Statistical Methods in Geography)****[PRACTICAL]****[New syllabus under CBCS]**

Full Marks : 20

Time : 4 Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***Answer all the questions.**

1. From the given set of data (Table No.1)

- Calculate Mode
- Calculate Standard Deviation
- Calculate Coefficient of Variation

3+4+3=10

Table No.1 : No. of Mouzas with households having toilet facilities

Households having toilet facilities (%)	No. of Mouzas
35-39	37
40-44	45
45-49	89
50-54	118
55-59	167
60-64	182
65-69	143
70-74	127
75-79	111
80-84	94
85-89	65
90-94	22

2. Laboratory Notebook and Viva Voce. 5+5=10

[Turn Over]

407/1 Geog/PR UG/3rdSem/GEO-H-SEC-P-01/A/PR/21

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[HONOURS]

Skill Enhancement Course (SEC)

Course Code : GEO-H-SEC-P-01/A

(Computer Basics and Computer Applications)

[PRACTICAL]

[New syllabus under CBCS]

Full Marks : 40

Time : 4 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. a) State the merits and demerits of Moving Average method.
b) Specify the merits and demerits of mean and median. 5+10=15
2. Write short notes (any **three**) : 5×3=15
 - a) Generation and extraction of information from internet surfing.
 - b) Uses of Histogram.

c) Coefficient of Variation.

d) Significance of Regression.

e) Uses of Scatter Diagram.

3. Laboratory Note Book and Viva Voce. 5+5=10

[Turn Over]

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408/1 Geog/PR UG/3rd Sem/GEO-H-GE-P-01C/PR/21

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[HONOURS]

Generic Elective Course (GE)

Course Code : GEO-H-GE-P-01C

(Map Projection and Map Interpretation)

[PRACTICAL]

Full Marks : 20

Time : 4 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. Write short notes on : 2×5=10
 - a) Standard Parallel
 - b) Generating Globe
 - c) Degree Sheet
 - d) Physiography
 - e) Isobar
2. Laboratory Note book and viva voce. 5+5=10

OR

Draw a net of graticules on Simple Conical

Projection with One Standard Parallel at 10° interval on scale 1:149×10⁶ for the extensions 20°N-60°N and 25°W-95°W. 10

[Turn Over]

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[2]

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[PROGRAMME]

Course Code : GEO-G-CC-T-03

(Human Geography)

[New syllabus under CBCS]

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** questions from the following :

2×5=10

যে-কোনো পাঁচটি প্রশ্নের উত্তর দাও :

a) Define growth rate of population.

জনসংখ্যা বৃদ্ধির হার বলতে কি বোঝ?

b) What is meant by dependent population?

নির্ভরশীল জনসংখ্যা বলতে কি বোঝায়?

c) Define society.

সমাজের সংজ্ঞা দাও।

d) What is sex ratio?

নারী পুরুষের অনুপাত কাকে বলে?

[Turn over]

e) What is dialect?

স্থানিক বা আঞ্চলিক ভাষা কি?

f) Define literacy.

সাক্ষরতার সংজ্ঞা দাও।

g) Name any four tribes in India.

ভারতের যে কোন চারটি জনজাতির নাম লেখ।

h) Name any two religious towns in India.

ভারতের যে-কোনো দুটি ধর্মীয় শহরের নাম লেখ।

2. Answer any **two** questions from the following:

5×2=10

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) What is the significance of age-sex pyramid?

Elaborate with examples.

উদাহরণসহ বয়সভিত্তিক নারী-পুরুষ পিরামিড চিত্রের গুরুত্ব আলোচনা কর।

b) Briefly describe the world distribution of major religions.

সংক্ষেপে পৃথিবীতে বিভিন্ন ধর্মাবলম্বীদের বণ্টন আলোচনা কর।

c) Discuss about different types of migration with reference to India.

ভারতে যে বিভিন্ন ধরনের পরিব্রাজন দেখা যায় তার বর্ণনা দাও।

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d) Describe the major features of a modern society.

আধুনিক সমাজের প্রধান বৈশিষ্ট্যগুলি ব্যাখ্যা কর।

3. Answer any **two** questions: $10 \times 2 = 20$

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) Elucidate the nature and contemporary relevance of human geography.

মানবীয় ভূগোল প্রকৃতি ও বর্তমান যুগে প্রাসঙ্গিকতা বিষয়ে আলোচনা কর।

b) What is space and briefly describe its different types.

স্পেস কি এবং এর বিভিন্ন ধরণ গুলির বিষয়ে আলোচনা কর।

c) Analyse the demographic transition theory with its merits and demerits.

জনবিস্তারন তত্ত্বটি দোষ-গুণ উল্লেখ সহকারে ব্যাখ্যা কর।

d) Discuss a functional classification of towns with suitable examples.

উদাহরণসহ একটি শহরের কর্মভিত্তিক শ্রেণীবিভাজন কর।

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U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[PROGRAMME]

Skill Enhancement Course (SEC)

Course Code : GEO-G-SEC-P-01A

(Computer Basics and Computer Applications)

[PRACTICAL]

[New Syllabus under CBCS]

Full Marks : 40

Time : 4 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

1. State the concept of Binary Number System with examples. 2
2. Perform the following task and write the results. 2×4=8
 - a) Add 1001011 with 0100110
 - b) Subtract 0111 from 1100
 - c) Multiply 1001 with 1101
 - d) Divide 110110 by 110
3. What is spreadsheet in Excel? State its role in data analysis. 3
4. How does coefficient of variation differ from standard deviation? Explain with an example. 4
5. Distinguish between correlation and regression. 4
6. What is scatter diagram? State its importance with example. 4
7. Describe how does internet surfing help in extraction of information. 5
8. Laboratory Note Book and Viva Voce. 5+5=10

OR

Mention the merits and demerits of mean and mode.

10

[Turn Over]

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[2]

407/1 Geog/PR UG/3rdSem/GEO-H-SEC-P-01/A/PR/21

U.G. 3rd Semester Examination - 2021

GEOGRAPHY

[HONOURS]

Skill Enhancement Course (SEC)

Course Code : GEO-H-SEC-P-01/A

(Computer Basics and Computer Applications)

[PRACTICAL]

[New syllabus under CBCS]

Full Marks : 40

Time : 4 Hours

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Answer all the questions.

1. a) State the merits and demerits of Moving Average method.
b) Specify the merits and demerits of mean and median. 5+10=15
2. Write short notes (any **three**) : 5×3=15
 - a) Generation and extraction of information from internet surfing.
 - b) Uses of Histogram.

c) Coefficient of Variation.

d) Significance of Regression.

e) Uses of Scatter Diagram.

3. Laboratory Note Book and Viva Voce. 5+5=10

[Turn Over]

407/1 Geog/PR

[2]

U.G 3rd Semester Examination-2021

GEOGRAPHY

(PROGRAM)

Course Code: GEO/G/CC/P/03

Map Projection and Map Interpretation

(Practical)

Full marks :20

Time: 2 Hours

The figures in the right hand side indicate marks.

Answer all the questions

1. Write short notes on : **2*5=10**
 - a) Standard parallel.
 - b) Generating Globe.
 - c) Degree sheet.
 - d) Physiography.
 - e) Isobar.
2. Laboratory Note Book and Viva-Voce. **5+5=10**

OR

Draw a simple conical projection with one standard parallel at 10° interval on scale 1:149,000,000 for the extension 20°N to 60°N and 25°W to 95°W. **10**

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-11****(Research Methodology and Field Work)****[NEW SYLLABUS under CBCS]**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I****(Research Methodology)**1. Answer any **three** questions from the following:

2×3=6

- a) What is analytical research in Geography?
- b) What is descriptive research?
- c) What is conceptual research?
- d) Give any two examples of primary data.
- e) What is bibliography?

2. Answer any **one** question from the following: 4×1=4

- a) Differentiate research method from research methodology.

[Turn over]

- b) Differentiate qualitative research from quantitative research.

3. Answer any **one** question from the following:

10×1=10

- a) Give the concept, types and relevance of hypothesis in Geographical research.
- b) State the research materials and methods with example from any contemporary issue in Geography.

UNIT-II**(Fieldwork)**4. Answer any **three** questions from the following:

2×3=6

- a) What is close ended question?
- b) What is unstructured questionnaire?
- c) What is field work?
- d) What is landscape survey?
- e) What are transects in landscape survey?

5. Answer any **one** question from the following: 4×1=4

- a) State the significance of fieldwork with special reference to Physical Geography.

- b) Mention the criteria for selection of a study area to conduct field work.

6. Answer any **one** question from the following:

10×1=10

- a) Discuss the advantages and disadvantages of video recording in field work.
- b) Write the essential steps involve in conducting interview with suitable examples.

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Course Code : GEO-H-CC-T-12****Remote Sensing and GIS****[NEW SYLLABUS under CBCS]**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I****(Remote Sensing)**1. Answer any **three** questions from the following:

2×3=6

- i) What is EMR in remote sensing?
- ii) What is passive sensor?
- iii) What is atmospheric window?
- iv) What is FCC?
- v) What is aerial photography?

2. Answer any **one** question from the following: 4×1=4

- i) Distinguish between airborne and spaceborne platforms.

[Turn over]

- ii) Bring out the advantages and limitations of remote sensing.

3. Answer any **one** question from the following: 10×1=10

- i) Classify, sensor resolution and discuss their characteristics.
- ii) Give a detailed note on visual image interpretation.

UNIT-II**(Geographical Information Systems and Global Navigation Satellite System)**4. Answer any **three** questions from the following:

2×3=6

- i) Define GIS.
- ii) What is raster data?
- iii) What is vector data?
- iv) What is spatial data?
- v) What is non-spatial data?

5. Answer any **one** question from the following: 4×1=4

- i) What are the advantages of GIS?
- ii) What are the advantages of GPS survey?

6. Answer any **one** question from the following:

10×1=10

- i) Discuss the principles of preparation of attributes tables and overlay analysis in GIS.
- ii) Discuss the principles of waypoint collection using GNSS and transferring the waypoints to GIS.

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : GEO-H-DSE-T-01/A****(Urban Geography)****[New Syllabus Under CBCS]**

Full Marks : 60

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I****(Marks : 30)**1. Answer any **five** from the following: 2×5=10

- a) Define urban morphology.
- b) Who propounded sector theory?
- c) What is meant by urbanization pattern?
- d) What is hierarchy in urban settlement?
- e) Define primate city.
- f) What is multiple nuclei in urban morphology?

- g) Define rank size rule.
- h) Identify two scopes of urban geography.

2. Answer any **two** from the following: 5×2=10

- a) Mention the recent trends of urban geography.
- b) Explain the law of primate city with examples.
- c) Discuss the context of sector theory.
- d) Briefly discuss the nature of urban geography.

3. Answer any **one** from the following: 10×1=10

- a) Compare the urbanization pattern in developed and developing countries.
- b) Explain the Concentric Zone Theory with criticism.

UNIT-II**(Marks : 30)**4. Answer any **five** from the following: 2×5=10

- a) Define urbanization.
- b) What is urban renewal?
- c) What is urban growth?
- d) Define city region.

[Turn over]

- e) What is rural-urban fringe?
- f) What is slum?
- g) Write the full form of JNNURM.
- h) What is meant by metropolitan region?

5. Answer any **two** from the following: $5 \times 2 = 10$

- a) Identify the characteristics of a city region in India.
- b) Describe the ecological process of urban growth.
- c) Bring out the main features of land use in Kolkata city region.
- d) Identify the salient features of urban renewal programme JNNURM.

6. Answer any **one** from the following: $10 \times 1 = 10$

- a) Discuss the urban issues relating to housing and slums in Kolkata.
- b) Critically explain the pattern and trends of urbanization in India.

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : GEO-H-DSE-T-02/A****(Population Geography)****[New Syllabus Under CBCS]**

Full Marks : 60

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***UNIT-I****(Marks : 30)**1. Answer any **five** from the following: 2×5=10

- a) What is optimum population?
- b) What is vital statistics?
- c) Define agricultural density of population.
- d) What is Census?
- e) What is natural increase of population?
- f) Define over population.

- g) What is population projection?
- h) What is concentration index of population?

2. Answer any **two** questions: 5×2=10

- a) How does demography differ from population geography?
- b) Bring out the notable characteristics of growth trend of global population.
- c) Describe the process of demographic transition with reference to Indian population growth.

3. Answer any **one** question: 10×1=10

- a) Compare between the theories of Malthus and Marx.
- b) Describe the influence of socio-cultural and demographic factors in the population distribution of India.

UNIT-II**(Marks:30)**4. Answer any **five** questions: 2×5=10

- a) What is population composition?
- b) Define primary sex ratio.

[Turn over]

- c) Define life expectancy.
- d) What is occupational structure?
- e) What is HDI?
- f) Define seasonal unemployment.
- g) Distinguish between mobility and migration.
- h) Mention two adverse effects of unemployment on physical and mental health.

5. Answer any **two** questions: $5 \times 2 = 10$

- a) Classify migration mentioning the bases.
- b) Discuss the salient features of population resource region.
- c) Elucidate the nature of unemployment in rural and urban India.

6. Answer any **one** question: $10 \times 1 = 10$

- a) Analyse the determinants of Fertility.
- b) Discuss the main objectives and strategic themes of National Population Policy, 2000.

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[PROGRAMME]****Generic Elective (GE)****Course Code : GEOG-GE-T-01****(Disaster Management)****(New Syllabus Under CBCS)**

Full Marks : 60

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **ten** from the following: $2 \times 10 = 20$

যে-কোনো দশটি প্রশ্নের উত্তর দাও :

a) What is man-made disaster?

মনুষ্যসৃষ্ট বিপর্যয় কাকে বলে?

b) When does a hazard become disaster?

কখন দুর্যোগ বিপর্যয়ে পরিণত হয়?

c) What is earthquake?

ভূমিকম্প কী?

d) Which hazards are commonly found in Sundarban region?

সুন্দরবন অঞ্চলে সাধারণত কোন্ বিপর্যয় লক্ষ্য করা যায়?

e) Define natural hazard with example.

উদাহরণসহ প্রাকৃতিক দুর্যোগের সংজ্ঞা দাও।

f) Define vulnerability.

বিপন্নতার সংজ্ঞা দাও।

g) Which are the most earthquake-prone areas in India?

ভারতের সবচেয়ে বেশি ভূমিকম্প-প্রবণ অঞ্চলের নাম লেখ।

h) What is meant by risk?

ঝুঁকি কি?

i) What is disaster mitigation?

বিপর্যয় উপশম কাকে বলে?

j) Mention the earthquake measuring scale.

ভূমিকম্প পরিমাপক স্কেলের নাম উল্লেখ কর।

k) What is meant by hazard perception?

দুর্যোগ সম্পর্কে চেতনা বলতে কি বোঝ?

l) Define slump.

স্লাম্পের সংজ্ঞা দাও।

m) Define hydrograph.

হাইড্রোগ্রাফের সংজ্ঞা দাও।

[Turn over]

n) What is disaster preparedness?

বিপর্যয় প্রস্তুতি বলতে কি বোঝ?

o) Give different names of tropical cyclone in the world.

পৃথিবীতে ক্রান্তীয় ঘূর্ণবাতের বিভিন্ন নামগুলি উল্লেখ কর।

2. Answer any **four** questions: $5 \times 4 = 20$

যে-কোনো চারটি প্রশ্নের উত্তর দাও :

a) Bring out the consequences of landslides in hilly areas.

পাহাড়ী অঞ্চলে ভূমিধ্বসের ফলাফল বর্ণনা কর।

b) Discuss different types of disaster with examples.

উদাহরণসহ বিভিন্ন প্রকার বিপর্যয় আলোচনা কর।

c) Mention the causes of flood of West Bengal in 2000.

পশ্চিমবঙ্গের 2000 সালের বন্যার কারণগুলি উল্লেখ কর।

d) Bring out the causes of soil erosion in different regions of India.

ভারতের বিভিন্ন অঞ্চলের মৃত্তিকা ক্ষয়ের কারণগুলি উল্লেখ কর।

e) Identify the different earthquake intensity zones of India with the help of a map.

একটি মানচিত্রের সাহায্যে ভারতের ভূমিকম্প প্রবণ অঞ্চলগুলি চিহ্নিত কর।

f) Highlight the salient features of the disaster management plan for the coastal region of West Bengal.

পশ্চিমবঙ্গের উপকূলীয় অঞ্চলের বিপর্যয় ব্যবস্থাপনার প্লান এর মুখ্য বৈশিষ্ট্যগুলি লেখ।

3. Answer any **two** questions: $10 \times 2 = 20$

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) Discuss the causes, impact, and distribution of drought in India with the help of a map.

একটি মানচিত্রের সাহায্যে ভারতের বিভিন্ন অঞ্চলের ক্ষার কারণ, প্রভাব ও বণ্টন ব্যাখ্যা কর।

b) Explain the causes and impacts of accidental release of toxic chemical with example.

উদাহরণসহ বিষাক্ত রাসায়নিক গ্যাস দুর্ঘটনার প্রভাব ও কারণ বর্ণনা কর।

c) Mention the Tsunami prone areas in the world and bring out the causes and impact of Tsunami.

পৃথিবীর সুনামি প্রবণ-এলাকার নাম উল্লেখ কর এবং সুনামির কারণ ও প্রভাব উল্লেখ কর।

d) Explain the role of indigenous knowledge and community in the disaster management.

বিপর্যয় ব্যবস্থাপনায় দেশীয় জ্ঞান ও গোষ্ঠীর (community) -এর ভূমিকা বর্ণনা কর।

U.G. 5th Semester Examination - 2021**GEOGRAPHY****[PROGRAMME]****Discipline Specific Elective (DSE)****Course Code : GEOG-DSE-T-01/A&B****(New Syllabus Under CBCS)**

Full Marks : 60

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.***Answer all the questions from selected Option.****OPTION-A****GEOG-DSE-T-01/A****(Geography of India)**1. Answer any **ten** from the following: $2 \times 10 = 20$

যে-কোনো দশটি প্রশ্নের উত্তর দাও :

a) Name two automobile industry centres of India.

ভারতবর্ষের দুটি অটোমোবাইল শিল্পকেন্দ্রের নাম লেখ।

b) Define sex ratio.

লিঙ্গ অনুপাতের সংজ্ঞা দাও।

c) Name two main rice-producing states in India.

ভারতবর্ষের দুটি প্রধান ধান উৎপাদক রাজ্যের নাম লেখ।

d) Identify two problems of groundnut cultivation in India.

ভারতবর্ষে চীনাবাদাম চাষের দুটি সমস্যা উল্লেখ কর।

e) Define female literacy rate.

নারী সাক্ষরতার সংজ্ঞা দাও।

f) Name any two rain-fed rivers in India.

ভারতের যে-কোনো দুটি বৃষ্টির জলে পুষ্ট নদীর নাম লেখ।

g) Which type of climatic conditions are required for sugarcane cultivation?

আখ চাষের জন্য কী ধরনের জলবায়ু প্রয়োজন হয়?

h) Name main types of coal found in India.

ভারতবর্ষে প্রাপ্ত কয়লার প্রধান ধরনগুলির নাম লেখ।

i) Identify two main bauxite producing areas of India.

ভারতবর্ষের দুটি প্রধান বক্সাইট উৎপাদক অঞ্চল চিহ্নিত কর।

j) Which are the main cattle reared in India?

ভারতবর্ষে প্রধানত কোন্ গবাদি পশু পালিত হয়?

k) Identify two problems of fisheries in coastal India.

উপকূলীয় ভারতবর্ষে মৎস্যচাষের দুটি সমস্যা চিহ্নিত কর।

l) Name two hydroelectricity producing centres of India.

ভারতবর্ষের দুটি জলবিদ্যুৎ উৎপাদন কেন্দ্রের নাম লেখ।

m) Which are the main west-flowing rivers in India?

ভারতবর্ষের প্রধান পশ্চিমমুখী নদী কোন্গুলি?

n) Identify the main rail zones of India.

ভারতবর্ষের প্রধান রেল অঞ্চলগুলি চিহ্নিত কর।

o) What do you mean by population density?

জনঘনত্ব বলতে কী বোঝ?

2. Answer any **four** questions: $5 \times 4 = 20$

যে-কোনো চারটি প্রশ্নের উত্তর দাও :

a) Mention the geographical location of India.

ভারতবর্ষের ভৌগোলিক অবস্থান উল্লেখ কর।

b) Identify the climatic regions of India.

ভারতবর্ষের জলবায়ু অঞ্চলগুলি চিহ্নিত কর।

c) Discuss briefly the future prospects of automobile industries in India.

ভারতবর্ষে অটোমোবাইল শিল্পের ভবিষ্যৎ সম্ভাবনাগুলি সংক্ষেপে আলোচনা কর।

d) Identify the main features of literacy in India.

ভারতবর্ষে সাক্ষরতার মূল বৈশিষ্ট্যগুলি চিহ্নিত কর।

e) Mention the problems of road transportation in India.

ভারতবর্ষে সড়ক পরিবহনের সমস্যাগুলি উল্লেখ কর।

f) Find out the reasons behind the concentration of iron-steel industries in Chotonagpur Plateau.

ছোটনাগপুর মালভূমিতে লৌহ-ইস্পাত শিল্পের সমাবেশের কারণগুলি চিহ্নিত কর।

3. Answer any **two** questions: $10 \times 2 = 20$

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) Discuss the problems and prospects of cotton textile industry in India.

ভারতবর্ষে বস্ত্রবয়ন শিল্পের সমস্যা ও সম্ভাবনা সম্পর্কে আলোচনা কর।

b) Briefly discuss the relief features of India with suitable diagrams.

ভারতবর্ষের ভূ-প্রাকৃতিক বৈশিষ্ট্যগুলি উপযুক্ত চিত্রসহ সংক্ষেপে আলোচনা কর।

c) Illustrate the population size and growth in India since 1901.

ভারতবর্ষে 1901 সাল থেকে জনসংখ্যার আকার ও বৃদ্ধি ব্যাখ্যা কর।

d) Describe the settlement types and patterns in rural India.

গ্রামীণ ভারতবর্ষে জনবসতির ধরন ও প্যাটার্নগুলি বর্ণনা কর।

OPTION-B
GEOG-DSE-T-01/B
(Economic Geography)

1. Answer any **ten** from the following: $2 \times 10 = 20$

যে-কোনো দশটি প্রশ্নের উত্তর দাও :

- a) What is meant by ubiquitous types of raw materials?
সহজলভ্য কাঁচা মাল বলতে কী বোঝায়?
- b) What is 'Rudimentary Sedentary Tillage'?
'Rudimentary Sedentary Tillage' কী?
- c) Define 'Material Index'.
'Material Index'-এর সংজ্ঞা দাও।
- d) What are the significances of sacred groves?
Sacred groves-এর তাৎপর্য কি?
- e) Differentiate tertiary from quaternary economic activities.
Quaternary economic activities থেকে tertiary economic activities পার্থক্য কর।
- f) Write down two characteristics of the subsistence agriculture.
প্রগাঢ় কৃষি সম্বন্ধে দুটি বৈশিষ্ট্য লেখ।

g) What are the economic significances of crop rotation?

শস্যাবর্তনের অর্থনৈতিক গুরুত্ব কি?

h) What is meant by monopolistic competition?

একচেটিয়া প্রতিযোগিতা বলতে কী বোঝায়?

i) What is nomadic herding?

যাযাবর পশুপালন কি?

j) What is 'slash and burn' process of agriculture?

কৃষিকাজে ব্যবহৃত slash এবং burn এই দুটি পদ্ধতি কী?

k) Give an example of foot loosing industry.

Foot loose শিল্পের একটি উদাহরণ দাও।

l) What is JFM?

JFM কী?

m) Name two significant petrochemical hubs in West Bengal.

পশ্চিমবঙ্গের গুরুত্বপূর্ণ দুটি পেট্রোকেমিক্যাল শিল্পাঞ্চল এর নাম লেখ।

n) Give two examples of pelagic fish.

Pelagic fish-এর দুটি উদাহরণ দাও।

o) Give an example of pure non-weight losing type of raw material.

খাঁটি ও ভার হ্রাসমান কাঁচামালের উদাহরণ দাও।

2. Answer any **four** questions: $5 \times 4 = 20$

যে-কোনো চারটি প্রশ্নের উত্তর দাও :

- a) Discuss the salient features of shifting cultivation with special reference to North-East India.
উত্তর-পূর্ব ভারতে স্থানান্তর চাষাবাদের প্রধান বৈশিষ্ট্য আলোচনা কর।
- b) Discuss the future prospect of petrochemical industries in India.
ভারতে পেট্রোকেমিক্যাল শিল্পাঞ্চল-এর ভবিষ্যৎ সম্পর্কে লেখ।
- c) Justify the relevance of economic geography in the present day context.
বর্তমান দিনের পরিপ্রেক্ষিতে অর্থনৈতিক ভূগোল্যের প্রাসঙ্গিকতা আলোচনা কর।
- d) Diagrammatically illustrate the modification of Von Thunen's model in presence of navigable river and neighbouring market.
নৌ পরিবহনযোগ্য নদী এবং পার্শ্ববর্তী বাজারের উপস্থিতিতে ভন থুনের মডেলের পরিবর্তন চিত্র সহযোগে বর্ণনা কর।
- e) Discuss the various modes of transportation.
পরিবহনের বিভিন্ন পদ্ধতি সম্পর্কে আলোচনা কর।
- f) Explain the role of transportation cost in the industrial location theory of Alfred Weber.
আলফ্রেড ওয়েবারের শিল্প অবস্থান তত্ত্বে পরিবহন খরচের ভূমিকা ব্যাখ্যা কর।

3. Answer any **two** questions: $10 \times 2 = 20$

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

- a) Specify the factors responsible for the occurrence of cotton textile industry in India.
ভারতে তুলা শিল্প গড়ে ওঠার জন্য উপযোগী কারণগুলি উল্লেখ করো।
- b) Discuss the salient features of plantation farming with suitable examples.
উপযুক্ত উদাহরণসহ বাগিচা কৃষির মুখ্য বৈশিষ্ট্যগুলি আলোচনা কর।
- c) Describe the main characteristics of any two major commercial marine fishing zone of the world?
পৃথিবীর যে-কোনো দুটি প্রধান বাণিজ্যিক সামুদ্রিক মৎসচাষ ক্ষেত্রের মুখ্য বৈশিষ্ট্যগুলির বর্ণনা দাও।
- d) Discuss the impact of Information and Communication technology on human society.
মানব সভ্যতার উপর তথ্য ও যোগাযোগ প্রযুক্তি শিল্পের প্রভাব আলোচনা কর।

U.G. 5th Semester Examination - 2021

GEOGRAPHY

[PROGRAMME]

Skill Enhancement Course (SEC)

Course Code : GEO(G)SEC-P-03(B)/PR

[PRACTICAL]

**(Collection, Mapping & Interpretation of
Climatic Data)**

(New Syllabus Under CBCS)

Full Marks : 20 Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions.

1. a) What is hythergraph? What is the difference
between hythergraph and temperature-rainfall
graph? 1+1=2
- b) How do you draw Taylor's Climograph? 2
- c) What do the spokes of windrose diagram
represent? 2
- d) How does a raingauge work to measure rainfall?
2
- e) Define atmospheric pressure. Mention the
working principle of barometer. 1+1=2
2. Laboratoty note book and viva-voce. 5+5=10
