

2011

GEOGRAPHY (Honours)

First Paper.

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Section - I

Answer any *one* question. $20 \times 1 = 20$

1. What are the evidences used in the study of internal structure of the earth? Discuss the internal structure of the earth in the light of Seismic Waves. $5+15=20$

2. What do you mean by plate tectonics? Explain the landform features produced along the convergent plate boundary. Comment on the limitations of the plate tectonic theory. $4+12+4=20$

Section - II

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

3. Explain the principle of uniformitarianism as a fundamental concept in geomorphology. What is principle of actualism? $8+2=10$

4. Discuss supernova theory on the origin of the earth.

10

P.T.O.

5. Discuss Thermal Contraction theory of mountain building. 10

6. How does weathering differ from erosion? Describe role of vegetation in the process of weathering and erosion. 3+7=10

Section - III

All are compulsory.

2×5=10

7. Write short note on the following :

- (a) Universal conservation of angular momentum.
 - (b) Diastrophism.
 - (c) Law of buoyancy.
 - (d) Footwall and Hanging wall.
 - (e) Tor.
-

P-1(1+1+1)H/11

2011

GEOGRAPHY (Honours)

Second Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Section - I

hydrology

Answer any *one* question.

20×1=20

1. What do you mean by cycle of erosion? Analyse the concept of dynamic equilibrium as proposed by Hack and find out similarities and dissimilarities between Hack's concept and Davisian concept in this context. 2+12+6=20

2. Discuss the factors and process of hydrological cycle. What is the significance of hydrological cycle? How do human actions interrupt the hydrological cycle? 10+6+4=20

10+6+4=20

Section - II

Answer any *two* questions.

10×2=20

3. What do you mean by base level of erosion? What are impacts of positive and negative change of base level on normal cycle of erosion? 3+7=10

3+7=10

P.T.O.

4. What is delta ? Why delta are not found along the western coast of India ? 2+8=10

5. Discuss the factors controlling groundwater storage. 10

~~6~~ Compare and contrast between the drainage system developed in the folded structure and uniclinal structure. 10

Section - III

Answer *all* questions. 2×5=10

7. Write short note on the following :

~~(a) Valley-in-lie~~

(b) River Capture

(c) Piedmont

(d) Tombolo

(e) Stack.

2011

GEOGRAPHY (Honours)

Third Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Section - I

Answer any *one* question. 20×1=20

1. Distinguish between the terms 'Potential' and 'Developed' in the context of hydel power. In spite of great potentiality North-east India lags behind in hydel power generation – explain. 3+5+12=20

2. What do you mean by sustainable development? What are the principles of sustainable development? Distinguish between growth and development. How far principles of sustainable development have been followed in conservation of forest resource in India? 3+4+8+5=20

Section - II

Answer any *two* questions. 10×2=20

3. Explain how transport and communication system accelerate resource production and utilization. 10

4. Explain the significance of petroleum on global economy. 10

P.T.O.

(2)

5. What are the implications of underpopulation and over-population in a country? What is population explosion?

8+2=10

6. Define resource. Distinguish between flow and fund resource. Do you think water is inexhaustible resource? Why?

2+4+4=10

Section - III

Answer *all* questions.

2×5=10

7. Write short note on the following :

- (a) Man-Land Ratio
 - (b) Social forestry
 - (c) Arithmetic Density
 - (d) Silviculture
 - (e) Ubiquitous resource.
-

2012

GEOGRAPHY (Honours)

First Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

(New Syllabus)

Section - I

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

(Each answer should be within 700 words.)

1. Critically explain the theory of 'Plate Tectonics'. Explain the formation of the 'Island Arcs' in the light of this theory. $7+3=10$

2. What do you mean by 'Earth Movement' ? Explain its resultant structure with particular reference to faults. $3+7=10$

3. Explain the Supernova Hypothesis of Hoyle for the origin of the Earth. 10

Section - II

Answer any *five* questions. $4 \times 5 = 20$

(Each answer should be within 250 words.)

4. Differentiate between 'P' and 'S' waves.

P.T.O.

(2)

5. Write a short note on the evidences of the Deccan system in India.
6. Explain the theory of Isostasy after Pratt.
7. What are the basic assumptions of A. Wegener's Continental Drift theory ?
8. Write down the different components of a fold.
9. Write a short note on 'Big Bang theory' regarding the origin of the Earth.
10. Explain the mountain building theory according to Holmes.
11. Compare between continental crust and oceanic crust.

Section - III

Attempt *all* questions.

2×5=10

(Each answer should be within 100 words.)

12. Write short notes on the following :
 - (a) Land Bridge.
 - (b) Supernova.
 - (c) Polar reversal.
 - (d) Jura structure.
 - (e) Zig-saw-fit.
-

(3)

(Old Syllabus)

Section - I

Answer any *one* question. $20 \times 1 = 20$

1. Critically explain the theory of 'Plate Tectonics'.
Explain the mountain building process in the light of Plate
tectonics. $12+8$

2. Explain mass wasting as sub-aerial denudational
Process. 20

Section - II

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

3. What do you mean by 'Earth Movement' ?
Distinguish between fault scarp and faultline scarp. $4+6=10$

4. Explain the theory of Isostasy with reference to
'Airy' and 'Pratt'. 10

5. Discuss the 'Nebular Hypothesis' on the origin of
the Earth. 10

6. Comment on the recent development on the
Geomorphic ideas in America. 10

Section - III

Answer *all* questions. $2 \times 5 = 10$

7. Write short notes on the following :

(a) 'P' wave

P.T.O.

(4)

(b) Nappe

(c) Tor

(d) Zig-saw-fit

(e) Lehmann Discontinuity

P-I(1+1+1)H/12(N+O)

2012

GEOGRAPHY (Honours)

Second Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

(New Syllabus)

Section - I

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

(Each answer should be within 700 words.)

1. Distinguish between weathering and Mass wasting.
Describe the landforms produced by chemical weathering.

3+7=10

2. Describe the resulted landforms of interruption in
the normal cycle of erosion.

10

3. Write down the causes of left bank erosion of River
Ganga in Malda. What are the steps taken to combat this
situation ?

6+4=10

Section - II

Answer any *five* questions. $4 \times 5 = 20$

(Each answer should be within 250 words.)

4. Write down the various process of river erosion.

4

P.T.O.

(2)

5. Distinguish between Primärrumpf and Endrumpf. 4
6. Write a short note on the Trellis drainage pattern. 4
- ~~7. How 'Obsequent fault-line scarp' is formed ? 4~~
8. Describe the formation of 'Ox-bow-lake'. 4
9. What are the management plans for Flood ? 4
10. Discuss about the 'inversion of topography' on folded structure. 4
11. Distinguish between Zeugen and Yarlang. 4

Section - III

Answer *all* questions.

2×5=10

(Each answer should be within 100 words.)

12. Write short notes on the following :
 - (a) Pyramidal Peak
 - (b) Monadnocks
 - (c) Dolines
 - (d) Cuesta
 - (e) Solifluction.
-

(3)

(Old Syllabus)

Answer any *one* question. $20 \times 1 = 20$

1. What are the favourable conditions for the development for the Karst Topography ? Describe the landforms produced by underground water. $5 + 15 = 20$

2. What do you mean by 'Basin Hydrology' ? Discuss the factors affecting run-off. $8 + 12 = 20$

Section - II

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

3. Write an erosional landforms developed by Sea wave. 10

4. Write in brief on the modes of occurrence of water on the Earth. 10

5. Describe the resultant landforms of interruptions in the normal cycle of erosion. 10

6. Write down the development of drainage system on uniclinal structure. 10

Section - III

Answer *all* questions. $2 \times 5 = 10$

7. Write short notes on the following :

(a) Nunatak

P.T.O.

(4)

(b) Pediplain

(c) Barchan

(d) Evapotranspiration

(e) Infiltration.

P-I(1+1+1)H/12(N+O)

2012

GEOGRAPHY (Honours)

Third Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

(New Syllabus)

Section - I

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

(Each answer should be within 700 words.)

1. Define Infiltration ? What are the several factors affecting infiltration ? $2+8=10$

2. Write an essay on the contamination of Ground water with special reference to Arsenic prone areas of West Bengal. 10

3. Attempt a classification of Coral reefs. 10

Section - II

Answer any five questions. $4 \times 5 = 20$

(Each answer should be within 250 words.)

4. What is the significance of Hypsometric Curve ?

4

P.T.O.

(2)

5. What are the components of hydrological cycle ? 4
6. Give an account of various types of aquifers. 4
7. Rain water Harvesting. 4
8. What are the processes related to the recharge of Ground water. 4
9. Analyse the characteristics of 'T-S' diagram. 4
- ~~10.~~ Classify oceanic sediments. 4
11. Give the characteristics features of different thermal layers of ocean. 4

Section - III

Answer *all* the questions. 2×5=10

(Each answer should be within 100 words.)

12. Write short notes on the following :
 - (a) Elongation Ratio.
 - (b) Continental slope.
 - (c) Vadose water.
 - (d) River Basin.
 - (e) Sargasso sea.
-

(3)

(Old Syllabus)

Section - I

Answer any *one* question. $20 \times 1 = 20$

1. Assess the importance of Tropical Rain forest. Why lumbering is underdeveloped in this region ? What are the conservation policies taken to manage this natural resource?

$6+8+6=20$

2. Population as Human Resource—Explain. What are the principles of sustainable development ? $10+10=20$

Section - II

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

3. Explain the scope and significance of resource studies. 10

4. Give an account of the major petroleum producing countries in the Middle-East. 10

5. Why infrastructural facilities are important for the development of Resources ? 10

6. Evaluate the role of People's Participation in conserving forest. 10

Section - III

Answer *all* questions. $2 \times 5 = 10$

7. Write short notes on the following :

(a) Neutral staff.

P.T.O.

(4)

(b) NTPC.

(c) Under Population.

(d) Boreal Forest.

(e) Jaldhaka Hydel Power Station.

2013

GEOGRAPHY (Honours)

First Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

New Syllabus

Section - I

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

1. Give an account of distribution and economic importance of Dharwar System in India. 10

2. Briefly discuss the theory of continental Drift as proposed by A. Wegner. 10

3. Explain the mountain building theory according to Kober. 10

4. Compare the views of Pratt and Airy regarding the theory of isostasy. What is isostatic adjustment? $8 + 2 = 10$

Section - II

Answer any *five* questions. $4 \times 5 = 20$

5. Define and classify plate boundary. 4

P.T.O.

6. What are the salient features of Low velocity zone? 4
7. Explain Big Bang Theory for the origin of the earth. 4
8. How is internal structure of the earth determined with the help of seismic evidences? 4
9. What is magma? How is it injected into Lithosphere? 2+2=4
10. Discuss different types of Mass wasting. 4
11. Describe different types of folds with suitable example. 4

Section - III

12. Attempt *all* questions : 2×5=10
- (a) S wave
 - (b) Nappe
 - (c) Beni-off zone
 - (d) Supernova
 - (e) Triple junction.
-

Old Syllabus

Section - I

Answer any *one* question. 20×1=20

1. What is weathering? What are the difference between physical and chemical weathering? Discuss different types of mass wasting. 2+4+14=20

2. Critically explain the theory of continental Drift as proposed by A. Wegner. 20

Section - II

Answer any *two* questions. 10×2=20

3. Explain the theories of Kant and La-place for the origin of the earth. 5+5

4. What is normal fault? How does it differ from a reverse fault? 4+6=10

5. State briefly the factors favouring the development of Karst Topography. 10

6. Explain the theory of isostasy with reference to Airy. What is Isostatic adjustment? 6+4=10

P.T.O.

(4)

Section - III

7. Answer *all* questions :

2×5=

- (a) Subduction zone
 - (b) Exfoliation
 - (c) Uniformitarianism
 - (d) Nebula
 - (e) Faultline scarp
-

2013

GEOGRAPHY (Honours)

Second Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

New Syllabus

Section - I

Answer any two questions. 10×2=20

1. What do you understand by Dynamic Equilibrium? Explain the time-independent model of landscape development proposed by Hack. In what way is this model different from the cyclic models? 2+5+3=10

~~2. Discuss the development of landforms on faulted structure with suitable illustrations. 10~~

3. What do you mean by bank erosion? What are the probable causes of rapid bank erosion by the Ganga in Malda and Murshidabad districts of West Bengal. Discuss the consequences of this hazard. 2+4+4=10

4. What are the major depositional landforms formed by a river? Why do the rivers Narmada and Tapi not form a delta? 8+2=10

P.T.O.

(2)

Section - II

Answer any five questions. $4 \times 5 = 20$

5. Describe the geomorphic conditions favourable for the formation of delta. 4
6. Are there any differences between sea coast, sea shore and beach? Justify. 4 if
7. What is Uniformitarianism? Explain in detail. 4
8. Discuss the major transportational processes of the rivers. 4 [
9. Differentiate between meandering and braided channels. 4 n
10. What are the differences between drumlins and Roche Montagne? 4
11. What do you understand by inversion of relief? How does it occur? Give an example from Indian scenario. 2+1+1

Section - III

Answer all questions.

12. Write short notes on : $2 \times 5 = 10$
- (a) River Capture
 - (b) Neo-catastrophism
 - (c) Farakka Barrage
 - (d) Hogback
 - (e) Peneplain.

Old Syllabus

Section - I

Answer any *one* question. 20×120

1. Discuss in details about the development of drainage in anticlinal and folded structures with suitable illustrations.

10+10=20

2. Write down the controlling factors of infiltration? Discuss the processes and techniques regarding groundwater movement and storage. What is Darcy's Law? 8+10+2=20

Section - II

Answer any *two* questions. 10×2=20

3. Distinguish between Davis's and Penck's models of cycle of erosion. 10

4. What are the favourable conditions for the development of karst landscapes? What is solution? 8+2

5. What do you mean by mass wasting? Define landslide and discuss its vulnerability. 2+8

6. "River basin is a hydrological unit." Explain. 10

P.T.O.

(4)

Section - III

Answer *all* questions.

7. Write short notes on :

2×5=10

- (a) Rejuvenation
 - (b) Knick Point
 - (c) Antecedent stream
 - (d) Polje
 - (e) Seif.
-

2013

GEOGRAPHY (Honours)

Third Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

New Syllabus

Group - A

(Hydrology)

Section - I

Answer any *one* question. 10×1=10

1. Define 'runoff'. What are the various components of this ? Illustrate the major factors affecting runoff with suitable example. 2+3+5

2. Justify the consideration of a river basin as a hydrological unit with special reference to Damodar. 10

Section - II

Answer any *four* questions. 4×4=16

3. Define 'evaporation'. Mention the major factors influencing this. 4

4. How does Hypsometric Curve serve as a evidence in detecting stage in cycle of erosion. (नियंत्रणवर्ण) 4

P.T.O.

(2)

5. Briefly describe contamination of groundwater with special reference to arsenic pollution in Malda district. 4
6. Discuss the formation of an artesian well. 4
7. Explain the Hydrological Cycle indicating its various phases. 4
8. Discuss movement of groundwater in the light of Darcy's Law. 4

Section - III

Answer *all* questions.

2×2=4

9. Write short notes on :
- (a) Recharge head.
- (b) Connate water.

~~Group - B~~

~~(Oceanography)~~

Section - I

Answer any *one* question.

10×1=10

10. Discuss the bottom relief characteristics of any Ocean. 10
11. Write the factors influencing variation of density of ocean water in the subsurface layers. 10

(3)

Section - II

Answer any *one* question.

4×1=4

12. Differentiate between 'bay' and 'lagoon' with examples. 4

13. Give a brief account of the currents of the Indian Ocean. 4

Section - III

Answer *all* questions.

3×2=6

14. Write short notes on :

(a) Pycnocline

(b) Diatoms

Old Syllabus

Section - I

Answer any *one* question.

1. What is Resource? What are the attributes of resources? Classify resource on the basis of frequency of occurrences. State the difference between 'natural stuff' and 'natural resistance'. 2+3+10+5

2. What is 'sustainable development'? State the various principles of this. List out the various indicators of environmental sustainability. 4+8+8

P.T.O.

(4)

Section - II

Answer any two questions.

10×2=20

3. What are the attributes of human resource development ? 10

4. State briefly the various methods of conservation of resources. Evaluate the role of man as consumer of resources. 10

5. Discuss the commercial uses of coniferous forest of the world. Write about depletion of tropical rainforest and related environmental problems. 3+7

6. What are the advantages and disadvantages of Hydroelectric power generation ? 10

Section - III

Answer all questions.

2×5=10

9. (a) Phantom pile
(b) Recycling of resource
(c) Optimum population
(d) Man-Land ratio
(e) Selva.
-

P-1 (1+1+1)H/14(N+O)

2014

GEOGRAPHY (Honours)

First Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

[New Syllabus]

Geotectonics

Section - I

Answer any two questions. 10×2=20

1. Discuss the theory of continental Drift of A. Wegnar. 10
2. What do you mean by discontinuities ? Discuss about structure, composition and characteristics of earth's interior. 2+8=10
3. Mention the evidences of sea floor spreading. Explain the concept of sea floor spreading after Hary Hess. 3+7=10
4. Classify and describe the characteristics of different types of fault with suitable diagram. 10

Section - II

Answer any five questions. 4×5=20

5. Enumerate the weaknesses of Nebular Hypothesis. 4

P.T.O.

(2)

6. Explain the topographic expressions of fold. 4
7. What do you mean by level of Compensation ? 4
8. Elaborate the concept of 'Gravity Anomaly'. 4
9. Discuss the characteristics and distribution of 'Deccan System' in India. 4
10. What is 'Hot spots' and 'Mantle Plumes'? 2+2=4
11. Discuss with proper diagrams the theory of Isostasy as propounded by G. Airy. 4
12. What are the drawbacks of Plate tectonics theory ? 4

Section - III

13. Answer *all* the questions : 2×5=10
 - (a) 'Flight from the Pole'
 - (b) Strike - slip fault.
 - (c) Mid Atlantic Ridge.
 - (d) Median Mass and Randketten.
 - (e) Big Bang Theory.
-

(3)

[Old Syllabus]

Physical Geography

Section - I

Answer any *one* question. $20 \times 1 = 20$

1. Briefly discuss the plate tectonic theory. How is orogenesis related to plate tectonic ? $10+10=20$

2. Discuss different processes of physical weathering. What are the geomorphic importance of weathering ? $14+6=20$

Section - II

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

3. Explain the Tidal Hypothesis of the origin of earth by James Jeans. What do you mean by 'primitive sun' ? $8+2=10$

4. Briefly discuss the internal structure and composition of earth's interior. 10

5. Write about the role of American School for the development of geomorphologic ideas. 10

6. Explain the mountain building theory according to Kober. 10

P.T.O.

(4)

Section - III

7. Answer *all* the questions :

2×5=10

- (a) Tor.
 - (b) Zone of compensation.
 - (c) NIFF.
 - (d) Nappe.
 - (e) Strike-slip-fault.
-



20/12

P-1(1+1+1)H/14(N+O)

2014

GEOGRAPHY (Honours)

Second Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

[New Syllabus]

Geomorphology

Section - A

Answer any two questions.

10×2=20

1. "Geological Structure is a dominant controlling factor in the evolution of land forms and is reflected in them". Elaborate the statement with examples having taken the meaning of the term 'structure' as the sense as conceived by William Morris Davis. 10

2. Describe and explain the geomorphic effects of wind erosion. 10

3. Discuss the causes of flood with special reference to North Bengal region. Assess the performance of DVC in flood control. 7+3=10

4. What is Karst topography ? Write on the erosional processes as well as resultant landforms developed by underground water. 2+8=10

P.T.O.

(2)

Section - II

Answer any *five* questions. 4×5=20

5. Distinguish between rapid and slow processes of mass-wasting and indicate their impacts on landforms. 4
6. Explain the formation of river terraces. 4
7. Explain the development of resequent stream on folded rock strata. 4
8. Distinguish between oxidation and carbonation in chemical weathering. 2+2=4
9. What are the different types of delta ? 4
10. Write on the assumptions proposed by Hack in his dynamic equilibrium concept. 4
11. What is Bergschrund ? How does it help in erosion of glacier valley ? 4
12. Describe and explain the formation of cirque. 4

Section - III

Answer *all* questions.

13. Write short notes on : 2×5=10
 - (a) Hook.
 - (b) Flood Plain.
 - (c) Out wash plain.
 - (d) Man Made Hayard.
 - (e) Tombolo.
-

(3)

[Old Syllabus]

Physical Geography

Section - I

Answer any *one* question. $20 \times 1 = 20$

1. Define hydrology. What do you mean by hydrologic cycle? Assess the major components of hydrological cycle. Illustrate your answer with suitable diagram. $2+4+14=20$

2. What do you mean by ideal cycle of erosion ? Analyse the concept of Davis's cycle of erosion and compare it with Hack's cycle of erosion. $2+14+4=20$

Section - II

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

3. What are the favourable factors for the formation deltas ? State the differences between aluvial fans and deltas. $6+4=10$

4. Describe the topographic features produced by marine deposition. 10

5. What is landslide ? What are the major causes of landslide with special reference to Hill region ? $2+8=10$

6. Discuss the depositional landforms developed by valley glacier. 10

(4)

Section - III

Answer all questions.

2×5=10

7. Write short notes on :

- (a) Nappe.
 - (b) Inversion of Relief.
 - (c) Barchan.
 - (d) Pot hole.
 - (e) River Capture.
-

P-1(1+1+1)H/15(N+O)

2015

GEOGRAPHY (Honours)

First Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

[New Syllabus]

(Geotectonics)

Section - I

Answer any two questions. 10×2=20

1. Discuss the origin of the universe with particular reference to the 'Big Bang' Theory. 10

2. Explain the term 'Isostasy'. Give an account of Pratt's views on Isostasy. What is the "Gravitational anomaly" ? 2+6+2=10

3. What is meant by plate tectonic? How can it explain the present layout of young fold mountains in the World ? 2+8=10

4. Discuss the relevance of the theory of convection current as formulated by A. Holmes in explanation of the major tectonic processes and features of the earth. 10

P.T.O.

(2)

Section - II

Answer any *five* questions. 4×5=20

5. Differentiate epirogenic movement from Orogenic movement. 4

6. What is Thrust ? Distinguish between over thrust and under thrust. 2+2=4

7. Write in brief how Wegener used paleontological and paleoclimatic evidence to match the different continents. 2+2=4

8. Write a short note on the evidences of the Deccan system in India. 4

9. Compare between SIAL and SIMA. 4

10. Write a note on 'Tetrahedral' hypothesis. 4

11. With appropriate sketches distinguish between strike slip fault and dip slip fault. 4

12. How can sea-floor spreading be explained by palaeomagnetism ? 4

Section - III

Answer *all* questions. 2×5=10

13. (a) Hot spots.

(b) Nappe.

(c) NIFE

- (d) Triple Junction.
- (e) Gutenberg discontinuity.

[Old Syllabus]

Section - I

Answer any *one* question. 20×1=20

1. What is fault ? Mention the different types of faults and describe the landforms produced by them. 4+16=20
2. What is hydrological cycle ? Explain the different components of hydrological cycle. 2+18=20

Section - II

Answer any *two* questions. 10×2=20

3. Write a short note on the evidences in favour of continental drift theory as proposed by Wegner. 10
4. What are the ideal conditions for the development of Karst topography ? 10
5. Describe and account for the different features produced by wind deposition in desert areas. 10
6. What are the characteristics of Igneous rocks ? How are Igneous rocks classified on the basis of silicon content ? 10

P.T.O.

(4)

Section - III

7. Answer *all* questions.

2×5=10

- (a) Lithosphere.
 - (b) Knick point.
 - (c) Drumlin.
 - (d) Triple Junction.
 - (e) Super nova.
-

P-1(1+1+1)H/15(N+O)

2015

GEOGRAPHY (Honours)

Third Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

[New Syllabus]

Group - A

(Hydrology)

Section - I

Answer any *one* question.

10×1=10

1. What do you mean by basin morphometry ? Discuss the components of basin like slope and elongation ratio.

2+4+4=10

2. What is infiltration ? What are the controlling factors of infiltration ?

2+8=10

Section - II

Answer any *four* questions.

4×4=16

3. Differentiate between evaporation and transpiration. 4

4. Give an account of various types of aquifers. 4

5. Write a short note on ground water movement and storage. 4

P.T.O.

(2)

6. What are the different components of hydrological cycle ? 4
7. Distinguish between water table and artesian aquifer. 4
8. Explain in brief the problems of conservation of water. 4

Section - III

Answer *all* questions. 2×2=4

9. Write short notes on :
- (a) Aquicluids
 - (b) Sinuosity Index.

Group - B

(Oceanography)

Section - I

Answer any *one* question. 10×1=10

10. What is coral reef ? Explain its origin after Darwin theory. 2+8=10
11. Write the differences between equatorial and polar ocean currents. Assess the role of ocean current in controlling climate on earth's surface. 6+4=10

Section - II

Answer any *one* question. 4×1=4

12. Distinguish between seamounts and guyots. 4

(3)

13. Write the characteristics of organic ocean deposits.

4

Section - III

Answer all questions.

2×3=6

14. Write short notes on :

(a) Warm current.

(b) Dead Sea.

(c) Trench.

[Old Syllabus]

Section - I

Answer any *one* question.

20×1=20

1. What is resource ? Explain the role of infra-structural facilities to exploit resource. What are the problems of non-renewable resource ?

2+12+6=20

2. What are the main causes of forest depletion ? Assess the role of agro-forestry in forest conservation.

15+5=20

Section - II

Answer any *two* questions.

10×2=20

3. What are the different types of non-conventional energy ?

P.T.O.

(4)

4. Explain the role of coal in location of thermal power plant.

5. What is optimum population ? What are the advantages of optimum population ?

6. Assess the economic importance of petroleum.

Section - III

Attempt *all* questions.

2×5=10

7. Write short notes on :

(a) Rock Oil.

(b) Fund resource.

(c) Participatory Forest Management (PFM).

(d) Under-population.

(e) Mangrove forest.

P-1(1+1+1)H/15(N+O)

2015

GEOGRAPHY (Honours)

Second Paper

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

[New Syllabus]

Section - I

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

1. What is meant by 'Modification of normal cycle'? Clarify the causes of such modification. How would you recognize the rejuvenated landscape in the field?

$2+6+2=10$

2. What do you understand by the term 'Karst Topography'? Discuss the favourable conditions for the development of Karst Topography. Describe the various erosional landforms produced by underground water in a region of limestone rocks.

$2+4+4=10$

3. Explain with illustration the influence of lithology on topography.

10

4. What do you mean by fluvial geomorphology? Discuss the different types of landforms formed due to river erosion.

$2+8=10$

P.T.O.

(2)

Section - II

Answer any *five* questions.

4×5=20

5. How does interlocking spur differ from a truncated spur ? 4

6. Why is chemical weathering more prominent in humid tropical regions ? 4

7. Compare and contrast between the concept 'catastrophism' and 'Gradualism'. 4

8. What is 'Factor of safety' ? How is it used to explain the causes of slope failure ? 2+2=4

9. Distinguish Hazard from Disaster. Would you consider flood as the Hazard ? Give reason. 2+2=4

10. Explain the structure of Delta. 4

11. Distinguish between wash and backwash. 4

12. What is water fall ? Why does water fall recede upstream ? 2+2=4

Section - III

Answer *all* questions.

2×5=10

13. Write short notes on :

(a) Oxidation

(b) Monadnock

(c) Esker

- (d) Tors
- (e) Ventifacts.

[Old Syllabus]

Section - I

Answer any *one* question. 20×1=20

1. What is fluvial geomorphic process ? Describe with illustration the erosional landforms created by fluvial process.
What is stream abstraction ? 2+16+2=20

2. Define hydrological cycle. What are its components?
Explain how various geographical factors affect runoff. 2+6+12=20

Section - II

Answer any *two* questions. 10×2=20

3. What is drainage system ? Explain different types of drainage system. 2+8=10

4. What is peneplain ? How does it differ from pediplain ? Explain how does peneplain evolve ? 2+2+6=10

5. Describe topographic features produced by marine deposition. 10

6. Define river rejuvenation. What are the geomorphic consequences of rejuvenation of river ? 2+8=10

P.T.O.

(4)

Section - III

Answer *all* the questions.

2×5=10

7. Write short notes on :

- (a) Inversion of relief.
 - (b) Outwash plain.
 - (c) Infiltration.
 - (d) Abrasion.
 - (e) Elbow of river capture.
-

P-I (1+1+1) H/16 (N)

2016

GEOGRAPHY (Honours)

Paper Code : I-B

(New Syllabus)

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Module - 1 : Geotectonic

Section - I : (Long Answer type Question)

Answer any *one* question. 10×1=10

1. Critically assess the interior structure of the earth with special reference to Seismology. Define the term geological time scale. 8+2=10

2. Elaborately discuss about the origin of folded mountain of Himalaya with special reference to Plate tectonics. 10

Section - II : (Semi-long answer type)

Answer any *four* questions. 5×4=20

3. Classify folds on the basis of their geometrical shape with suitable diagrams. 5

P.T.O.

1/154-1600

(2)

4. Distinguish between Alty and Pratt's views regarding tectonics in the light of modern research. 5
5. What are the domains of 'Supernova' hypothesis regarding the explanation of the origin of earth? 5
6. Discuss briefly the phenomena of Sea-level change and its relation with geological time scale. 5
7. Narrate the drawbacks of Wegner's theory in the light of absence of appropriate evidences. 5
8. Discuss about the mountain building theory of Kober. 5
9. Classify faults based on structure. 5
10. Assess the 'Pacific-Ring of fire' on the light of Plate tectonics and Volcanism. 5

Module - 2 : Oceanography

Section - III : (Long answer type questions)

- Answer any one question. 10×1=10
11. Discuss about the global horizontal distribution of temperature of ocean water with suitable maps and data. What is 'Plethom'? 8+2=10
 12. Explain in detail about the ocean floor of North-Atlantic Ocean and South-Atlantic Ocean with proper diagram. 5+5=10

(3)

Section - IV : (Semi-long type questions)

- Answer any two questions. 5×2=10
13. What are the importance of coral reefs in marine ecology and environment? 5
 14. Give an account on the classification and distribution of marine deposits in South Pacific Ocean. 5
 15. Assess the impact of global warming on the normal flow of ocean currents. 5
 16. What factors are responsible behind the unequal distribution of salinity of ocean or sea-water? 5

P-1(1+1+1)H/16(N)

2016

GEOGRAPHY (Honours)

Paper Code : I-C

(New Syllabus)

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Module 3 : Geomorphology

Section - I

(Long answer type questions)

Answer any *one* question. 10×1=10

1. Define mass-wasting. Discuss with proper diagrams the resultant landform of weathering. What is saprolite ?

2+7+1=10

2. What do you mean by geomorphic hazards ? Describe the causes responsible for frequent occurrences of landslides in the Darjeeling Himalayas.

2+8=10

Section - II

(Semi long answer type questions)

Answer any *four* questions. 4×5=20

3. What are the favourable conditions for the development of 'Karst' topography ? 5

P.T.O.

(2)

4. What do you mean by negative change in base level of erosion ? What are the geomorphic significances of negative change in base level of erosion in the down stream regions of a river ? 5
5. What is river meander ? Discuss the process of formation of ox-bow lake. 1+4=5
6. Describe the evolution of landform in unisidinal structure in the first-cycle of erosion. 5
7. Discuss the major differences found in the theory of Davis and Peck on cycle of erosion. 5
8. Sketch on major fluvio-glacial landforms with proper illustrations. 5
9. How is the flood plains formed ? 5
10. 'Present is the key to the past' — Explain. 5

Module 4 : Hydrology

Section - III

(Long answer type questions)

- Answer any one question. 10×1=10
11. Define run-off. What are the controlling factors of infiltration of a region ? 2+8=10
 12. What do you mean by aquifers ? Give a sketch on movement of ground water with suitable illustration. 2+8=10

(3)

Section - IV

(Semi-long answer type questions)

- Answer any two questions. 5×2=10
13. What is basin morphometry ? Discuss the importance of hypsometric curve. 2+3=5
 14. Write a short note on rain-water harvesting. 5
 15. Define evapotranspiration. Mention the controlling factors of evaporation. 2+3=5
 16. Write a brief management plan for the conservation of water resources in urban centres of the lower gainain plains. 5

P-1(1+1+1)H/17(N)

2017

GEOGRAPHY (Honours)

Paper Code : I-B

(New Syllabus)

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

GEOTECTONIC

Section - I

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

1. Discuss the origin of Universe with particular reference to the Big Bang Theory. 10
2. Classify different types of folds mentioning the basis of your classification. 10

Section - II

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

3. How can seafloor spreading be examined by palaeomagnetism? 5
4. Discuss the mountain building theory according to Holmes. 5

P.T.O.

(2)

5. Define plate. Classify plate boundaries. 2+1
6. How does plate tectonics and volcanism are interrelated? 5
7. Write a short note on Carboniferous period. 5
8. Assess the interior of earth on the basis of velocities of Seismic waves. 5
9. With appropriate sketches, distinguish between strike-slip-fault and dip-slip-fault. 5
10. Write a short note on the theory of Isostasy after Pratt. 5

OCEANOGRAPHY

Section - III

Answer any one question: 10=1+10

11. Explain the factors which determine the nature of ocean currents. Describe the salient features of the Indian Ocean currents. 4+6=10
12. Define Coral reef and atoll. Explain Darwin's theory of Coral reef formation. 4+6=10

Section - IV

Answer any two questions: 5+2=10

13. Distinguish between continental shelf and continental slope.

(3)

14. Give an account of the food resources of the sea.
15. What is T-S Diagram? Explain its significance. 1+4=5
16. Define Ooze. Write a short note on terrigenous deposits. 1+4=5

2017

GEOGRAPHY (Honours)

**Second Paper
(Geomorphology)
[Old Syllabus]**

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

Section - I

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

1. Give an account of W. Penck's view of landform development. 10
2. Discuss the influence of lithology on characteristics of landform with particular reference to granite and limestone in a humid tropical and humid temperate climate. 10
3. "The present is the Key to the Past"— explain. 10
4. Discuss the depositional landforms created by the aeolian process with suitable diagrams. 10

Section - II

Answer any *five* questions. $4 \times 5 = 20$

5. Explain the formation of Uvalas and Poljes.

P.T.O.

6. Distinguish between 'earthflow' and 'landslide' in the context of mass movement.

7. Describe the different processes of thermal weathering.

8. Explain the mechanism of river-bank erosion with special reference to such erosion in West Bengal.

9. Discuss the processes involved in the evolution of a delta.

10. Write in brief the consequences of flood in West Bengal.

11. Bring out the salient features of moraines.

12. Distinguish between a hogback and a Cuesta.

Section - III

Answer *all* questions.

13. Write short notes on : 2×5=10

(a) Tor.

(b) Nappe.

(c) Drumlin.

(d) Ox-bow lake.

(e) Outwash plain.

P-1(1+1+1)H/17(N)

2017

GEOGRAPHY (Honours)

Paper Code : I-B

(New Syllabus)

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

GEOTECTONIC

Section - I

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

1. Discuss the origin of Universe with particular reference to the Big Bang Theory. 10
2. Classify different types of folds mentioning the basis of your classification. 10

Section - II

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

3. How can seafloor spreading be examined by palaeomagnetism? 5
4. Discuss the mountain building theory according to Holmes. 5

P.T.O.

5. Define plate. Classify plate boundaries. 2+3
6. How does plate tectonics and volcanism are interrelated? 5
7. Write a short note on Carboniferous period. 5
8. Assess the interior of earth on the basis of velocities of Seismic waves. 5
9. With appropriate sketches, distinguish between strike-slip-fault and dip-slip-fault. 5
10. Write a short note on the theory of Isostasy after Pratt. 5

OCEANOGRAPHY

Section - III

Answer any *one* question: 10×1=10

11. Explain the factors which determine the nature of ocean currents. Describe the salient features of the Indian Ocean currents. 4+6=10
12. Define Coral reef and atoll. Explain Darwin's theory of Coral reef formation. 4+6=10

Section - IV

Answer any *two* questions: 5×2=10

13. Distinguish between continental shelf and continental slope.

(1)

14. Give an account of the fossil resources of the sea.
15. What is T - S Diagram ? Explain its significance.
1+4 = 5
16. Define Ooze. Write a short note on terrigenous deposits.
1+4 = 5
-

P - I (1+1+1) H/18 (N)

2018

GEOGRAPHY (Honours)

Paper Code : I-C

[New Syllabus]

Full Marks : 50

Time : Two Hours

The figures in the margin indicate full marks.

GEOMORPHOLOGY

Section - I

Answer any *one* question. 10×1=10

1. Define mass movement. What is the difference between weathering and mass-movement? Explain the characteristics of major types of mass movement. 2+2+6=10

2. Briefly describe the landforms associated with folded structure. Differentiate between dip and strike. 6+4=10

Section - II

Answer any *four* questions. 5×4=20

3. Distinguish between branched and meandering channel. 5

P.T.O.

1/129-1300

(2)

4. How Penk's model of cycle of erosion differ from Davisian concept of normal cycle of erosion. 5
5. Write a short note on duricrusts. 5
6. What is graded river? Write a short note on erosional processes associated with river. 5
7. Differentiate between hazard and disaster. 5
8. Explain any two fundamental concepts in geomorphology. $2\frac{1}{2}+2\frac{1}{2}=5$
9. What are the impacts of positive and negative changes of base level on normal cycle of erosion. 5
10. Explain the basic mechanisms involved in the left bank erosion of Ganga in, Malda District. 5

HYDROLOGY

Section - III

Answer any *one* question. 10×1=10

11. What are the different forms of substance water? What is aquifer? Describe various types of aquifer. What is Darcy's law? $3+1+4+2=10$
12. What is water harvesting? Why it is important? Explain various techniques of water harvesting in context of India. $2+2+6=10$

(3)

Section - IV

Answer any two questions. 5×2=10

13. Describe ground water resource of India and its utilization. 5
 14. Explain the factors affecting evapo-transpiration. 5
 15. Discuss the global water budget. 5
 16. Explain the significance of hypsometric curve for drainage basin and lysis. 5
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