

**EXAM YEAR-2018**

**PART-I, II, III**

**SEMESTER-I**

79(Sc)NS

UG-I/Geo-I(H)/NS/18

2018

## GEOGRAPHY

[HONOURS]

Paper : I

[NEW SYLLABUS]

Full Marks : 75

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.*

### GROUP-A

(Geotectonics)

[Marks : 35]

1. Answer any **three** of the followings:  $1 \times 3 = 3$

- a) What is 'L wave'?
- b) Who is the author of the book 'Exposition of the World System'?
- c) What is an *index fossil*?
- d) What is *lithosphere*?
- e) What are *isochrones*?

[Turn over]

2. Answer any **five** of the followings:  $2 \times 5 = 10$

- a) What is meant by radiocarbon dating?
- b) Define *eugeosyncline*.
- c) What is transform fault?
- d) Differentiate *anticlinorium* from *synclinorium*.
- e) What is meant by the endogenetic force? ✓
- f) Distinguish between *dip* and *strike*. ✓
- g) What is fault scarp?
- h) What are *fumaroles*?

3. Answer any **two** of the followings:  $6 \times 2 = 12$

- a) Outline the major earthquake belts of the world.
- b) Discuss the salient features of normal and reverse faults with suitable diagrams.
- c) How can magnetic symmetry be used as evidence of sea floor spreading?

4. Answer any **one** of the following:  $10 \times 1 = 10$

- a) Explain the origin of mountains in the light of plate tectonic theory.
- b) Elaborate the major types of folds with suitable diagrams.

## GROUP-B

### (Geomorphology)

[Marks : 40]

5. Answer any **two** of the followings:  $1 \times 2 = 2$

- a) What is profile of equilibrium?
- b) What is soil creep?
- c) Define base level of erosion.
- d) What is endrumpf?

6. Answer any **two** of the followings:  $2 \times 2 = 4$

- a) What is 'Trio of Davis'?
- b) What is rejuvenation of a river?
- c) What is reg?
- d) Differentiate *corrasion* from *corrosion*.

7. Answer any **four** of the followings:  $6 \times 4 = 24$

- a) Bring out the recent trends of Geomorphology.
- b) Account for the different types of delta with suitable diagrams.
- c) Distinguish between *pediment* and *bajada*.



- d) Describe the major glacio-fluvial landforms with suitable diagrams.
- e) Explain the conditions essential for the development of karst topography.
- f) Outline the different stages of the origin of inversion of relief.

8. Answer any **one** of the following:  $10 \times 1 = 10$

- a) Discuss the major erosional landforms developed by aeolian processes.
- b) Illustrate the Penck's model of the cycle of erosion with suitable diagrams.

Complete

Mosaraf Sk.

20-07-2018

2018

**GEOGRAPHY**

**[HONOURS]**

**Paper : II**

**[NEW SYLLABUS]**

Full Marks : 75

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.*

**GROUP-A**

**(Soil Geography)**

**[Marks : 35]**

1. Answer any **three** questions:  $1 \times 3 = 3$
- a) What is meant by *illuviation*?
  - b) Where are calcareous soils formed?
  - c) Define *bog soil*.
  - d) What do you mean by *soil horizon*?
  - e) What is a contour bund?

*[Turn over]*



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

- a) What are the basic characteristics of soil texture?
- b) What is soil organic matter?
- c) What is *podsolisation*?
- d) Differentiate *regosols* from *alluviums*.
- e) State any two importance of soil aeration.
- f) What is capillary water?
- g) Distinguish between *Pedalfers* and *Pedocals*.
- h) Distinguish between sheet erosion and gully erosion.

3. Answer any **two** questions:  $6 \times 2 = 12$

- a) Give an outline of the soil composition with a suitable diagram.
- b) Highlight the characteristics of *chernozems* and *laterites*.
- c) Diagrammatically represent an ideal soil profile showing the main horizons.

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

- a) Describe the soil forming factors in brief with necessary illustrations.
- b) Outline soil orders and their major characteristics according to USDA soil taxonomy.

## GROUP-B

### (Biogeography)

[Marks : 40]

5. Answer any **two** questions:  $1 \times 2 = 2$

- a) Define biosphere.
- b) What is energy flow?
- c) Define ecology.
- d) What is meant by primary producer?

6. Answer any **two** questions:  $2 \times 2 = 4$

- a) Differentiate *food chain* from *food web*.
- b) What is meant by bio-geochemical cycle?
- c) Narrate the global distribution of tropical rainforest biome.
- d) What do you mean by 'biodiversity loss'?

7. Answer any **four** questions:  $6 \times 4 = 24$

- a) Assess the significance of energy flow in ecosystems.
- b) Explain the mechanism of nitrogen cycle in the biosphere.
- c) Illustrate the characteristics and significance of trophic structure in grazing ecosystem.

d) Examine the ecological importance of tropical grasslands.

e) Describe in brief the controlling factors of biodiversity.

f) Elaborate the biogeographic characteristics of the tropical rainforest biome.

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

a) Account for the effects of climate and topography on the distribution of plants.

b) Establish the relationship between the global distribution of precipitation and the distribution of the world biomes.

Complete

Mosaraf Sko  
23-7-18



81/4(Sc)NS/PR/Set-V

UG-I/Geo-III(H)/PR/NS/18

2018

## GEOGRAPHY

[HONOURS]

Paper : III

[PRACTICAL]

[NEW SYLLABUS]

SET-V

Full Marks : 50

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.**

### GROUP-A

(Scale)

1. a) Construct a comparative scale to read 525 yards and 525 metres when scale of the map is 16 inches to 1 mile.
- b) What is negative vernier?
- c) Mention two advantages of R.F.

6+2+2=10

[Turn over]



## GROUP-B

### (Cartograms)

2. With the following data (Table-1), draw a climograph and comment on the degree of comfort of the station.  $8+2=10$

Table 1

#### [Climatic Data (Station-Ranchi)]

Months	J	F	M	A	M	J
Wet bulb temperature( $^{\circ}$ F)	54.5	56.3	61.1	66.3	71.0	74.1
Relative Humidity(%)	50.5	48.0	36.0	33.0	40.0	64.5

Months	J	A	S	O	N	D
Wet bulb temperature( $^{\circ}$ F)	74.6	74.6	73.7	68.9	59.9	54.8
Relative Humidity(%)	85.0	85.5	83.0	69.5	56.0	56.5

## GROUP-C

### (Geological Maps)

3. Draw a section along the line given on the Geological map (Map-1) and interpret under the following heads:
- a) Geological succession of beds
  - b) Structure of beds
  - c) Geological history  $8+(2+2+2)=14$

## GROUP-D

### (Rocks and Minerals)

4. Identify four given specimens of rocks and minerals mentioning any two characteristics of each specimen.  $1\frac{1}{2} \times 4 = 6$

## GROUP-E

5. Laboratory Note Book and Viva-voce.  $5+5=10$

**2018**  
**GEOGRAPHY**  
**[HONOURS]**  
**Paper : IX**

Full Marks : 80

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.*1. Answer any **seven** from the following questions: $1 \times 7 = 7$ 

a) Define nodal region.

b) What do you mean by NCR?

c) Which river was known as 'River of Sorrow' in West Bengal?

d) What is DPAP? *Drought prone areas programme.*e) Who propounded the concept of "Growth Pole"? *French economist Jacques Boudeville*f) In which state the largest river island is situated? *Orissa*g) Where has been 'Jawahar Tunnel' constructed? *Kashmir valley*

h) What is 'Bagar'?

[Turn over]



1. Name a district where 'Sundari tree' is grown.

2. Answer any six questions:  $2 \times 6 = 12$

a) Define 'environmental planning' in context of regional development.

b) What is Dampier and Hodges line?

c) In which part of India 'syntaxial bends' is observed?

d) What do you mean by 'para-transit' in transport system?

e) What is 'Pat lands'?

f) In which region of India 'radial drainage' patterns are well developed?

g) What is 'rohi' in Marusthali?

h) What is JNNURM? *Jawahar Lal Nehru Urban Renewal National Mission*

3. Answer any three questions:  $3 \times 3 = 9$

a) Highlight the biotic characteristics of Sundarban as a Biosphere Reserve.

b) Differentiate between Macro and Micro level regional planning.

c) Enumerate the processes of evolution of NCR with special reference to Delhi.

90(Sc)

[2]

d) Highlight the problems of industrial development of West Bengal.

e) Elaborate the fundamental issues of Sundarban ecosystem.

4. Answer any four from the following questions:

$10 \times 4 = 40$

a) Elucidate the distribution and characteristics of soils in western plateau region of West Bengal (Rahr-Bengal).

b) Highlight the regional entities of the vale of Kashmir.

c) Critically evaluate the problems and prospects of petro-chemical industry in Haldia.

d) Bring out the salient features of major drainage systems in West Bengal.

e) Critically analyse the problems and prospects of DVC.

f) Illustrate the methods of delineation of a functional region.

90(Sc)

[3]

**2018**  
**GEOGRAPHY**  
**[HONOURS]**  
**Paper : VIII**

Full Marks : 80

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.*

**SECTION-A**

1. Answer any **seven** from the following questions:

1 × 7 = 7

- a) Give an example of weight losing raw material.
- b) Mention a merit of crop rotation.
- c) What do you mean by 'Jhum' cultivation?
- d) Define 'material index'.
- e) Mention two raw materials of paper industry.
- f) What is plankton?
- g) Name a petro-chemical industrial centre of Western India.
- h) Define horticulture. - *उच्चतर पौधों की खेती*
- i) What is agro-forestry?

[Turn over]



### SECTION-B

2. Define any **six** from the following questions:

2×6=12

- a) Differentiate intensive farming from extensive farming.
- b) What is 'Silvi culture'?
- c) Distinguish between primary and secondary sector of economy.
- d) What is meant by 'Break of Bulk'?
- e) What do you mean by SEZ?
- f) What is crude oil?
- g) Highlight two problems of commercial fishing in tropical region.
- h) Define 'isodapane'.

### SECTION-C

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

7×3=21

- 3. Explain the major factors influencing location of a industry after Weber.
- 4. Bring out the challenges and opportunities of lumbering in tropical forests.
- 5. Highlight the salient features of plantation farming with suitable example.

89(Sc)

[ 2 ]

6. Account for the major problems and challenges of cotton textile industry in USA.

7. Critically discuss the assumptions highlighted in von Thunen's model of Landuse.

### SECTION-D

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

10×4=40

- 8. Outline the scope and content of Economic Geography.
- 9. Clarify the factors of location and development of paper industry in Canada.
- 10. Account for the major commercial fishing zones highlighting their location factors, problems and prospects.
- 11. Explain the different sectors of economy and their linkages with suitable examples.
- 12. Bring out the locational factors, and prospects of iron and steel industry of Japan.
- 13. Critically evaluate the theory of industrial location propounded by August Losch.

89(Sc)

[ 3 ]

2. Delineate the given drainage basin from the toposheet (R.F.=1:50,000) and prepare a slope map after Wentworth of the basin. Interpret the slope map.  $12+3=15$
3. Draw a transect chart along the given line of 15 cm length on the toposheet (R.F.=1:50,000) to show the relationship between relief and drainage. Interpret the same.  $3+2=5$
4. Identify the given five specimens of rocks and minerals mentioning distinguishing characteristics.  $5 \times 2 = 10$
5. Field Report and Viva Voce.  $10+10=20$
6. Laboratory Notebook and Viva Voce.  $5+5=10$

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10° - 9°

92/4(Sc)/PR/Set-V

UG-III/Geog.-XI(H)/Set-V/PR/18

**2018**  
**GEOGRAPHY**  
**[HONOURS]**  
**Paper : XI**  
**[PRACTICAL]**  
**SET-V**

$$\frac{90-0}{2}$$

$$= 45 - \frac{0}{2}$$

$$= \frac{90-0}{2}$$

Full Marks : 80

Time : 6 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) Draw neat graticule of Polar Zenithal Stereographic Projection for an area extending from 30°N to 70°N and 40°E to 140°E at an interval of 10° on a scale of 1:100,000,000.
- b) Distinguish between perspective and non-perspective projections.
- c) What is meant by Azimuthal Projection?

32

16+2+2=20

[Turn over]

[2]

92/4(Sc)/PR/Set-V



b) From the prepared frequency distribution table :

i) Calculate mean.

ii) Calculate median.

iii) Draw a frequency curve.

$$5+(3+3+3)=14$$

3. Calculate Spearman's rank correlation coefficient with the given set of data (Table No. 1) and interpret the result.

$$5+1=6$$

Table No. 1

Roll No. of Students	Marks obtained in Geomorphology	Marks obtained in Economic Geography
1	52	54
2	66	59
3	71	65
4	45	63
5	56	61
6	58	59
7	66	70
8	50	55

4. From the given set of data (Table No. 2) :-

a) Draw a time series graph.

b) Fit a trend line by 3-year moving average method and interpret the trend :

$$3+(3+2)=8$$

Table No. 2

Years	Foodgrains Production in India ('000 Tonnes)
2007 - 2008	230775
2008 - 2009	234466
2009 - 2010	218107
2010 - 2011	244482
2011 - 2012	259286
2012 - 2013	257135
2013 - 2014	265045
2014 - 2015	252023
2015 - 2016	251566

5. From the given set of data (Table No. 3) :-
- Draw a scatter diagram.
  - Fit a trend line by least squares method.
  - Interpret the nature of relationship.

3+3+2=9

Table No. 3

Percentage coverage under irrigation-X	Yield rates of foodgrains (Kgs./Hectare)-Y.
47.8	2129
29.7	1013
35.1	1457
48.3	1930
42.8	1652
22.2	644
40.8	1704
49.8	2120

Group-B

6. Laboratory Notebook and Viva-voce.

5+5=10

2018

SIXTH PAPER

Practical • SET-II • Full Marks - 50 • Time - 4 hours

Answer all the questions

Group-A

- What are meant by discrete and continuous data? Give one example for each. 2+1=3
- Compute frequency distribution into six classes for the given annual rainfall (in centimeters) of 50 weather stations.  
115.6, 78.9, 90.0, 90.8, 99.1, 117.3, 124.0, 89.7, 85.8, 103.5, 73.4, 108.0, 110.0, 72.0, 75.0, 83.3, 120.1, 119.5, 130.9, 96.0, 129.0, 116.0, 98.7, 100.4, 77.5, 99.3, 127.8, 85.2, 78.8, 125.2, 110.7, 116.1, 79.9, 90.1, 91.1, 84.4, 129.0, 95.5, 93.7, 119.5, 80.3, 104.0, 87.2, 113.8, 108.4, 119.5, 109.9, 87.6, 92.9, 107.9
  - From the prepared frequency distribution table :
    - Calculate median
    - Calculate standard deviation
    - Draw an ogive (Less than type)5+(3+3+3)=14



3. Calculate Person's product moment correlation with the given set of data (Table No. 1) and interpret the result. 5+1=6

Table No. 1

Name of Gram Panchayats	Drop-out rate(%) at Secondary Level	Child labour to total workers (%)
Ichhapur	18.22	14.28
Kudiatala	28.77	17.09
Rangapur	11.20	6.67
Vulkia	8.75	7.25
Hirenpur	26.43	16.72
Bakulmath	16.66	12.88
Balurpara	21.98	18.54
Nischintapur	7.08	11.01
Shimulbag	13.77	9.26
Jalanda	20.25	14.22

4. From the given set of data (Table No. 2) :-

- Draw a time series graph.
- Fit a trend line by 3-year moving average method and interpret the trend : 3+(3+2)=8

Table No. 2

Years	Net Availability of Wheat in India (Gram/Capita/Day)
2007	157.8
2008	145.1
2009	154.7
2010	168.2
2011	163.5
2012	158.4
2013	145.8
2014	183.1
2015	168.0

5. From the given set of data (Table No. 3) :-

- Draw a scatter diagram.
- Fit a trend line by least squares method.
- Interpret the nature of relationship. 3+3+2=9

**Table No. 3**  
**Percentage of Gross Irrigated Area to Total Cropped Area-X**

38.7  
39.8  
44.9  
47.4  
46.3  
48.7  
45.9  
49.3

**Cropping Intensity (%) - Y**  
122.2  
121.2  
124.4  
126.3  
126.1  
127.3  
125.7  
129.7

**Group-B**

6. Laboratory Notebook and Viva-voce.

5+5=10

**2018**

**SIXTH PAPER**

**Practical • SET-III • Full Marks - 50 • Time - 4 hours**

**Answer all the questions • Group-A**

1. Explain systematic sampling with examples. 3
2. a) Compute frequency distribution into six classes for the given set of data. (Percentage of electrified households of 50 Villages):  
 25.06, 34.05, 15.30, 11.14, 34.58, 20.00, 31.89, 23.35, 17.25, 24.90, 39.98, 14.78, 24.80, 24.44, 16.70, 33.56, 39.45, 11.88, 22.65, 28.99, 23.20, 38.33, 17.20, 16.06, 30.07, 29.01, 12.88, 36.78, 24.80, 18.55., 27.08, 15.10, 14.33, 17.07, 25.40, 21.20, 28.20, 39.22, 27.65, 22.88, 32.04, 33.67, 32.07, 12.50, 26.90, 23.00, 19.91, 33.00, 15.98, 15.98  
 b) From the prepared frequency distribution table:  
 i) Calculate mode.  
 ii) Calculate mean deviation.  
 iii) Draw a histogram showing location of mode in it.  $5+(3+3+4)=15$
3. Calculate Coefficient of Variations of the given rainfall data of two weather stations (Table No.1). Which weather station is more consistent in terms of rainfall? 5+1=6



Table No. 3	
Level of Urbanisation (%)—X	Formal Workers to Total Workers (%)—Y
48.48	34.76
40.20	22.08
29.91	15.44
46.75	36.01
35.50	21.20
22.60	14.50
17.18	12.29
28.67	17.70
36.65	20.20

### Group-B

6. Laboratory Notebook and Viva-voce.

5+5=10

2018

### SIXTH PAPER

Practical • **SET-IV** • Full Marks - 50 • Time - 4 hours

Answer all the questions • Group-A

- Mention any two limitations of moving average method in time series analysis.
  - What is test of significance? 2+1=3
- Compute frequency distribution into six classes for the given set of data. (Female literacy rates of 50 Villages) :  
 47.05, 44.12, 48.88, 75.09, 36.88, 21.27, 18.11, 47.00, 46.01, 77.38, 26.66, 40.34, 76.44, 30.08, 20.25, 23.07, 50.50, 51.55, 74.80, 36.50, 68.99, 27.02, 56.31, 57.00, 33.56, 36.50, 46.10, 40.88, 59.97, 31.00, 60.20, 37.25, 52.20, 40.20, 54.88, 25.22, 28.70, 48.90, 35.55, 70.25, 38.70, 65.00, 58.67, 44.09, 60.20, 47.11, 33.30, 64.40, 43.40, 39.01
  - From the prepared frequency distribution table:
    - Calculate mean.
    - Calculate median.
    - Draw a frequency polygon. 5+(3+3+3)=14
- Calculate Z-Scores of the given set of data (Table No. 1) and interpret : 6+1=7

Table No. 1

Months	Rainfall in Milimetres	
	Station-A	Station-B
January	16.00	41.35
February	27.40	32.27
March	15.22	36.2
April	22.44	6.27
May	26.12	0.65
June	14.16	2.23
July	20.61	0.06
August	22.88	11.78
September	28.07	3.99
October	26.01	34.22
November	23.13	42.21
December	11.77	39.5

4. From the given set of data (Table No. 2) :-

a) Draw a time series graph.

b) Fit a trend line by semi average method and interpret the trend:

$$3+(3+1)=7$$

Table No. 2

Years	Area under total Cereals in India ('000 Hectares)	
2002 - 03		93364
2003 - 04		99988
2004 - 05		97315
2005 - 06		99208
2006 - 07		100516
2007 - 08		100435
2008 - 09		100739
2009 - 10		98051
2010 - 11		100269
2011 - 12		100293

5. From the given set of data (Table No. 3) :-

a) Draw a scatter diagram.

b) Fit a trend line by least squares method.

c) Interpret the nature of relationship.

$$3+4+2=9$$



**Table No. 2**

**Years**      **Area of Groundnut  
Cultivation in  
India ('000 Hectares)**

2006 - 07	5615
2007 - 08	6292
2008 - 09	6165
2009 - 10	5478
2010 - 11	5856
2011 - 12	5264
2012 - 13	4721
2013 - 14	5505
2014 - 15	4769
2015 - 16	4597

**Table No. 3**

**Literacy**      **Newspaper  
Rate**      **Population**  
**(%)-X**      **(%)-Y**

68.70	16.77
56.65	10.02
72.88	15.66
85.44	28.77
90.92	25.90
60.25	11.37
52.25	8.90
87.69	30.10
91.20	27.30
43.48	9.55

e) Name the proponents of Plate Tectonic Theory.

প্লেট টেকটনিক তত্ত্বের প্রবক্তাদের নাম লেখ।

f) Where is Labrador current found?

ল্যাব্রাডর স্রোত কোথায় দেখা যায়?

g) What is meant by continental shelf and continental slope?

মহীসোপান ও মহীতাল কাকে বলে?

h) What is meant by 'process' in the Davisian cycle of erosion?

ডেভিসের ক্ষয়চক্রে 'প্রক্রিয়া' বলতে কি বোঝায়?

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

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

a) What are the landforms developed due to the action of water in the deserts? Describe them briefly.  $1+4=5$

মরু অঞ্চলে জলধারার কার্যের ফলে কোন্ কোন্ ভূমিরূপ গঠিত হয়? ভূমিরূপগুলির সংক্ষিপ্ত বর্ণনা দাও।

b) In which regions of the world chemical weathering is found? Briefly discuss any two types of such weathering.  $1+4=5$

রাসায়নিক আবহবিকার পৃথিবীর কোন্ কোন্ অঞ্চলে দেখা যায়? এই ধরনের আবহবিকারের যে কোনো দুই প্রকার ভেদ সংক্ষেপে আলোচনা কর।



- c) What are the different types of plate boundaries? Discuss about the landforms developed on converging plate boundaries.  $1+4=5$

পাতসীমান্তের প্রকার ভেদগুলি কি কি? অভিসারী পাত-সীমান্তে গড়ে ওঠা ভূমিরূপগুলির বর্ণনা দাও।

- d) What is meant by hydrosphere? Discuss the mechanism of hydrological cycle.  $1+4=5$

বারিমণ্ডল বলতে কি বোঝায়? জলচক্রের প্রক্রিয়া ব্যাখ্যা কর।

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

যে-কোনো দুটি প্রশ্নের উত্তর দাও :

- a) Describe with illustrations the different stages in the fluvial cycle of erosion after Davis and their associated landforms.

চিত্রসহ ডেভিসের ক্ষয়চক্রের বিভিন্ন পর্যায় ও সংশ্লিষ্ট ভূমিরূপের বর্ণনা দাও।

- b) Describe with illustrations the landforms developed due to glacial erosion.

হিমবাহের ক্ষয়কার্যের ফলে উদ্ভূত ভূমিরূপগুলির চিত্রসহ বর্ণনা দাও।

- c) Describe briefly the bottom relief of Pacific Ocean.

চিত্রসহ প্রশান্ত মহাসাগরের তলদেশের ভূমিরূপের সংক্ষিপ্ত বর্ণনা দাও।

d) Describe with illustrations the currents found in the Atlantic Ocean.

চিত্রসহ আটলান্টিক মহাসাগরের স্রোতগুলির সংক্ষিপ্ত বর্ণনা  
দাও।

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**U.G. 1st Semester Examination - 2018****GEOGRAPHY  
(PROGRAMME)****Course Code : GEOP/CC-T-I**

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: 2×5=10

যে-কোনো পাঁচটি প্রশ্নের উত্তর দাও :

a) What is exfoliation?

এক্সফোলিয়েশন কাকে বলে?

b) What are the constituent materials of the earth's core?

পৃথিবীর কেন্দ্রমন্ডল কোন্ কোন্ পদার্থ দ্বারা গঠিত?

c) What is a Barchan?

বারখান কাকে বলে?

d) What is meant by Crag and Tail?

ক্র্যাগ ও টেল বলতে কি বোঝায়?

*[Turn over]*

## U.G. 1st Semester Examination - 2018

GEOGRAPHY  
(HONOURS)

Course Code : GEOH/CC-T-I

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

- ~~a)~~ What is *radiocarbon dating*?
- ~~b)~~ What is *isoseismal line*?
- ~~c)~~ What is meant by *benioff zone*?
- ~~d)~~ Define *strike*.
- e) What is *caldera*?
- ~~f)~~ Define *anticlinorium*.
- g) What is meant by *inversion of relief*?
- ~~h)~~ Define *nappe*.
- ~~i)~~ What is *attrition*? *erosion*
- ~~j)~~ Define *base level of erosion*.
- k) What is *swash*?

[Turn over]



- l) What is meant by *basket of egg topography*?
- m) Define *karst window*.
- n) What is *hydration*?
- o) What is *soil creep*?

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

$$5 \times 4 = 20$$

- a) Briefly discuss about the structure and composition of earth's crust.
- b) Differentiate *normal faults* from *reverse faults*.
- c) Analyse the mechanism of fissure eruption with reference to plate tectonics theory.
- d) State the different types of river meanders.
- e) Specify the key factors affecting mass wasting.
- f) Distinguish between *bajada* and *pediment*.

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

$$10 \times 2 = 20$$

- a) Discuss the earth's tectonic and structural evolution with reference to geological time scale.
- b) Bringout the difference between the models of Davis and Penck on landscape evolution with sketches.
- e) Give an account of the major coastal depositional landforms produced by sea waves with suitable diagrams.
- d) Analyse the major physical weathering processes in hot desert region with diagrams.

## U.G. 1st Semester Examination - 2018

## GEOGRAPHY

## (HONOURS)

Course Code : GEOH/CC-T-II

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: $2 \times 5 = 10$ 

- ☒ a) Define map projection.
- b) What is choropleth map?
- ☒ c) What is the significance of scale on map?
- ☒ d) Differentiate *strike* from *dip*.
- e) What is transect chart?
- f) Mention two characteristics of bauxite.
- g) What do you mean by direct vernier?
- ☒ h) What is polar coordinate?

[Turn over]



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

5×2=10

- a) Highlight the components of a map. 5
- b) Mention the advantages and disadvantages of linear scale. 3+2
- c) What do you understand by *Geoid* and *Spheroid*?  $2\frac{1}{2} + 2\frac{1}{2}$
- d) Define bedding plane. Distinguish between *true* and *apparent dip*. 2+3

3. Answer any **two** of the following questions :

10×2=20

- a) Describe the classification of maps mentioning their bases. 10
- b) Elaborate the concept of UTM projection and mention the significances of it. 10
- c) Discuss the nature and scope of cartography. 10
- d) Highlight the major properties and uses of Simple Conical Projection with one standard parallel. What are the demerits of this projection?

7+3

**U.G. 1st Semester Examination - 2018**

**GEOGRAPHY**

**(HONOURS)**

**Course Code : GEO(H)CC/PR/02**

**[PRACTICAL]**

**SET-V**

Full Marks : 20

Time : 2 Hours

*The figures in the margin indicate marks.*

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

Answer **all** the questions.

1. a) Construct a vernier scale to read 3.88 inches when the value of one small main scale division is  $1/10^{\text{th}}$  of an inch and 9 small main scale divisions are equal to 10 small vernier scale divisions.

- b) Prepare an average slope map on an area (10cm×10cm) from the given toposheet.

5+5=10

2. Laboratory Note Book and Viva-Voce.

5+5=10