

Rayat Shikshan Sanstha's
Chhatrapati Shivaji College, Satara
(Autonomous)
M.A/M.Sc. (Part-I) (Semester-I) -2019-20

QUESTION BANK

GEOC 21 Fundamentals of Geomorphology

.....

Question 1. A) Fill in the blanks (One mark Each)

1. Geomorphology is a significant branch of Geography.: **Physical**
2. Landscape is the function of structure, process and stage, is a dictum of -----**W.M.Davis**
3. 'Principles of Geology' are associated with the**Charles Lyell**
4. The principle of uniformitarianism was given by**James Hutton**
5. The term 'Geomorphology' was first used by -----in the year 1840.**Arthur Keith**
6. Continent and ----- are first order landform on the earth crust.**Ocean**
7. Continental Slope is the -----order landform on the ocean floor.**(Third)**
8. The term 'delta' first used by Greek geographer namely-----**Aristotle**
9. The term 'base level' postulated by -----**J.W. Powell**
10. -----are consider to the concept of cycle of erosion.**W.M.Davis**
11.propounded that the landscape is the function is the result of two competing tendencies i.e. tendency towards variability and uniformity. **Gilbert**
12. Study of is the prime focus of geomorphology.**Landforms**
13. Sudden acceleration in erosive power of the fluvial process caused by variety of factor is ----- **Catastrophism**
14. There were several smaller inland seas scattered over the Pangaea which was surrounded by huge water body, which known as **Panthalasa**
15. Lifting and rolling ofis deflation occurred by arid Region. **Geo-material**
16. The whole mechanism of the evolution motion and resultant reaction of plate is called----**Plate tectonics**
17. Tuzo Wilson 1965, university of Toranto first used the term----- **Plate Tectonics**
18. Theory of plate tectonics published by -----**W.J.Morgan**
- 19.. Constructive, destructive and conservative are the margins or borders of ----- **Plate**
20. The boulder between mantle and Core determiner by..... discontinuity.**Moho**

21. The boundary between lower crust and mantle determined by..... discontinuity. **Gutenberg**
22. Exfoliation is a type of **Mechanical weathering**,
23. Seismic waves are recorded with the help of instruments known as **Seismograph**
24. The place of the occurrence of an earthquake is called focus and the place which experiences the seismic event first is called..... **Epicenter**
25. Movement of rock mass down the hillslope is called..... **Rock fall**)
26. Seismic waves are recorded with the help of instruments known as **Seismograph**
- 27..... waves cannot pass through liquid materials. **Secondary**
28. The place of the occurrence of an earthquake is called focus and the place which experiences the seismic event first is called..... **Epicenter**
- 29.. Lifting and rolling of geo-material is deflation occurred by ----- . **Arid Region**
30. Wearing away of land surface is a phenomena of ----- **Denudation**
31. Uvala associated withregion. **Karst**
32. The breakdown of the rocks of valley side due to the impact of water currents of Channel is ----- **Hydraulic action**
33. Sudden acceleration in erosive power of the fluvial process caused by variety of factor is ----- **Rejuvenation**
34. The final product of all denudational processes is ----- **Peneplain**
35. A recent but significant branch of applied Geomorphology is -----Geomorphology.
- Environmental**
36. Writer of the book 'Geomorphology' published by prayagpustakbhavan is ----- **S.Singh**
37. Stalagmites form in -----region. **Karst**
38. Barchans are formed by----- action. **Wind**
39. The concept of Normal Cycle of Erosion was propounded by ----- **W.M. Davis**
40. U shaped valleys are formed by ----- **Glaciers**
41. The greatest earthquake activities are concentrated in belt of ----- **Circum-Pacific**
- 42.. Caldera with cinder cone is landform produced by----- **Volcanic Activity**
43. The waves do not travel through the liquid part of the earth . **secondary**
- 44.. The point on the earth surface immediately above the focus is ----- **Epi-centre**

- 45.. Extensive and broad fold consisting of several minor anticlines and synclines is -----
FanFold
- 46.. Horst is an elevated block between two normal-----**Faults**
47. ----- fault is characterized by unequal and irregular limbs.**Asymmetrical**
48. Each geomorphic process produces its own characteristics assemblage of ----**landforms**
49. Landscape is a function of structure, process and -----**Stage**
50. Blow holes are the geomorphic features formed by-----**Wind**
51. Encyclopedia of Geomorphology is edited by-----**Fairbridge**
52. Mushroom rock is associated with an action of ----- **wind**
53. Rock fall and soil creep is a movement ofprocess.**Masswasting**
54. ----- is the mountain formed by folding process.**Himalaya**
55. Glacier is the mass of anwhich moves slowly down to the valley.**ICe**
56. The soil is the end product ofprocess. **Weathering**
- 57.....is known as the light house of the Mediterranean.**Stramboli**
58. The concept of geosyncline was propounded by.....**James Hall and Dana**
59. forces are responsible for the origin of mountains.**Horizontal forces**
- 60.....is considered to be the patron of science of geomorphology.**W.M.Davis**
- 61.The concept of sea floor spreading was proposed by..... **H.Hess**
- 62.Wave like bends formed in the crustal rocks due to compressive force in interior of the earth are called.....**Folds**
63. Long but narrow and shallow water depression characterized by sedimentation and subsidence are called.....**Geosyncline**.
- 64.Wearing away of the land surface by erosion and weathering is termed as**Denudation**
- 65.**The concept of 'Base level' was enunciated by.....**J.W.Powel**
- 66.**The process of disintegration and decomposition of rocks, due to external forces, in situ is known as**Weathering**
- 67.**Fault is considered in theforces. **Endogenetic**
- 68.Study of is the prime focus of geomorphology.**Landforms**
- 69.Running water landforms are also known as.....**Fluvial** landforms

70. The Antarctic ice sheet is the best example of **Continental glacier**
71. is the most powerful and effective erosive agent of coastal areas. **Sea wave**
72. Pot hole is considering the topography. **Fluvial**
73. Delta landform exists due to the work of running water. **Depositional**
74. In river the Grand Canyon is situated. **Colorado river (USA)**
75. Waterfalls are formed due to the erosional work of **River**
76. Mushroom rocks are considered to the action of **Wind**
77. The average density of the whole earth is about -----g cm⁻³. **5.5**
78. According to the nebular hypothesis the core of the earth should be in state. **Liquid**
79. Seismic waves are recorded with the help of instruments known as **Seismograph**
80. waves cannot pass through liquid materials. **Secondary**
81. has through light on the chemical composition of the earth's interior. **E. Suess.**
82. The boulder between mantle and Core determined by discontinuity. **Moho**
83. The boulder between lower crust and mantle determined by discontinuity. **Gutenberg**
84. The place of the occurrence of an earthquake is called focus and the place which experiences the seismic event first is called **Epicenter**
85. Landforms developed in limestone region are also called as ----- . **Karst topography**
86. Flood plains are ----- landform. **Fluvial**
87. Sea wall can be constructed for the protection of ----- **Harbors**
88. Any change natural or man induced that may affect the geomorphic stability of a
landform is ----- hazard. **Geomorphic**
89. Lifting and rolling of geo-material is deflation occurred by ----- . **Arid Region**
90. Wearing away of land surface is a phenomena of ----- **Denudation**
- 90.** Wadis are formed by ----- **Aeolian**
91. A large basin shaped volcanic crater is called **Caldera**
92. The breakdown of the rocks of valley side due to the impact of water currents of
Channel is ----- **Hydraulic action**
93. Sudden acceleration in erosive power of the fluvial process caused by variety of factor
is ----- . **Catastrophism**
94. The final product of all denudational processes is ----- **Peneplain**

95. Valley deepening process take place during thesstage of river. **Youth**
96. Writer of the book ‘Geomorphology’ published by prayag pustak bhavan is ----- . **S.Singh**
97. Stalagmites form in -----region. **Karst**
98. Barchans are form by----- **Wind**
99. The concept of Normal Cycle of Erosion was propounded by ----- **W.M. Davis**
100. U shaped vallies are formed by -----**Glaciers**
101. Horns are produce by the erosional work of -----**Glacial**
102. An upfold in thef straataa of the earth crust called.....**Anticline**
103. Exfoliation is concerned with.....weathering. **Physical**
104. Karstification is domonated by-----**Underground water**
- 105....., Medial, terminal are the types of glacial moraine. **Lateral**
106. The greatest earthquake activities are concentrated in belt of -----**Circum-Pacific**
107. Caldera with..... cone is landform produced by volcanic activity. **Cinder**
108. The waves travel through the solid and liquid part of the earth is -----**Primary**
109. The point on the earth surface immediately above the focus is -----**Epi-centre**
110. Extensive and broadfold consisting of several minor anticlines and synclines is -----**Fan Fold**
111. Horst is an elevated block between two normal----- **Faults**
112. -----fault is characterized by unequal and irregular limbs. **Asymmetrical**
113. Each geomorphic process produces its own characteristics assemblage of ---- **landforms**
114. Landscape is a function is structure, process and ----- **stage**
115. Sand dunes are the geomorphic features formed by-----**Wind**
- 116. Drumlins and the eskers are the features seen in the landscape of ----- Glacier**

B) Write a short note on any one of the following (Four marks each)

- 1.
2. Scope of Geomorphology
3. Nature of Geomorphology

4. Uniformitarianism
5. Present is key to the past
6. Contribution of American Geographer
7. Characteristics of land water distribution
8. Continental Drift Theory
9. Plate Tectonic Theory
10. Sea floor spreading
11. Convergent plate boundary
12. Divergent plate boundary
13. Transform plate boundary
14. Types of plates
15. Types of movement of plate boundary
16. Causes of volcanoes
17. Exogenic forces
18. Classification of forces
19. Types of Weathering
20. Process of Erosion
21. Process of mass movement
22. Chemical weathering
23. Biotic weathering
24. Factor affecting on physical weathering
25. Denudation
26. Agents of denudation
27. Fluvial process
28. Glacier types
29. Coastal Process
30. Sand Dunes formation
31. Mushroom Rock
32. Erosional landform of river
33. Erosional landform of glacier
34. Erosional process of wind
35. Erosional landform of sea wave
36. Depositional landform of river
37. Erosion process of river
38. Depositional landform of wind
39. Depositional landform of sea wave
40. Features of youth stage of river
- Stages of river
40. Types of Himalayas
41. Wave cut landform

Question 2. A) Answer in one sentence (One mark each)

1. Who is the patron of Geomorphology?
2. What is Tiro of Davis?
3. Who is the author the book 'Geomorphology' published by Prayag Pustak Bhavan?
4. Who used the term first 'Geomorphiology'?
5. Who used the term first 'Delta'?
6. Who enunciated the concept of 'Base level' ?
7. What is the meaning of Panthalasa?
8. What do you understand about pangea?
9. Who postulated the 'Theory of Plate Tectonic'?
10. What is the name of theory propounded by Alfred Wegner in 1912?
11. What are the types of plate movement boundry?
12. Define plate boundaries.
13. What is Angara?
14. What is Gondwana?
15. Define Exfoliation.
16. What is the name of instruments whcih seismic waves are recorded?
17. Define Epicenter.
18. Which type of waves cannot pass through liquid materials?
19. What is river rejuvenation?
20. What is the final product of all denudational processes?
21. Which forces are responsible for the origin of mountains?
22. Which forces are responsible for the building of continent?
23. What is attrition?
24. What is mean by Plucking?
25. What is deflation?
26. What is soli creep?
27. What do you understand about landslide?
28. What id physical weathering?
29. What is Chemical weathering?
30. Define biotic weathering.
31. What is fold?

32. What is fault?
33. What is erosion?
34. Define weathering?
35. Which denudational agent produce landform namely 'Mushroom Rock'.
36. In which climetic region work of wind found always dominant?
37. Which is the most powerful and effective erosive agent of coastal areas.
38. In which region work of glacier found dominant?
39. Which is the best example of Continental glacier?
- 40.
41. Pot Holes are considering which denudational agent?
42. Delta landform are considering which denudational agent.
43. In which river the Grand Canyon is situated?
44. What is the average density of the whole earth?
45. Drumlins are considering which denudational agent?
46. Yardang are considering which denudational agent?
47. Wave cut platforms are considering which denudational agent?
48. What is playa?
49. What is the name of topography landform are developed in desert region?
50. What is the name of topography landform are developed by running water?

B.) Explain the following concept (Four mark each)

- | | |
|-----------------------|-------------------------|
| 1. | |
| 2. Landform | 10. Sea floor spreading |
| 3. Delta | 11. Fold |
| 4. Uniformitarianism | 12. Fault |
| 5. Tiro of Davis | 13. Endogenetic Forces |
| 6. Plate boundary | 14. Exogenetic Forces |
| 7. Divergent plate | 15. Denudation |
| 8. Conservative plate | 16. Exfoliation |
| 9. Transform plate | |

17. Weathering
18. Erosion
19. Masswasting
20. Landslide
21. Debris fall
22. Soil creep
23. Chemical weathering
24. Physical Weathering
25. Biotic Weathering
26. Forms of Erosion
27. Fluvial
28. Wind
29. Glacier
30. Sea wave
31. Morphogenetic Region
32. Rapids
33. Waterfalls
34. Pot Hole
35. Deflation
36. Attrition
37. Abrasion
38. Corrosion
39. Plucking
40. Hydraulic action
41. Mushrooms Rocks
42. Mesa
43. Playa
44. Bajada
45. Drumlin
46. Wave Cut Platform
47. Lappies
48. Doline
49. V Shaped Valley

Question 3. A) Give reasons (Two mark each)

1. Circum pacific belt known as a Ring of fire.
2. Southern hemisphere is called water hemisphere.
3. Delta are mainly found in the lower course of river.
4. Vertical erosion always lies in the youth stage of river.
5. Variety of sand dunes are formed in the aeolian region.
6. Horizontal erosion lies in mature stage of river.
7. Landforms vary in size and shape in region to region.
8. Landslide always lies in rainfall affected area.
9. Sand dunes are found in different size and shape in arid region.
10. Pangea drifted towards westward and equatorward direction.
11. Secondary waves cannot travel liquid region.
12. Himalaya is a folded mountain.
13. Japan known as a country of earthquake.
14. Northern hemisphere called land hemisphere.
15. Erosion is a dynamic process.
16. Generally masswasting process lies in rainfall affected hilly area.
17. Horizontal forces consider mountain building process.
18. Vertical forces concern continental building process.
19. Earthquake is an sudden force.
20. Chemical weathering lies in specially limestone area.
21. Velocity of water is very high in upper stage of river.
22. Weathering is a static process.

B) Write short answers (Two marks for each)

1. What do you understand about landform hierarchy?
2. State the two distinctive features of Delta.
3. Discuss 'Present is key to the past'.
4. What is Tiro of Davis?
5. Every landform is the function of structure, process and stage. Discuss.
6. What is plate boundary?

7. What are the characteristics of divergent plate boundary.
8. What are the characteristics of convergent plate boundary.
9. What are the characteristics of transform plate boundary.
10. What is sea floor spreading?
11. What are the two direction of drifting of continent?
12. What are the two direction of drifting of the continent?
13. Name the list of minor plate.
14. Write two evidences of continental drift theory.
15. Define Weathering.
16. What is Volcano? What are the types of volcano on the basis of period of origin?
17. What are the different kind of fold?
18. What are the different kind of fault?
19. What are the types of endogenetic forces?
20. List the exogenetic forces?
21. What is mean by denudation? What are the factor affecting on Physical weathering?
22. Write the process of chemical weathering.
23. How the exfoliation is type of physical weathering?
24. List the process of masswasting.
25. What are the causes of landslide?
26. Distinguish between primary and secondary seismic wave.
27. What are the types of volcanoes on the basis of origin of period?
28. What are the types of seismic wave?
29. What are the different forms erosional agent?
30. What are the erosional landforms of river?
31. What are the depositional landforms of river?
32. What are the erosional landforms of wind?
33. List the depositional landforms of aeolian?
34. What are the erosional landforms of sea wave?
35. List the depositional landforms of coastal area.
36. What are the erosional landforms of glacier?
37. What are the depositional landforms in polar areas?
38. State the basis of morphogenetic region.
39. What are the formation process of waterfall?

40. Differentiate between weathering and erosion.

Question 4. Subject related technical aspects/ issues (Five marks of each)

1. How the role of lava in the formation process of Kas plateau in Satara district.
2. Explain the Process of waterfall formation with suitable diagram.
3. What do you understand about physical weathering and biotic weathering?
4. Discuss on Mass movement process around Satara district.
5. How the erosion is dynamic geomorphic process?
6. 'Sea wave' is dominant in the coastal area. Discuss.
7. Why the wind is active in desert region? Explain it.
8. What are the causes of changing forms of the land of any climatic region.
9. What do you understand about Rock structure and geomorphic process? Discuss it.

Question 5. Write broad answers (Five marks of each)

1. Give a brief account of development of geomorphic thought in the modern period.
2. Define Geomorphology and explain the scope of geomorphology.
3. Explain in detail nature of geomorphology
4. Give a brief account of development of geomorphic thought.
5. What are the characteristics of land water distribution?
6. Give a brief account of plate tectonic theory.
7. Critically examine the theory of continental drift of Alfred Wegner.
8. Give a brief account of continental drift of Alfred Wegner.
9. Give a brief account of Sea floor spreading.
10. What are the different types of forces?
11. What are the causes of earthquake?
12. Explain the factor affecting on Physical weathering?
13. What are the various types of weathering?
14. Give brief account of chemical weathering process.
15. What are the various process mass movement?
16. Give a brief account of development of geomorphology in American school.
17. Discuss on erosional landforms of river.
18. What are the characteristics of youth stage of river?
19. Explain the different landforms associated with coastal area.
20. How the wind active in arid region?

21. Elaborate the landform associated with glacier.
22. Explain the erosional landforms associated wind action.
23. Explain the depositional landforms associated glacier.

Question 6. A) Match the following/ distinguish (One mark of each)

1.

A Group		B Group
1.	Uniformitarianism	A. Continental Drift Theory
2.	Fluvial	B. James of Hutton
3.	Alfred Wegner	C. Rapids
Ans: 1.B 2.C 3.A		

2.

A Group		B Group
1.	Mushroom Rock	A. Wind
2.	Drumlin	B. River
3.	Pot hole	C. Glacier
Ans: 1.A 2.C 3.B		

3.

A Group		B Group
1.	Sea cliff	A. Glacier
2.	Delta	B. Sea wave
3.	Drumlin	C. Runnign water
Ans: 1.B 2.C 3.A		

4.

A Group		B Group
1.	James hutton	A. Cycle of erosion

2.	W.M.Davis	B. Base Level
3.	J.W.Powell	C. Uniformitarianism
Ans: 1.C 2.A 3.B		

5.

A Group		B Group
1.	Continental drift theory	A. H.Hess
2.	Plate Tectonic theory	B. Alfred Wegner
3.	Sea floor spreading	C. W.J.Morgan
Ans: 1.B 2.C 3.A		

6.

A Group		B Group
1.	Volcano	A. Fold
2.	Fold	B. Sudden movements
3.	Anticline	C. Slow movement
Ans: 1.B 2.C 3.A		

7.

A Group		B Group
1.	Continent	A. Third order landform
2.	plateau	B. Second order landform
3.	Mesa	C. First order landform
Ans: 1.C 2.B 3.A		

8.

A Group		B Group
1.	Fluvial	A. Polar region
2.	Wind	B. Running water
3.	Glacier	C. Arid region
Ans: 1.B 2.C 3.A		

9.

A Group		B Group
1.	Delta	A. Geomorphology
2.	Aruther Keith	B. Second order landform
3.	Continental slope	C. Aristotle
Ans: 1.C 2.A 3.B		

10.

A Group		B Group
1.	Epicentre	A. Sea wave
2.	Caldera	B. Earthquake
3.	Sea cliff	C. Volcano
Ans: 1.B 2.C 3.A		

B) True or False (One mark of each)

1. The term 'delta' first used by Greek geographer namely Aristotle –**True**
2. 'Plate Tectonic Theory' theory propounded by W.J.Morgan in 1967. **True**
3. Erosion is a static process. **False**
4. Southern hemisphere is called water hemisphere. **True**
5. Delta are mainly found in the lower course of river. **True**
6. Vertical erosion always lies in the old stage of river. **False**
7. Variety of sand dunes are formed in the aeolian region. **True**
8. Horizontal erosion lies in youth stage of river. **False**
9. Landforms vary in size and shape in region to region. **True**
10. Landslide always lies in rainfall affected area. **True**
11. Sand dunes are found in different size and shape in arid region. **True**
12. Pangea drifted towards westward and equatorward direction. **True**
13. Weathering is a static process. **True**
14. Generally masswasting process lies in rainfall affected hilly area. **True**
15. Horizontal forces consider continent building process. **False**

16. Vertical forces concern continental building process. **True**
17. Earthquake is an sudden force. **True**
18. Physical weathering lies in specially limestone area. **False**
19. Velocity of water is very high in upper satge of river. **True**
20. The erosion of the sea coast is caused by glacier. **True**
21. Washington consider as a country of earthquake. **False**
22. Pacific ocean consider Ring of fire. **True**
23. Geomorphology is the sub branch of physical geography. **True**
24. Secondary waves cannot travel liquid region. **True**
25. Himalaya is a folded mouttain. **True**
26. Geomorphology is branch of human geography. **False**
27. The term 'base level' postulated by W.M.Davis. **False**
28. W.M.Davis are consider to the concept of cycle of erosion. **True**
29. Study of landform is the prime focus of geomorphology. **True**
30. The average density of the whole earth is about 1.5 g cm^{-3} . **False**
31. Stalagmites form in arid region. **False**
32. U shaped vallies are formed by Glaciers. **True**
33. The point on the earth surface immediatly above the focus is Epi-centre. **True**
34. Barchans are formed by River action. **False**
35. The concept of Normal Cycle of Erosion was propounded by W.M. Davis. **True**
36. There were several smaller inland seas scattered over the Pangaea which was surrounded by huge water body, which known as pacific ocean.. **False**

C) Define the term (Two mark of each)

- | | |
|------------------------|------------------------|
| 1. | |
| 2. Delta | 11. Landform |
| 3. Conservative plate | 12. Fault |
| 4. Transform plate | 13. Fold |
| 5. Sea floor spreading | 14. Endogenetic Forces |
| 6. Plate boundary | 15. Denudation |
| 7. Divergent plate | 16. Exfoliation |
| 8. Exogenetic Forces | 17. Weathering |
| 9. Uniformitarianisam | 18. Erosion |
| 10. Tiro of Davis | |

19. Masswasting
20. Landslide
21. Debris fall
22. Soil creep
23. Chemical weathering
24. Playa

25. Disintegration
26. Biotic Weathering
27. Pot Hole
28. Deflation
29. Bajada
30. Drumlin
31. Fluvial
32. Wind
33. Glacier
34. Sea wave
35. Morphogenetic Region
36. Rapids
37. Waterfalls
38. Wave Cut Platform
39. Lappies
40. Doline
41. V Shaped Valley
42. Attrition
43. Abrasion
44. Corrasion
45. Plucking
46. Hydraulic action
47. Mushrooms Rocks
48. Mesa
