F Y B A GEOGRAPHY QUESTION BANK
Sub- PHYSICAL GEOGRAPHY (G-1)
Chapter No. 1
IMAGINARY LINE AND MOVEMENT OF THE EARTH

Q.1.A Choose the appropriate alternative from those given below and rewrite the correct sentence

1) The earth rotates on its axis from……
   a) North to south b) east to west c) west to east d) south to north

2) The parallel of $23\frac{1}{2}^0$ N is called the……
   a) Arctic Circle b) Tropic of Capricorn c) Tropic of cancer d) Antarctic circle

3) The 0^0 meridian of longitude is known as the……..
   a) Meridian of the Green wich b) Equator
   c) Antarctic Circle d) Tropic of Capricorn

4) The parallel of $66\frac{1}{2}^0$ S is called the……
   a) Arctic Circle b) Antarctic circle c) Tropic of Cancer d) None of these

5) The difference between the Indian Standard Time and the Greenwich Meridian Time is……..
   a) 5 hours b) 6 hours c) 5½ hours d) 4½ hours

6) In India the longitude of 82 $\frac{1}{2}^0$ E (80 30'E) near Allah bad is selected reckoning the...
   a) Greenwich Meridian Time b) Indian Standard Time
   c) Local Time d) None of these

7) …….. Of any place is that time when the Sun is right overhead
   a) Indian Standard Time b) Greenwich meridian time
   c) Local Time d) None of these

8) The earth rotates on its axis once in ……..
   a) 26 h 15 m 20 s b) 23h 56m 04s c) 24 h 30 m 10 s d) None of these

9) The earth revolves around the Sun once in ……..
   a) 365 years b) 367 days c) 365.25 days d) None of these

10) The …….are semi circles and they run from the north pole to the south pole
   a) Meridians b) Parallels c) Great circles d) Equator

B) Write true or false, if false rewrite the correct sentence.

1) The earth axis is tilted at an angle of 45^0 from a line perpendicular to the plane of the orbit.
2) The distance between the meridians is maximum at the equator.

3) The meridian passing through Greenwich is marked as 0^0 and the meridian opposite to Greenwich is marked as 180.
4) In India the longitude of $82½^0$ E (80'30'E) near Allahabad is selected for reckoning the Indian Standard Time.
5) The difference between the Indian Standard Time and the Greenwich Meridian Time is 5 ½ hours.
6) The parallel of $23½^0$ S is called the Antarctic Circle.
7) The parallel of $66½^0$ N is called the Antarctic Circle.
8) The earth rotates on its axis once in 23 hours 56 minute and 04 second.
9) The meridian passing though Greenwich is known as Prime Meridian.
10) Local time of any place is that time when the Sun is right overhead.

C) Write answer in one sentence.

1) Define the axis of the earth.
2) Define parallels of latitudes.
3) Define meridian of longitudes.
4) Define the equator.
5) Draw a diagram to show the axis o the earth.
6) Which longitude is selected for reckoning the Indian Standard Time?
7) What is rotation of the earth?
8) What is revolution of the earth ?
9) Define Meridian of Greenwich.
10) Draw a diagram to show the equator of the earth.

D) Give correct geographical terms for the following statements.

1) The 0^0 meridian of longitude is called the……
2) The parallel of $23½^0$ N is called the……
3) The parallel of $23½^0$ S is called the ……..
4) The parallel of $66½^0$ N is called the …..…
5) The parallel of $66\ ½^0$ S is known as …….
6) The earth rotates on its ……..

Q.2. Write short answer (any four) (4 Marks each)

1) What is the Standard Time?
2) What is the Local Time?
3) What is the Axis of the Earth?
4) What are the parallel of latitudes?
5) What is the meridian of longitude?

Q.3. Give the answer in brief. (6 Marks each)

1) Distinguish between parallels of latitudes and meridians of longitudes.
2) Explain in brief the local and standard time
3) Explain in brief the International Date Line.

Q.4.Explain/Describe in brief (8 Marks each)

1) What is the rotation of the earth and explain its effects.
2) What is the revolution of the earth and explain its effects.

Q.5.Write short notes (any four) **(4 Marks each)**

1) Standard Time.
2) Axis of the Earth.
3) Parallels of latitudes.
4) Meridians of Longitudes.
5) International date line.

Chapter No.2
DISTRIBUTION OF CONTINENTS AND OCEANS

Q.1.(A) Choose the appropriate alternative from those given below and rewrite the correct sentence

1) Who put forward the continental drift theory…….
   a) Wilson b) Davis c) Wegener D) Weber

2) The Wegener hypothesis is associated with the…….
   a) plate tectonics b) continental drift c) sea floor spreading d) None of these.

3) Theory of plate tectonics was first published by …… in 1967.
   a) Harry Hess b) F. B. Taylor
   c) Holmes d) W. J. Morgan

4) The …… is the largest and deepest ocean in the world.
   a) Pacific Ocean b) Indian Ocean
   c) Atlantic Ocean d) Artic Ocean

5) Out of the total surface of the earth, the land masses have occupied……...percent area.
   a) 32.00 b) 65.00 c) 29.22 d) 70.78

6) The landmasses of Laurasia and Gondwana land were seperated by narrow east west stretching sea, which was called by Wegener as ……
   a) Tethys sea b) Gulf of Mexico
   c) Bay of Bengal d) Andaman Sea

7) Which mountain was created when on the surface of Tethys sea folds burst ?
   a) Alps b) Himalayas
   c) Satpura d) Andes

8) In continental drift theory ……...is a hypothetical continent from which the present continent originated by drift?
   a) Panthalssa b) Tethys c) Pangea d) None of these
9) The water bodies covered ……..present of the total area of the earth surface.
   a) 69.50 b) 70.78 c) 29.22 d) 75.00

10) Due to east ward drifting of North & South America the……..mountain ranges came into existence
    a) Rockies and Andes b)Alps and Himalayas
    c) Western Ghat and Satpura d) None of these

B) Write true or false, if false rewrite the correct sentence.

1) Plate tectonics is a revolutionary and comprehensive theory which scientifically explain the drift of continents and expansion of ocean floor.
2) Wegener's hypothesis is associated with plate tectonics
3) In continental drift theory 'Panthalssa' is a hypothetical continent from which the present continents originated by drift.
4) The theory of plate tectonics was first published by W.J. Morgan in 1967.
5) The Indian oceans is the largest and deepest ocean in the world.
6) The northern hemisphere is called as the land hemisphere and the southern hemisphere called as the water hemisphere.
7) In continental drift theory the united continent was called by Wegener as 'Pangea'.
8) The landmasses of laurasia and Gondwana land were seperated by a narrow east- west stretching sea which was called by Wegener as tethys sea.
9) Satpuda mountain was created when on the surface of Tethys sea folds burst.
10) The continents have occupied 29.22 percentage lands and water bodies covered 70.78 percent
    area of the total surface area of the earth.

c) Write answer in one sentence

1) Which hemisphere is called the land hemisphere ?
2) Which hemisphere is known as the water hemisphere ?
3) What is 'Pangea' ?
4) What is Panthalssa ?
5) What is Continent ?
6) What is Ocean ?
7) Name the major plates of the earth.
8) Name the major oceans of the earth.
9) Name the continents of the earth.
10) Who put forward the continental drift theory ?
11) Who first published the theory of plate tectonics ?
12) Who formulated the continental drift theory ?

D) Write correct geographical terms for the following statements.

1) In continental drift theory …….. is a hypothetical continent from which the present continents originated by drift.

Q.2.Write short answer (any four) (4 Marks each)

1) Write two evidences given by Wegner in support of his theory of continental drift.
2) What is 'Pangea' and 'Panthalssa' ?
3) Define plate and name the major and minor plates of the earth.
4) Define continent and ocean. Name the continents and occans of the earth.

Q.3. Give the answer in brief. (6 Marks each)

1) Explain briefly the plate tectonic theory.

2) Describe in brief the evidences given by Wegener in support of his theory of continental drift.

Q.4. Explain/Describe in brief **(8 Marks each)**

1) Explain briefly the Continental drift theory.
2) Critically examine the Continental drift theory.
3) Explain in brief the Plate tectonic theory.
4) Give an account of Plate tectonic theory.

Q.5.Write short notes (any four) **(4 Marks each)**

1) Plate tectonic theory.
2) 4 Supporting evidences of continental drift theory.

Chapter No. 3
LITHOSPHERE

Q.1. (A) Choose the appropriate alternative from those given below and rewrite the correct sentence

1) Average density of the earth is …….gm/cc.
   a) 4.5 b) 5.0 c) 5.5 d) 6.0
2) The surface of discontinuity that lies between the crust and the mantle is known as …….discontinuity.
   a) Conrad b) Gutenberg c) Mohorovicic d) None of these.
3) The surface of discontinuity that lies between the mantle and the core is known as……. Discontinuity.
   a) Conrad b) Gutenberg c) Mohorovicic d) None of these.
4) Marble is …… rock.
   a) Igneous b) Sedimentary c) Metamorphic d) None of these.
5) Shale is ……..rock.
   a) Igneous b) Sedimentary c) Metamorphic d) None of these.
6) Besalt is ……..rock.
   a) Volcanic b) Sedimentary c) Metamorphic d) None of these.
7) The sides of a fold are called…..
   a) anticlines b) limbs c) synclines d) fracture.
8) Symmetrical folds are formed when the compressional force is ……
   a) uneven from both sides. b) high and uneven
   c) even from both sides d) None of these
9) Asymmetrical folds are formed when the compressional force is …….
   a) uneven from both sides. b) high and uneven
   c) even from both sides d) None of these
10) Horizontal compression can result in the formation of upfolds called……..
   a) limbs b) synclines c) anticlines d) None of these.
11) Horizontal compression can result in the formation of downfolds called…….
   a) limbs b) synclines c) anticlines d) None of these.
12) ……is formed by raising of a block between two faults.
   a) Volcanic mountain b) Block mountation.
   c) Satpuda mountain d) Himalayas

13) The intensity of earthquake is measured in …….scale.
a) Richter b) Verbal c) Graphical d) Time and distance.
14) Earthquakes are recorded with the help of an instrument known as ……..
a) Barograph b) Seismograph c) Thermograph d) Raingauge

15) The place below the earth's surface where an earthquake originates is called the …….
a) Epicentre b) Seismic focus c) Tsunami d) None of these.
16) The huge waves in the sea resulting from an earthquake are called……..
a) Neap tides b) Tsunamis c) Spring tides d) None of these.

b) Write true or false, if false rewrite the correct sentence.

1) Average density of the earth is 5.5 gm/cc
2) Average density of the earth is 6.0 gm/cc
3) The surface of discontinuity that lies between the crust and the mantle is known as mohorovicic discontinuity.
4) The surface of discontinuity that lies between the mantle and the core is known as mohorovicic discontinuity.
5) The surface of discontinuity that lies between the crust and the mantle is known as Gutenberg discontinuity.
6) The surface of discontinuity that lies between the mantle and the core is called Gutenberg discontinuity.
7) Marble is a metamorphic rock.
8) Marble is a sedimentary rock.
9) Besalt is a sedimentary rock
10) Besalt is a volcanic rock.
11) Igneous rocks are formed by the solidification of molten lava.
12) Coal is found in Igneous rocks.
13) Coal is found in sedimentary rocks.
14) Sedimentary rocks contain fossils and tracess of plants and animals.
15) Igneous rocks contain fossils and tracess of plants and animals.
16) Igneous rocks do not contain fossils and tracess of plants and animals.
17) Sedimentary rocks do not contain fossils and traces of plants and animals.
18) The sides of a fold are called limbs.
19) Asymmetrical folds are formed when the compressional force is uneven from both sides.
20) The arch like upfolded rock structure is called as syncline.
21) A fault is fracture involving the displacement of rocks.
22) The intensity of the earthquake is measured in Richter scale.
23) The intensity of the earthquake is measured in time and distance scale.
24) Earthquakes are recorded with the help of an instrument known as Seismograph.
25) Earthquakes are recorded with the help of an instrument known as Aneroid Barometer.
26) The place below the earth's surface where an earthquake originates is called the epicentre.
27) The place below the earth's surface where an earthquake originates is called the seismic focus.
28) The huge sea-waves caused by sub-marine earthquakes are known as tsunamis.

c) Write answer in one sentence

1) What is sial ?
2) What is sima ?
3) What is Mohorovicic discontinuity ?
4) What is Gutenberg discontinuity ?
5) What is core ?
6) Name the parts of the earth's crust.
7) What is symmetrical fold ?
8) What is asymmetrical fold ?
9) What is fault ?
10) What is anticline ?
11) What is syncline ?
12) What is limbs ?
13) What is an epicentre of an earthquake ?
14) Write any two types of earthquake waves ?
15) What is seismic focus ?

d) Write correct geographical terms for the following statements.

1) The outermost shell of the earth is known as the earth's ……
2) The intensity of earthquake is measured by which scale.
3) The place below surface where an earthquake originates is called as …….
4) A huge sea-wave caused by sub-marine earthquake is known as ……..

Q.2.Write short answer **(4 Marks each)**

1) Explain in brief the earth's crust.
2) Explain in brief the core of the earth.
3) Give the characteristics of igneous rocks.
4) Give the characteristics of sedimentary rocks.
5) Describe in brief the types of folds.
6) Describe in brief the types of faults.
7) Describe in brief the Block Mountain.
8) Describe in brief the Rift Valley.
9) Describe briefly the causes of earthquakes.
10) Write four effects of earthquakes.

Q.3. Give the answer in brief. **(6 Marks each)**

1) Draw a neat diagram of earth's interior and briefly describe the crust of the earth.
2) Explain in brief the mechanically derived sedimentary rocks.
3) Explain in brief the plutonic and hypabasal rocks.
4) Describe in brief the different forms of igneous rocks.
5) Explain in brief the metamorphic rocks.
6) Briefly describe the block mountain and rift valley.
7) Give the characteristics of igneous and sedimentary rocks.
8) Explain in brief the effects of earthquakes.

Q.4.Explain/Describe in brief

1) What is rock ? Briefly describe the igneous rocks.
2) What is rock ? Briefly describe the sedimentary rocks.
3) With well labelled diagram explain in brief the structure of earth's interior.

4) Give an account of earth's interior.
5) Write a geographical essay on the interior of the earth.
6) What is earthquake ? Explain in brief the effects of earthquakes.

Q.5.Write short notes **(4 Marks each)**

1) Sial and sima
2) The earth's crust
3) Characteristics of Igneous rocks.
4) Characteristics of Sedimentary rocks.
5) Metamorphic rocks.
6) Block mountain
7) Rift valley
8) Types of folds.
9) Effects of earthquakes.

Chapter No. 4
PROCESS OF DENUDETION

Q.1. (A) Choose the appropriate alternative from those given below and rewrite the correct sentence

1) ……..is not associated with chemical weathering.
   a)Oxidation b) Carbonation c) Exfoliation d) Hydration
2) Hydration is a process of ……. Weathering.
   a) mechanical b) biological c) Chemical d) None of these
3) ……is associated with chemical weathering.
   a) Oxidation b) Frost action c) Exfoliation d) None of these
4) …….is associated with mechanical weathering.
   a) Carbonation b) Oxidation c) Exfoliation d) None of these
5) In ……. Weathering the rocks are disintegrate by the action of plants and animals.
   a) mechanical b) biological c) Chemical d) None of these.
6) Deltas are formed by ……..
   a) depositional work of river b) depositional work of sea waves.
   b) erosional work of river d) depositional work of wind.
7) Waterfall is formed by ……
   a) erosional work of wind b) erosional work of river
   c) depositional work of glaciers d) erosional work of sea waves
8) 'V' shaped valley is formed by ……
   a) erosional work of wind b) erosional work of river
   c) depositional work of glaciers d) erosional work of sea waves
9) …… are associated with the depositional work of river.
   a) Barkhans b) Deltas c) Waterfalls d) Lagoons.
10) Meanders and Oxbow lake is associated with the depositional work of ……
   a) river b) sea waves b) wind d) glacier
11) …….is the product associated with wind deposition.
   a) Waterfalls b) Barkhan c) 'U' shaped valley d) Deltas
12) Mushroom rock is formed by ……..
   a) depositional work of sea waves. b) erosional work of wind
   c) erosioanl work of river d) depostional work of glacier.

13) …….. is formed by the erosional work of glacier.
a) Moraines b) Cirque c) Drumlins d) Barkhan
14) 'U' shaped valley is formed by …….
a) depositional work by wind b) erosional work of glacier
c) depositional work of sea waves d) depositional work of glacier.
15) The valley of the tributary of a glacier is called……..
a) yardang b) hanging valley c) Gorge d) deltas.
16) Sea caves are formed by ……
a) erosional work of river b) erosional work of wind
c) erosional work of sea waves d) depositional work of sea waves
17) …….. is associated with the erosional work of sea waves.
a) Lagoon b) Sand bar c) Sea-cliff d) Barkhan
18) Beach is formed by…….
a) depositional work by wind b) erosional work of glacier
c) depositional work of sea waves d) depositional work of glacier.
19) …….. is the product associated with erosional work of sea waves.
a) Beach b) Lagoon c) Barkhan d) Sea stacks
20) Off-shore bars are formed by……..
a) depositional work by wind b) erosional work of glacier
c) depositional work of sea waves d) depositional work of glacier.

b) Write true or false, if false rewrite the correct sentence

1) Carbonation is not associated with chemical weathering.
2) Exfoliation is associated with mechanical weathering.
3) Hydration is a process of chemical weathering.
4) Disintegration of rocks is the main function of chemical weathering.
5) The line on mountain above which the snow does not melt even in summer is known as the snowline.
6) The valley of the tributary of a glacier is known as hanging valley.
7) Exfoliation is associated with chemical weathering.
8) Oxidation is a process of chemical weathering.
9) Mushroom rock is formed by wind deposition.
10) Barkhan is the product associated with wind deposition.
11) 'U' shaped valley is formed by river erosion.
12) Beach is formed by the wind deposition.
13) The biological weathering is mainly brought by the action of plants and animals.
14) Plants and animals are agents of biological weathering.
15) Deltas are formed by the erosional work of the river.
16) All rivers do not form deltas.
17) Waterfall is associated with river deposition.
18) Sea cliff is associated with the erosional work of sea waves.
19) Sea caves are formed by the depositional work of sea waves.
20) Yardangs are associated with the erosional work of wind.

c) Write answer in one sentence

1) Define weathering.
2) State any two types of weathering.

3) State any two processes of chemical weathering.
4) Write any two landforms formed by the erosional work of river.
5) Write any two landforms formed by the depositional work of river.
6) Write any two landforms formed by the erosional work of wind.
7) Write any two landforms formed by the depositional work wind
8) Write any two landforms formed by the erosional work of sea waves.
9) Write any two landforms formed by the depositional work of sea waves.
10) Write any two landforms formed by the erosional work of glaciers.
11) Write any two landforms formed by the depositional work of glaciers.

d) Write correct geographical terms for the following statements.

1) Mechanical and chemical decomposition of rock is called.
2) A soil formed by wind deposition is known as
3) The mass of water flowing under gravity from high land to low land areas is called……
4) The erosion by river is know as……
5) The triangular depositional feature formed at the mouth of the river is known as……..
6) The mass of ice that move down hill under the influence of gravity is known as…….
7) The shallow depressions formed in the desert due to the action of deflation are known as…….
8) A crescent shaped dune which has two horns pointing downwind is called….
9) The valley of the tributary of a glacier is called……
10) An armchair shaped depression formed by the erosional work of glacier is known as……

Q.2.Write short answer (4 Marks each)

1) Define weathering and briefly describe the Biological weathering.
2) With the help of suitable diagram briefly describe the formation of deltas.
3) With the help of suitable diagram describe in brief the meanders and oxbow lake.
4) With the help of diagram describe the Barkhan in detail.
5) With the help of diagram describe in brief the flood-plain and flood levees.
6) With the help of diagram describe the Cirque in brief.
7) With suitable diagram describe in brief the Moraines.
8) With suitable diagram describe in brief the 'Sea cliff'.

Q.3. Give the answer in brief. (6 Marks each)

1) What is weathering ? Explain in brief any one type of weathering.
2) What is weathering ? Describe the mechanical weathering in detail.
3) What is weathering ? Describe the chemical weathering in details.
4) With suitable diagrams describe in brief the gorges and 'V' shaped valley.
5) With suitable diagrams describe in brief the Rapids and Waterfalls.
6) With the help of suitable diagrams describe in brief the Barkhans and sand-dunes.
7) With suitable diagrams describe in brief the mushroom rocks and yardangs.
8) With suitable diagrams describe in brief the Meanders and Ox-bow lake.
9) Describe any two landsforms associated with erosional work of glacier.

Q.4.Explain/Describe in brief

1) What is weathering ? Explain in brief any two types of weathering.
2) What is weathering ? Describe the mechanical weathering and biological weathering.
3) What is weathering ? Describe the chemical weathering and biological weathering.
4) Distinguish between the mechanical and chemical weathering.
5) Write an account of the any four landforms associated with the erosional work of river.
6) Write an account of the any four landforms associated with the erosional work of wind.
7) Write an account of the any four landforms associated with the deposition of river.
8) Briefly describe any four landforms associated with erosional work of glaciers.

Q.5.Write short notes **(4 Marks each)**

1) Mechanical weathering
2) Chemical weathering
3) Biological weathering
4) Waterfall
5) 'V' shaped valley
6) Meanders and Ox-bow lake.
7) Deltas.
8) Mushroom rock
9) Yardangs
10) Barkhan
11) Loess deposits.
12) Sea –cliff
13) Sea caves
14) Beach
15) Lagoons
16) 'U' shaped valley
17) Moraines.

Chapter No. 5
ATMOSPHERE

Q.1. (A) Choose the appropriate alternative from those given below and rewrite the correct sentence

1) The envelope of colourless, tasteless and odourless gas which surrounds the earth is called……..
   a) atmosphere b) hemisphere c) lithosphere d) hydrosphere
2) The uppermost layer of atmosphere is known as …….
   a) Ozonosphere b) Stratosphere c) Inosphere d) Troposphere
3) Percentage of Organ gas in the atmosphere is ……..
   a) 0.28 b) 0.93 c) 0.78 d) 21.00
4) Choose the correct sequence of atmospheric layers from bottom to top.
   a) Troposhere – Stratosphere – Inosphere
   b) Inophere – Troposhere – Stratosphere

c) Stratosphere – Inosphere – Troposhpere
d) None of these.

5) The temperature decreases with increasing height in ……..atmospheric layer.
a) Stratosphere b) Troposphere c) Inosphere d) Ozonosphere

6) The lowermost layer of atmosphere is known as……...
a) Stratosphere b) Troposphere c) Inosphere d) Ozonosphere

7) ……absorbs the ultraviolet rays of the Sun and protect the earth from intence heat.
a) Ozonosphere b) Inosphere c) Troposphere d) None of these

8) The average height of the troposphere is ……
a) 18 km. b) 11 km. c) 80 km d) 50 km

9) …… is the convectional zone of the atmosphere.
a) Stratosphere b) Inosphere c) Troposhere d) None of these

10) ……is the isothermal zone of the atmosphere.
a) Inosphere b) Troposhpere c) Stratosphere d) None of these.

b) Write true or false, if false rewrite the correct sentence.

1) The Ozone gas is observed in Inosphere.
2) The Ozone gas is observed in Ozonsphere.
3) Kenelly heaviside layer is observed in the Stratosphere.
4) Kenelly heaviside layer is observed is Inosphere.
5) The uppermost layer of the atmosphere is known as Inosphere.
6) The lowermost layer of the atmosphere is known as Troposphere
7) The lowermost layer of the atmosphere is known as Stratosphere.
8) The envelope of colourless, tasteless and odorless gas which surrounds the earth has been called atmosphere.
9) Nitrogen and Oxygen gases make up 99 percent of the atmospheric gases.

c) Write answer in one sentence.

1) What is atmosphere ?
2) What is lapse rate ?
3) Define Ozonosphere ?
4) What is Troposphere ?
5) Which is the lowermost layer of atmosphere ?
6) Which is the topmost layer of atmosphere ?
7) Name the layers of the atmosphere.
8) In which layer the temperature decreases with increasing height.
9) Which layer absorbs the ultraviolet rays of the Sun.
10) Which atmospheric layer is also known as the convectional zone of the atmosphere ?
11) Which atmospheric layer is also known as the isothermal zone of the atmosphere ?

D) Give correct geographical terms for the following statements.

1) The envelope of colourless, tasteless and odourles gas which surronds the earth has been called……
2) The decreasing rate of temperature with increasing height is known as …….
3) The atmospheric layer lies between the Troposphere and the Inosphere is known as…….
4) The atmospheric layer which is close to the surface of the earth is known as…….

Q.2. Attempt the following questions. (4 Marks each)

1) Describe in brief the atmospheric compostion.
2) Briefly describe the Troposphere ?
3) Draw a well labelled diagram of the structure of atmosphere.
4) Explain in brief the Stratosphere.
5) Describe in brief the Troposphere and Tropopause.

Q.3. Attempt the following questions. (6 Marks each)

1) Draw a neat diagram of the structure of atmosphere and briefly describe the Troposphere.
2) Distinguish between Troposphere and Stratosphere.
3) Explain the composition of the atmosphere in detail.
4) Explain in brief the Troposphere and Stratosphere.
5) What is atmosphere ? Mention the atmospheric layers and explain one of them with suitable diagram.

Q.4. Explain/Describe in brief (8 Marks each)

1) What is atmosphere ? Name the major layers of atmosphere and explain any two of them.
2) Define atmosphere. Give an account of the structure of the atmosphere.
3) Draw a neat diagram of the structure of atmosphere and give the details about the Troposphere and Stratosphere.
4) Draw a well labelled diagram of the structure of atmosphere and give the composition of atmosphere in detail.

Q.5.Write short notes (any four) (4 Marks each)

1) Troposphere
2) Stratosphere
3) Inosphere
4) Ozonosphere
5) Well labelled diagram showing the atmospheric structure.

Chapter No. 6
INSOLATION

Q.1.A Choose the appropriate alternative from those given below and rewrite the correct sentence.

1) A line joining the places having equal atmospheric temperature is called……
   a) isotherm b) isohytes c) isobar d) contour
2) The rate of temperature of air decreases with increase in elevation is called……
   a) rainfall b) normal lapse rate c) precipitation d) condensation
3) The radient energy received from the Sun transmitted in the form of electromagnetic waves is called……
   a) Solar radiation b) Evaporation c) Exfoliation d) Saturation.
4) At the particular height, instead of decrease in temperature it increases it is called….
   a) increase of temperature b) inversion of temperature
   c) imbalance of temperature d) None of these.

5) …….region lies between tropic of cancer and tropic of capricorn.
   a) Polar b) Tropical c) Temperate d) None of these
6) ……..zone in northern hemisphere lies between Arctic circle and North pole.
   a) Temperate b) Tropical c) Desert d) Frizid
7) …….Zone in southern hemisphere lies between Antarctic circle and south pole.
   a) Desert b) Temperate c) Frigid d) Tropical
8) On …….degree north latitude the Sun rays strike the surface at an angle of 90^0 on June 21^{st} .
   a) 23½ b) 66½ c) 30 d) None of these
9) The solar radiation is only available to the earth during…….
   a) Day and night b) Night c) Day light hours d) None of these
10) ……is the longest day in northern hemisphere.
   a) 22^{nd} December b) 21^{st} June c) 21^{st} March d) 22^{nd} September

b)Write true or false, if false rewrite the correct sentence.

1) A line joining the places having equal atmospheric temperature is known as isotherm.
2) A line joining the places having equal temperature is called as isobar.
3) The rate of temperature of air decreases with increase in elevation is called normal lapse rate.
4) The rate of temperature of air decrease with increase in height is called dry adiabetic lapse rate.
5) The radient energy received from the Sun transmitted in the form of electromagnetic waves is called solar radiation.
6) The radient energy received from the Sun transmitted in the form of electromagnetic waves is called absorption.
7) On 23½ N latitude the Sun rays strike the surface at an angle of 90^0 on June 21^{st}.
8) The solar radiation is only available to the earth during day light hours.
9) 21^{st} June is the longest day in northern hemisphere.
10) Tropical region lies between tropic of cancer and tropic of capricorn.
11) Tropical region lies between Antarctic Circle and south Pole.
12) Temperate zone in northern hemisphere lies between Arctic Circle and North Pole.
13) Temperate zone in southern hemisphere lies between Antarctic Circle and South Pole.
14) Temperature zone in south hemisphere lies between Arctic Circle and North Pole.

D) Write correct geographical terms for the following statements.

1) A line joining the places having equal atmospheric temperature is called……
2) The rate of temperature of air decreases with increase in elevation is called…….
3) The radient energy received from the Sun transmitted in the form of electromagnetic waves is called ……..

Q.2. Attempt the following questions. (4 Marks each)

1) Briefly describe the inversion of temperature.
2) Describe in brief the vertical distribution of temperature.
3) Draw a well labelled diagram to show the horizontal distribution of temperature.

Q.3. Attempt the following questions. (6 Marks each)

1) With the help of suitable diagram describe in brief the inversion of temperature.
2) Distinguish between tropical and temperate zones of the earth.

Q.4. Attempt the following questions. (8 Marks each)

1) Explain in brief the horizontal distribution of temperature.
2) With well labelled diagram, briefly describe the horizontal distribution of temperature.
3) Draw a well labelled diagram to show the horizontal distribution of temperature and describe in brief the tropical and temperate zones of the earth.

Q.5.Write short notes. (4 Marks each)

1) Inversion of temperature.
2) Vertical distribution of temperature.
3) Tropical zone
4) Temperate Zone.

Chapter No. 7
ATMOSPHERIC PRESSURE AND WINDS

Q.1.A Choose the appropriate alternative from those given below and rewrite the correct sentence

1) Which winds below follow the pressure belts.
   a) Monsoon winds. b) planetary winds
   c) Sea and land breezes d) Chinook winds.
2) The winds which below exactly opposite to the trade winds are called……
   a) Polar winds b) Local winds
   c) Antitrade winds d) Monsoon winds
3) The line joining the places having equal atmospheric pressure is called…..
   a) Isotherm b) isobar c) isohytes d) None of these
4) In northern hemisphere the trade winds below from……
   a) west to east b) south east to northeast
   c) northeast to southeast d) All above
5) Give the direction of trade winds in southern hemisphere.
   a) southeast to northwest b) northeast to southwest
   c) west to east d) None of these
6) …….wind is not associated to planetary winds.
   a) Antitrade winds b) Monsoon winds
   c) Sea and land breezes d) chinook winds
7) The Antitrade winds which below beyond the 50^0 S latitude are also known as……
   a) Monsoon winds. b) roaring forties
   c) Furious fifties d) Cyclonic winds
8) The high velocity antitrade winds which below beyond the 40^0 S latitude are also known as……
   a) Furious fifties b) Fohn winds
   c) Roaring forties d) valley winds

9) Sea breezes below from …….
   a) Sea to land b) land to land
   c) land to sea d) None of these
10) Land breezes below from ……..
   a) land to land b) sea to land
   c) land to sea d) None of these

b)Write true or false, if false rewrite the correct sentence.

1) The planetary winds below follow the pressure belts.
2) The planetary winds are not below follow the pressure belts.
3) The antitrade winds below exactly opposite to the trade winds.
4) The antitrade winds are not below opposite to the trade winds.
5) A line joining the places having equal atmospheric pressure is called isobar
6) A line joining the having equal atmospheric pressure is called isotherm.
7) High velocity antitrade winds at 40^0 S latitude are called roaring forties.
8) Very high velocity antitrade winds beyond 50^0 S latitude are called furious fifties.
9) Monsoon wind is associated to planetary winds.
10) Monsoon wind is the result of uneven heating of landmass and waterbodies.
11) The equatorial low pressure belt lies between 5^0 N to 5^0 S latitude.
12) Sea breezes below from sea to land.
13) Land breezes below from land to sea
14) Land breezes below from sea to land.
15) Sea breezes below from land to sea.

c) Give the answer in one sentence.

1) Give the direction of winds in cyelone of the northern hemisphere.
2) Give the direction by winds in cyclone of the southern hemisphere.
3) Give the direction of winds in anticyclone of the northern hemisphere.
4) Give the direction of winds in anticyclone of the southern hemisphere.
5) Define isobar.
6) Name the types of planetary winds.
7) …… pressure is observed at the centre of cyclone.
8) ……pressure is observed at the centre of anticyclone.
9) The winds always below from high pressure to ……. Pressure area.

d) Write correct geographical terms for the following statements.

1) A line joining the places having equal atmospheric pressure is called……..
2) The winds which below exactly opposite to the trade winds are called…….
3) Which winds below follow the ……pressure belts.
4) The very high velocity antitrade winds which below beyond the 50^0 S latitude are called…….
5) The high velocity antitrade winds which below beyond the 40^0 S latitude are called are known as……..

Q.2.Write short answer **(4 Marks each)**

1) What is trade winds ?
2) What is antitrade winds ?

3) Draw a well labelled diagram of planetary winds.
4) Draw a well labelled to show the pressure belts.
5) Briefly describe the monsoon winds.
6) Explain the cyclone.
7) Explain in brief anticyelone.
8) Briefly describe the sea and land breezes.
9) Briefly describe the equatorial low pressure belt.

Q.3. Give the answer in brief. **(6 Marks each)**

1) Distinguish between trade and antitrade winds.
2) Distinguish between cyclone and anticyclone.
3) Distinguish between sea and land breezes.
4) Explain in brief the trade and antitrade winds.
5) Describe the monsoon winds.

Q.4.Explain/Describe in brief.

1) Give an account of planteraty winds.
2) Explain the various types of plantary winds.
3) With well lebelled diagram describe the trade, antitrade and polar winds.
4) Explain the monsoon winds in detail.
5) Define the shifting of pressure belts and explain the shifting of pressure belts.

Q.5.Write short notes (any four)

1) Trade winds
2) Antitrade winds
3) Sea and land breezes
4) Cyclone
5) Anticyclone
6) Monsoon winds.

Chapter No. 8
MOISTURE IN ATMOSPHERE

Q.1.A Choose the appropriate alternative from those given below and rewrite the correct sentence

1) The process in which the water vapour is transformed into water droplet is called……..
   a) Radiation b) Absorption c) Condensation d) None of these
2) Maximum relative humidity is found in…….
   a) Equatorial region b) Polar region
   c) Hot deserts d) None of these
3) Convectional rainfall mostly occurs in ……..
   a) Temperate region b) Equatorial region
   c) Tundra region d) Desert areas
4) The actual amount of water vapour present in the atmosphere is called……
   a) Absolute humidity b) Fog
   c) Condensation d) None of these.

5) In orographic rainfall…….. side of the mountain 'received maximum rainfall.
   a) Leeward b) Rainshadow c) Windward d) None of these.
6) The …….is the raito between the amount of moirture, which the air can hold, at a given temperature and the amount it actually holds.
   a) Absolute humidity b) Mixing raito
   c) Relative humidity d) Specific humidity

b) Write true or false, if false rewrite the correct sentence.

1) The process in which the water vapour is transformed into water droplet is called condensation.
2) The process in which the water vapour is transformed into water droplet is called evaporation.
3) Maximum relative humidity is found in equatorial region.
4) Convectional rainfall mostly occurs in equatorial region.
5) Convectional rainfall mostly occurs in polar region.
6) The word humidity is used to denote the amount of dampness in the atmosphere.
7) The air said to be saturated when a given mass of it contains all the water vapour that it is capable of retaining.
8) The temperature at which saturation is reached is called the 'Dew point'.
9) The temperature at which saturation is reached is called evaporation.
10) The windward slopes of the mountains receive maximum rainfall than the leeward slopes.
11) Maximum relative humidity is observed in hot deserts of the world.
12) The cyclonic rainfall is associated with cyclones.

c) Write answer in one sentence.

1) Define condensation.
2) Define Dewpoint.
3) Define evaporation
4) Define Absolute humidity.
5) Define Relative humidity.
6) Which type of rainfall mostly occurs in Equatorial region ?
7) Maximum relative humidity is found in which region of the world ?
8) State any two types of humidity.
9) State any two types of rainfall.
10) State any two types of precipitation.

D) Write correct geographical terms for the following statements.

1) The process in which the water vapour transformed into water droplet is called……...
2) The amount of water vapour present in the atmosphere is called……..
3) The temperature at which the saturation is reached is called……
4) A line joining the places receiving same amount of rainfall is called……..

Q.2. Attempt the following questions. (4 Marks each)

1) Describe the types of precipitation.
2) What is Absolute humidity.
3) With neat diagram describe the cyclonic rain.
4) Define the terms evaporation, condenration, saaturation and dewpoint.

Q.3. Attempt the following questions. (6 Marks each)

1) Briefly describe the relative humidity.
2) Describe in brief the Absolute humidity.
3) With neat diagram describe the convectional rainfall.
4) With neat diagram describe in brief the Orographic rainfall.

Q.4. Attempt the following questions. (8 Marks each)

1) What is meant by Humidity ? Explain in brief the Absolute and Relative humidity.
2) Distinguish between Absolute and Relative humidity.
3) What is meant by 'Rainfall' ? Describe in brief the convectional and Orographic rainfall.
4) Distinguish between convectional and Orographic rainfall.

Q.5. Write short notes. (4 Marks each)

1) Absalute humidity
2) Relative humidity
3) Convectional rainfall
4) Orographic rainfall
5) Cyclonic rainfall.

Chapter No. 9
HYDROSPHERE

Q.1.(A) Choose the appropriate alternative from those given below and rewrite the correct sentence

1) The deepest part of the submarine relief is called……..
   a) Continental shelf b) trench c) island d) continental slope.
2) ……..is the cold current in south atlantic ocean.
   a) Gulf stream b) Brazil current
   c) Mozambique current d) Beneguela
3) The labrador and ……..meet near newfoundland and form foggy weather.
   a) Gulf stream b) Kuroshiv current
   b) Canaries current d) Okhotsk current
4) Which of the following is the deepest of all ocean deeps.
   a) Phillippine trench b) Mariana trench
   c) Kurial trench d) Romanche trench
5) ……..is the cold current in North Atlantic ocean.
   a) Labrador current b) Gulf stream
   c) Brazil current d) None of these.
6) …….. are caused by the gravitational pull of the moon and some extent by the pull of the Sun.
   a) Tides b) Tsunamis b) ocean currents d) None of these
7) …… is the deepest trench in the world.
   a) Phillipine trench b) Mariana trench
   c) Kurila trench d) Romanche trench

b) Write true or false, if false rewrite the correct sentence.

1) The alternate rise and fall in the waters of the ocean in about 24 hours are known as tides
2) The alternate rise and fall in the waters of the ocean in about 24 hours are known as ocean currents.
3) The average difference in water level between high and low tides at any place is called the amplitude (range) of the tide.
4) The deepest part of the submarine relief in trench.
5) The Labrador and Gulf stream meet near Newfounland and form foggy waether.
6) The Gulf stream is the cold current in North Atlantic ocean.
7) Labrador is the cold current in North Atlantic ocean.
8) Gulf stream has great influence on the climate of south-eastern U.S.A. and wetern Europe.
9) The meeting of the Labrador current with the warm Gulf stream causes heavy fogs of the shores of Newfoundland.

c) Write the answer in one sentence.

1) Which is the deepest trench of the world.
2) Which current meets to the Gulf stream near Newfoundland and form foggy weather.
3) What is tide ?
4) What is ocean current ?
5) Write any two ocean currents in Atlantic ocean.
6) Write any two types of tides.
7) Write any two types of ocean deposits.

D) Write correct geographical terms for the following statements.

1) The deepest part of the submarine relief is called……..
2) The alternate rise and fall in the waters of the ocean in about 24 hours are known as…….
3) The average difference in the water level between high and low tides at any place is called……..

Q.2. Attempt the following questions. (4 Marks each)

1) Describe in brief the effects of ocean currents.
2) Explain in brief the Spring tides.
3) Briefly describe the Neap tides.
4) Explain in brief the Palagic Deposits.
5) Briefly describe the types of Ocean Mud.

Q.3. Attempt the following questions. (6 Marks each)

1) Describe in brief the causes of formation of ocean currents.
2) Explain in brief the Spring tides and Neap tides.
3) Distinguish between the spring tides and Neap tides.
4) Explain in brief any two types of ocean deposits.
5) Distinguish betweenTerrigeneous depostis and Palagic deposits.

Q.4. Attempt the following questions. (8 Marks each)

1) Describe the general struture of ocean floor.
2) Explain with the help of suitable diagram the general structure of the ocean floor.

3) Give a brief account of submarine relief of Indian ocean.
4) Describe the circulation of ocean currents in the Atlantic Ocean.
5) What is ocean current ? Describe the causes of the formation of ocean currents.
6) What is ocean deposits ? Explain in brief any two types of ocean deposits.

Q.5.Write short notes **(4 Marks each)**

1) Effects of ocean currents.
2) Spring tides.
3) Neap tides.
4) Terrigeneous deposits
5) Palagic deposits.
6) Currents in North Atlantic Ocean.

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F.Y.B.Sc.-Paper – I Physical Geography
(Lithosphere)

Chapter – I
CONTINENTS AND OCEANS

Q.1 Objectives (one marks each)

B. Multiple Choice Questions

1. Which is the largest continent in the world?
   a. Australia b. America c. Asia d. Africa

2. Which is the largest ocean in the world?
   a. Antarctica b. Atlantic c. Pacific d. Indian

3. Who put forwarded the theory of continental drift?
   a. Afred Wegner b. Halm c. Strahler d. Gregory

4. Alfred Wegner called the single landmass in the past history of the earth is……
   a. Pangeaa b. Laurentia c. Red Sea d. Panthalissa

5. Laurntia and Gondwana were separated by….
   a. The Tethys Sea b. Arebian Sea. c. Red Sea. d. Arctic Sea

6. Out of the total surface of the earth, Landmasses have occupied…..
   a. 29% area b. 19% area c. 09% area d. None of these

7. How many area covered by waterbodies over the earth surface?
   a. 17% area b. 71% area
   c. 23% area d. 29% area

8. South henesphere also called as…….
   a. Land Hemesphere b. Water Hemesphere
   c. South Gangotri d. South Pole

9. Wegeners hypothesis is related to the……
   a. Contraction of the earth.
   b. Spliting of the earth
   c. Drifting of the continents
   d. Subsidence of the continents

10. According to Wegener, in the past the super and compact continent was called…..
    a. Gondawana b. Laurentia c. Pengea d. Tethys

11. The sea which separated Laurentia and Gondwana from each other called…….
    a. Penthalassa b. Tethys c. Arctic d. None of these

12. Which hypothesis is related to the origin of the earth?
    a. Drift Hypothesis b. Planetesimal hypothesis
    d. Tetrahedral hypothesis d. Thermal-convection hypothesis

13 --------- mountain is formed due to the uplift movement of Tethys sea-
    a. Rockies b. Alps c. Himalaya d. Andies
14. Continental Drift theory put forward by-------
    a. Alfred Wegener b. Holms c. Swess d. Taylor

C. State whether the following statements are true of false, if false rewrite the correct the sentence.

1. Asia is the largest continent in the world.
2. Indian ocean is the largest ocean in the world.
3. Pasific ocean is the largest ocean in the world.
4. Alfred Weber put forward the theory of continental Drift.
5. Alfred Wegener was published the theory of continental Drift.
6. Laurentia and Gondwana were separated by Penthalassa.
7. Laurentia and Gondwana were separated by Tethys.
8. The ocean 'Tethys' separated Laurentia and Gondwana from each other.
9. Drfit hypotesis is related to the origin of the earth.
10. 29% area out of the total surface of the earth is occcupied by landmasses.
11. South hemesphere is also called as South Gangotri surrounded by Panthalassa.
12. The super and compact continent, 'Pangia' was surrounded by Panthalassa.

C. Answer in one sentence.

1. Who formulated the continental Drift theory?
2. Which is the largest continent of the world?
3. Which is the largest ocean in the world?
4. How many area corered by waterbodies over the earth surface?
5. Which hypothesis is related to the origin of the earth?
6. Who published the plate Tectonics theory?

D. Explain the concepts

1. Pangia
2. Tethys
3. Panthalassa
4. The Flight from the Poles.

Q.2. Short answer questions (Four Marks)

1. What is mean by drifting of continents?
2. Write criticism on 'Plate Tectonic Theory'
3. Write main objections against 'continental Drift Theory'
4. Explain any two evidences which suports Wegener's 'Continental Drift Theory'
5. Write the charracteristics of the distributions of continents and oceans.

Q.3. Write answers in brief (six marks)

1. Critically examine the evidences that suports 'Wegners Theory'
2. Explain the evidences that suport ' Wegners Continental Drift Theory'
3. Describe in brief the 'Plate Tectonic Theory'
4. How continents are drifted?
5. Explain any three major evidences of the continental drift theory.

Q.4. Answer the following (Eight Marks)

1. Write a precise account of the continental theory.
2. Explain the 'Plate Tectonic Thory'.
3. Critically examine the evidences of the continental drift theory.
4. Explain the central theam of the 'Wegener's continental drift theory'.
5. Explain the formation of the Himalaya with reference to Wegeners theory.

Q.5. Write short note (Four Marks)

1. Characteristic features of land and Water distribution on the earth.
2. Criticism of 'Continental Drift Theory'.
3. Criticism of 'Plate Tectonic Thory.
4. Any two evidences of 'Continental Drift theory'
5. The objections against the Wegners Theory'.
6. The central team of Plate Tectonic Theory'.

Chapter – II
CONTINENTS OF THE EARTH'S INTERIOR

Q.1 Objectives (one marks each)

B. Multiple Choice Questions

1. The inner core of the earth is composed of ------
   a. Nickel and Ferrium b. Silica and Megnesia
   c. Silica and Aluminium d. Molter rocks and gases

2. Mohorovicic discontinuity separates ------
   a. Crust and mentle b. Core and mentle
   c. Inner core and outer core d. Sial and Nife

3. The boundry between the curst and mentle is called----
   a. Moho layer b. Core d. The mentle d. None of these

4. The boundry between the mentle and core is called----
   a. Moho layer b. Gutenburg discontinuity
   c. Lehmann discontinuity d. None of these

5. The interior layer of the earth which composed of silica and aluminium is called-----
   a. Sima b. Sial c. Nife d. Core

6. The surface separating the sial from the sima is known as------
   a. Gutenburg discontinuity b. Conrad discontinuity
   c. Mohorovicic discontinuity d. None of these

7. Ocean floors are mainly made up of ----------
   a. Sial b. Sima c. Nickel d. None of these

8. The term 'Nife' refers to-------
   a. earthquack b. core of the earth
   c. ocean d. curst of the earth

9. The curstal layer of the earth is also called------
   a. Sima b. Nife c. Sial d. Moho

10. The average density of the earth as whole is about
    a. 5.5 b. 375.5 c. 4.5 d. None of these

C. State whether the following statements are true or false, if false rewrite the correct sentence.

1. The average density of the earth as a whole is about 6.5.
2. Sial is consist of Silica and Aluminium.
3. Mohorovicic discontinuity separates the crist from the mental
4. Gutenburg discontinuity is the zone which separates the mental from the crust.
5. The crustal layer of the earth is also called Lithosphere.
6. The term Nife refers to the crust of the earth.
7. Temperature increases with increasing depth.
8. Primary waves are not travels through a liquid materials.

D. Answer in one sentence :

1. What is Mohorovicic discontinuity?
2. State the composition of the sial layer.
3. Why the core of the earth is called Nife?
4. State any two names of the layers of the earth's interior.
5. Which layer of the earths interior is denses.

E. Explain the concepts :

1. Primary waves
2. Secondary waves
3. Surface waves
4. Core
5. The crust
6. Sial
7. Sima
8. Gutenburg discontinuity
9. Mohorovicic discontinuity
10. Nife.

Q.2. Short answers :

1. What do you mean by the crust of the earth.
2. State the properties of the core of the earth.
3. What does the sima layer consist of ? Where is it Localed?
4. Describe the mental of the earth.
5. What is meant by Mohorovicic discontinuity and Gutenburg discontinuity?
6. Density of the earth.
7. Types of seismic waves.

Q.3. Write answers in brief. (Six marks)

1. Discuss about the behaviour of seismic waves
2. Describe the crust.

Q.4. Answer the following (Eight marks)

1. Explain the structure of the interior of the earth.
2. Describe the composition and layers of the interior of the earth.
3. Discuss about the mental and core of the earth.

Q.5. Write short notes (Four marks)

1. Density of the earth.
2. Temperature of the earth.
3. Behaviour of earthquake waves.
4. Interior of the earth.
5. Sial
6. Sima
7. Nife
8. Crust
9. Core
10. Mental.

Chapter – III
ROCKS

Q.1. Objectives (one mark each)

C. Multiple Choice Questions

1. The term 'rock' comprises-
   a. a naturally occuring mass of solid, inorganic or organic matter.
   b. Forming a firm and coherent mass of the earth's crust.
   c. An aggregate of minerals, usually two or more
   d. All of the above

2. Which one of the following rocks is transformed into marble?
   a. Basalt b. Granite c. Limestone d. Shale

3. Coal occurs in
   a. Sedimentary rocks b. Metamorphic rocks
   c. Igneous rocks d. all of the above

4. Which type of rock weathers most rapidly in hot moist climate?
   a. Slate b. granite c. Limestone d. all of the above

5. Sandstone is sedimentary rock because it is
   a. made of sand b. formed by heat
   c. formed under water d. formed in desert area.

6. Igneous rocks are formed
   a. by the falling of the mountains
   b. by the cooling of the hot masses of the earth.
   c. By the deposition of sand.
   d. None of these.

7. Identify the sedimentary rock.
   a. granite b. basalt c. quartzite d. limestone

8. Metamorphic rocks originate from
   a. Igneous rocks b. sedimentary rocks
   c. both igneous and sedimentary rocks
   d. None of these.

9. Rocks formed deep inside the earth as a result of solidification of lava are called.
   a.Sedimentary rocks b. Volcanic rocks c. Plutonic rocks d. None of these

10. Which is an organic sedimentary rock ?
    a. coal b. slate c. marble d. granite

11. The molten igneous material is called
    a. magma b. mantle c. rocks d. volcano

12. Gneiss belongs to
    a. Metamorphic rocks b. Sedimentary rocks
    c. Igneous rocks d. volcanic rocks

13. Marble is a –
    a. Metamorphic rock b. Igneous rock
    c. Sandstone d. Volcanic rock

D. State whether the following statements are true or false, if false rewrite the correct sentence.

1. Coal and petroleum are generally found in igneous rocks.
2. Igneous rocks are also known as primary rocks.
3. Metamorphic rocks are called as stratified rocks.
4. Igneous rocks are not compact and massive.
5. Sedimentary rocks occupied nearby 75% of the total area of the earth.
6. Sedimentary rocks are not permeable.
7. Metamorphic rocks do not contain fassils.
8. Sedimentary rocks are easily weathered.
9. Sedimentary rocks contain fossils.

E. Answer in one sentence.

1. Write major types of rock according to their origin.
2. What are igneous rocks?
3. Write any two types of the Intrusive igneous rock.
4. State any two examples of metamorphic rocks.
5. Which type of rock is also known as primary rock?

D. Explain the concepts / terms / Definitions (2 marks each)

1. Rocks
2. Igneous rocks
3. Metamorphic rock
4. Dyke
5. Batholith
6. Intrusive igneous rocks
7. Organic sedimentary rocks
8. Inorganic sedimentary rocks

Q.2. Short answer questions (04 marks each)

1. Why igneous rocks are called as primary rocks?
2. State the formation of igneous rocks.
3. Describe the formation of metamorphic rocks.
4. Describe the organic sedimentary rocks.
5. What are the properties of igneous rocks.
6. What are the properties of sedimentary rocks.
7. What are the properties of metamorphic rocks.
8. Describe the contact metamorphism process.
9. How regional metamorphism takes place?
10. Classify the following, rocks according to their types basalt, schist, gypsum, marble, sandstone, gneiss, clay, granite.
11. Explain the instrusive igneous rocks.

Q.3. Write answers in brief. (06 marks each)

1. What is rock ? classify them any explain any one of them.
2. Describe the igneous rocks.
3. Explain the formation of metamorphic rocks.
4. Explain the formation and types of sedimentary rocks
5. Explain with example, organic sedimentary rocks.

Q.4. Answer the following questions (08 marks each)

1. What is rocks ? Explain the igneous rocks with examples.
2. What are rocks? Classify them and explain any one of them.
3. How are sedimentary rocks formed ? Explain its types.
4. What is metamorphic rock ? Describe the processes are involved in the formation of metamorphic rocks.
5. Define lgneous rocks. Explain its formation and types.
6. Define rocks. Describe the sedimentary rocks in detail.

Q.5. Short Notes :

1. Formation of igneous rocks.
2. Formation of metamorphic rocks.
3. Organic sedimentary rock.
4. Inorganic sedimentary rock
5. Intrusive igneous rocks.
6. Volcanic rocks.
7. Contact metamorphism.
8. Regional metamorphism
9. Plutonic igneous rocks.
10. Bathlith and Laccolith
11. Properties of lgneous rock
12. Properties of Sedimentary rock.
13. Properties of metamorphic rock.

Chapter – IV
EARTH MOVEMENTS

Q.1. Objectives (one mark each)

A. Multiple Choice Questions :

1. When the strata is bent upward into simple upfold called
   a. Synclien b. Anticline c. Monocline d. folding

2. Fold is one where one limb is steeper than the other limb called.
   a. Syncline b. monocline c. anticline d. none of these

3. If an abtus angle is formed between two sides of a fold, it is known as
   a. Open fold b. Isoclinal fold
   c. monoclinal fold` d. Closed fold

4. A Nappe is a
   a. Thrust fault b. Overthrust fold
   c. upfold d. Both a and c

5. The main cause of faulting is 7
   a. Tension b. Contraction
   c. Tidal activity d. wind

6. Which of the following is the result of earth movements-
   a. Volcanic mountain b. Folded mountain
   c. Block mountain d. All of above

7. Earthquake waves are recorded by
   a. Thermograph b. Barograph
   c. Seismograph d. Pentograph

8. An earthquake wave in which the vibration is in the direction of propagation is known as
   a. Primary wave b. Secondary wave
   c. Surface wave d. Tsunami

9. The earthquake waves which have transverse movements are known as-
   a. Primary waves b. Secondary waves
   c. Surface waves` d. Tsunami

10. The place of origin of the earthquake is called-
   a. Epicentre b. Focus
   c. Seismic zone d. None of these

11. Behaviour of earthquake waves is studied by
   a. Seismograph b . Thermograph
   c. Barograph d. Hygrograph

12. The scientific instrument seismograph is used for recording
   a. humidity b. Rainfall
   c. Wind speed d. earthquake shocks

13. Richter scale is used for measuring
   a. Temperature b. Depths of ocean
   c. Intensity of earthquakes d. None of these

14. Magma is
   a. rock solution b. molten lava
   c. a form of sedimentary rock d. weathered lava.

15. A volcano is a vent in the earth's crust through which comes out
   a. Molten lava, dust, steam and even pieces of rocks
   b. Molten lava and cloud of gases
   c. Clouds of gases
   d. All of the above

16. Molten rock below the surface of the earth is called.
   a. Magma b. Basalt
   c. Laccolith d. Plutonic rock

17. Geysers occur in-
   a. Volcanically active areas
   b. Plain areas
   c. High mountains
   d. Stopes of valleys

18. The active volcanoes are mostly found
   a. Around the pacific ocean b.Around the Indian ocean
   c. Around the Atlantic ocean d.All of the above

19. The main cause of Tsunami is
    a. Volcanoes b. Typhoons
    c. Cyclones d. Earthques on sea floor

20. Elastic rebound theory deals with
    a. Vocanoes b. Earthquakes
    c. Tsunamis d. Non of these

21. Almost all volcanic activities takes place
    a. Along the zones of spreading
    b. Along the subduction zones
    c. At both destructive and constructive boundaries
    d. None of these3

22. The intensity of earthquake is measured by
    a. Richter scale b. Milibar
    c. Decible d. Inch

B. State whether the following statements are true or false, if false rewrite the correct sentence.

1. The fault having primarily vertical movement are called normal fault.
2. Folds are caused by the forces of tension.
3. The intensity of energy released by an earthquake is measured by Richter scale.
4. The place on the ground surface, which is perpendicular to the buried focus is called epicenter.
5. The waves generated by an earthquake
6. Volcanoes which constantly eject volcanic lavas, gases, ashes and fragmental materials are called active volcanoes.
7. Volcanoes which become quiek after their eruptions for some time and there are no indications for future eruptions but suddenly the erupt very violently are called Extinct volcanoes.
8. The volcanic belt around the Atalantic ocean is called as the Fire Ring.

C. **Answers in one sentence.**

1. What is meant by Endogenetic forces?
2. What is folding?
3. State any two types of folds.
4. What is faults?
5. Write any two examples of Rift valley.
6. State the types of seismic waves.
7. Write any two effects of earthquakes.
8. Write the types of volcano according to their occurance/ periodicity.
9. Which scale is used for to measured the intensity of earth quake?

D. **Define / Explain the concepts (2 marks each)**

1. Earthquake
2. Folding

3. Faulting
4. Rift valley
5. Block Mountain
6. Epicentre
7. Focus
8. Anticline
9. Syncline
10. Normal fault

Q.2. Short answer questions. (04 marks each)

1. What is folding ? Give the various types of folds.
2. Distinguish between symmetrical and A symmetrical folds.
3. Distinguish between Anticlines and Synclines.
4. What is faulting? Define normal fault.
5. How is a rift valley formed ? Give an example.
6. What are block mountains?
7. Distinguish between normal fault and reversed fault.
8. Write any four causes of earthquakes.
9. What are the effects of earthquakes.
10. Indicate two major belts of earthquakes.
11. Describe in brief types of earthquake waves.
12. Distinguish between 'Seismic Focus' and 'Epicentre'
13. What are the causes of volcanoes
14. What are the effects of volcanoes?
15. How are volcanoes classified on the basis of their periodicity?
16. Indicate the world distribution of volcanoes.
17. Why the circum-pacific belt is called the 'Pacific Ring of Five'.

Q.3. Write answers in brief (06 marks each)

1. What is folding ? Explain any two types of folds.
2. Distinguish between the following.
   a. Symmetrical and Asymmetrical folds.
   b. Anticlinorium and Syclinorium folds.
3. Discribe any three types of folds with diagram.
4. What is faulting? Describe the formation of normal fault.
5. Describe the rift valley with diagram.
6. Describe the landforms associated with faulting.
7. Distinguish between the Rift valley and Block mountain. Draw neat diagrams.
8. State the causes of earthquakes.
9. State the causes of earthquakes.
10. Describe the world distribution of earthquakes.
11. Describe the causes of volcanoes.
12. Describe the classification of volcanoes based on their periodicity.
13. Distinguish between normal fault and reverse fault with diagram.

Q.4. Answer the following (08 marks each)

1. What is folding? Explain the various types of folds.
2. Define faulting? Describe the landformas associated with faulting.

3. What is earthquakes? Explain the causes of earthquakes.
4. Describe the causes and effects of earthquakes.
5. (a) Explain the types of earthquake waves.
   (b) Explain the types of volcanoes according to their periodicity.
6. What is meant by volcanoes? Describe the causes of volcanism.
7. What is volcanoes? Describe the types of volcanoes based on periodicity.

Q.5. Write short notes.

1. Folding
2. Symmetrical and Asymmetrical folds.
3. Anticlinorium and synclinorium
4. Normal fault and Reverse fault.
5. Block mountain
6. Rift valley
7. Types of earthquake waves.
8. World distribution of earthquakes.
9. Causes of volcanoes.
10. Types of volcanoes based on periodicity.
11. World distribution of volcanoes.

Chapter – V

WEATHERING

Q.1. Objectives (one mark each)

A. Multiple Choice Questions :-

1. The main type of weathering in a region of limestone topography is
   a. Limestone weathering b. Karst weathering
   c. Chemical weathering c. Mechanical weathering

2. Chemical weathering is act its maximum in
   a. hot and humid regions
   b. cold and dry regions
   c. hot and dry regions
   d. cold and humid regions
3. Mechanical weathering is act its maximum in
   a. hot and humid regions
   b. cold and dry regions
   c. hot and dry regions
   d. cold and humid regions

4. Weathering is a process
   a. by which land gets heated
   b. which breaks up the rocks
   c. which leads to formation of rocks
   d. which produces changes in weather
5. Chemical weathering is a process by which
   a. Rock is decompased
   b. Rock enlarges
   c. Rock gets heated
   d. Rock disintegrates by expansion and contraction.

6. Physical weathering takes place in regions with
   a. Dry climate
   b. Humid climate
   c. Annual temperature fluctuation
   d. None of these

7. Chemical weathering is more effective than mechanical weathering in
   a. Arid region
   b. Semi arid region
   c. coastal region
   d. high temperature and high humidity climate region.

B. State whether the following statements are true or false, if false rewrite the correct sentence.

1. Weathering is a static process
2. Mechanical weathering takes place without any change in chemical composition of the rock.
3. In chemical weathering rocks are disintegrates.
4. There is no change in chemical composition of rocks while chemical weathering takes place.
5. Man has become the most powerful weathering agent.

C. **Answer in one sentence -**

1. What is weathering?
2. Which are the types of weathering?
3. Which factors are plays an important role in physical weathering?
4. In which type of weathering decomposition of rocks takes place?
5. State the important chemical reactions which are responsible to chemical weathering?

D. **Explain the concepts (2 marks each)**

1. Weathering
2. Physical weathering
3. Chemical reaction in weathering
4. Oxidation reaction in weathering

Q.2. Short answers -- (4 marks each)

1. What is meant by weathering?
2. What is mechanical weathering? State the factors causes to mechanical weathering?
3. Write in brief Biological weathering.

Q.3. Write answers in brief (6 marks)

1. What is mechanical weathering? Describe how changes of temperature and frost lead to weathering.
2. Distinguish between mechanical weathering and chemical weathering.
3. What is weathering? How mechanical weathering takes place?
4. How biological weathering takes place?
5. Explain the different process of chemical weathering.

Q.4. Answers the following (8 marks each)

1. What is weathering? What are the types of weathering? Describe any one type of weathering.
2. What is mean by weathering? Explain the physical weathering.
3. Define weathering. Explain the chemical weathering.
4. Distinguish between mechanical weathering and chemical weathering.
5. Define weathering. Describe the Biological weathering.

Q.5. Short Notes (4 marks each)

1. Weathering
2. Physical weathering
3. Chemical weathering
4. Biological weathering

Chapter – VI
KARST TOPOGRAPHY (LIME STONE TOPOGRAPHY)

Q.1. Objectives questions (1 marks each)

A. 1. Which of the following agents of erosion produce 'Uvala'?
a. Glacier b. Wind c. Underground water d. Sea waves

2. A special type of sinkhole in Karst region with steep sides, flat floor and elongated shape is
a. Lapies b. Bolson c. Polje d. Blind valley

3. A Doline is
a. A large crack produced by erosion on the surface of a limastone plateau.
b. A large sink hole produced by solution.
c. An underground cave
d. None of these

4. Uvalas are found in
a. Chalk region b. Limestone region
c. None permeable region d. All of the above

B. State whether the following statements are True or False, if false rewrite the correct sentence.-

1. Lapies is the landform produced by erosional work of wind
2. Karst topography is also known as Limestone topography.
3. Tufa is a depositional landform of in karst topography.
4. Poljes is the erosional land form found in Karst topography.

C. **Answer in one sentence -**

1. Name any four erosional landforms of a karst region
2. What is Tufa?
3. What is Dripstones.
4. In India which regions have Karst Topography?

Q.2. Short answers questions (04 marks)

1. Sate the favourable condition for the development of Karst topography
2. Lapies
3. Poljes
4. What are Uvalas?
5. Caves an erosional landform of karst region

Q.3. Write answers in brief (06 marks)

1. Describe any three erosional landforms of karst topography.
2. Explain the following features of Limestone topography-
   a. Lapies b. Uvalas c. Sinkholes

Q.4. Answers the following - (08 marks)

1. What is mean by karst topography? Describe the erosional landforms of karst topography.
2. Explain the following land forms of karst region.
   a. Lapies b. Uvalas c. Dolines d. Karst window.

Q.5. Short notes (on makrs each)

1. Lapies
2. Uvalas
3. Karst window
4. Dolines
5. Poljes
6. Favourable condition for the development of karst topography.
7. Depositional landforms of Karst topography.

CHAPTER – VII
WORK OF RIVER

Q.1. Objectives (One mark each)

A. Multiple choice questions :-

1. An Ox-bow lake is a
   a. lake formed due to cut-off meander
   b. lake formed a hollow scooped by a glacier
   c. lake formed behind an off-shore bar
   e. all of the above

2. Sundarbans is a good example of
   a. Scrub forests b. Delta c. Monsoon forests d. None of these

3. Which is the largest delta in the world?
   a. Ganga b. Thames c. Mississipi d. Sunderbans

4. Ox-bow lakes are formed by
   a. Erossional work of wind b. Erossional work of glaciers
   c. rivers during their middle course d. all of the above

5. Waterfall formation will take place in which course of river.
   a. Upper b. middle c. lower d. all of the above

6. 'Natural leaves' are formed when
   a. a river actively erodes its bed.
   b. a river does lateral erosion
   c. a river forms delta
   d. a river deposits flood debris on it banks.

7. Deltas are formed by
   a. Depositional work of river
   b. depositional work of wind
   c. depositional work of glacier
   d. None of these

8. 'V' shaped valley is formed by
   a. erosional work of river
   b. erosional work of glacier
   c. erosional work of wind
   d. erosional work of sea waves
9. Meanders and ox-bow lake is assoicated with the deposional work of --
   a. river b. glacier c. wind d. dentritic pattern
10. Centripetal drainage patter is opposite to the ---
   a. Radial patter b. Rectangular patter
   c. Parallel patter d. Dentritic pattern

B. State whether the following statements are true of false.

1. All river forms deltas
2. Meanders are generally found in the upper course of a river.
3. Gorges are formed by glaciers.
4. 'V' shaped valleys are formed in the upper course of glaciers.
5. All rivers do not form deltas
6. 'Sunderbans' is the largest delta of the world.
7. In the lower course of a river vertical erosion is more prominent.
8. Depositional work of river is more prominent in the upper course of river.
9. In the upper course of river, vertical erosion is more prominent.
10. The velocity of the river is decreases in the lower course of river.

C. Answer in one sentence

1. By what actions do rivers erode the land ?
2. What is drainage density?
3. Write any two landforms formed by the erosional work of river.
4. Write any two landforms formed by the depositional work of river.
5. In which course of river vertical erosion is prominent.
6. In which course of river deposition is the more prominent.
7. What is river?
8. Write any two types of drainage pattern.
9. What is drainage patterns?

D. Explain concepts / Definition (2 marks each)

1. Drainage Density
2. Drainage patterns
3. Hydraulic action in river erosion.

Q.2. Short answers questions : (4 marks each)

1. Explain any two types of drainage patters.
2. What is drainage pattern? Explain any one type of its.
3. Describe the Radial pattern and centripetal pattern of river.
4. Describe the features of upper course of river.
5. Explain the formation of 'v' shaped valley.
6. Describe any one depositional feature of river.
7. Which factors are necessary for the delta formation?
8. How is a waterfall formed?
9. Describe the stream order with labelled diagram.
10. How are meanders and ox-bow lakes formed?

Q.3. Write answers in brief. (6 marks each)

1. Describe the mechanism of river erosion.
2. Describe the following features-
   a. 'V' shaped valley b. Waterfall
3. Explain the following relief features-
4. With suitable diagrams describe the Pot holes and Deltas.
5. With suitable diagrams describe the meanders and ox-bow lake.
6. Describe any two features associated with erosional work of river.
7. Explain any two features assoicated with depositional work of river.
8. Explain any two features which are forms in upper course of river.

9. Explain any two features which are formed in the lower course of river.
10. Why all rivers do not form deltas.

Q.4. Answers the following (8 marks each)

1. What is drainage patter? Descirbe various types of drainage pattern.
2. Explain the various land forms assoicated with erosional work of river.
3. Describe the various features associated with depositional work of river.
4. Explain the different features which formed in the upper course of the river.

Q.5. Short notes (4 marks each)

1. Drainage patterns.
2. Dendritic pattern of river
3. Centrepetal pattern of river
4. Mechanism of river erosion
5. 'V' shaped valley
6. Waterfall
7. Pot holes
8. Meanders and ox-bow lake
9. Flood plains and Levees
10. Deltas

CHAPTER – VIII
WORK OF WIND

Q.1. Objectives (One mark each)

A. **Multiple choice questions** :-

1. The formation of Mushroom rock in desert region is an example of --
   a. Erosion b. deposition c. Abration d. Attrition

2. Loess formation is due to the action of --
   a. Wind erosion b. wind deposition
   c. wind transportation d. running water

3. Longitudinal dunes are formed when.
   a. The wind whips up sand when they are converging.
   b. The wind blows in a defined direction for a longer time.
   c. The wind is very strong and sand supply limited.
   d. The wind blows linearly.

4. Barkhan formed by
   a. Depositional work of river
   b. Depositional work of wind
   c. Depositional work of sea waves
   d. Depositional work of glacier

5. Mushroom rock is formed by
   a. depositional work of wind b. erosional work of wind
   c. transportational work of wind d. none of these

6. Which of the following landform is assoicated with the depositonal work of wind?
   a. Mushrrom rock b. Sand Dunes c. Inselbergs d. all of the above

7. Which of the following landform is associated with the erosional work of wind?
   a. Yardangs b. Barkhans c. Sand Dunes d. Loess

B. State whether the following statements are true or False.

1. Mushroom rock is known as 'Gara' in Sahara.
2. Seif dues are formed at right angles to the wind direction.
3. Ripples are formed parallel to the wind direction.
4. Loess is usually brown in colour.
5. The slope of windward direction of sand dune is steep.
6. The slope of of sand dune on leeward direction is steep.
7. The slope of windward direction of sand dune is gentle.

C. Answers in one sentence.

1. Name two landforms assoicated with erosional work of wind.
2. State any two landforms associated with depositional work of wind.
3. By which actions wind erosion occurs?
4. Give any two characteristics of a barkhans.
5. What are sand dunes?

Q.2. Write short answer (4 marks each)

1. Write in brief, mechanism of wind erosion.
2. How mushroom rocks are formed?
3. Describe the formation of Barkhans.
4. With suitable diagram describe the formation of Yardangs.
5. Give the favourable condition for the creation of sand Dunes.
6. What is loess?

Q.3. Answers in brief (6 marks each)

1. Explain any two landforms formed by erosional work of wind. Draw neat diagrsm.
2. Describe any three depositional landforms assoicated with wind.
3. Explain the following features with diagrsm-
   a. Zeugen b. Inselbergs c. Barkhans

Q.4. Answers the folloiwng (8 marks each)

1. Describe the features assoicated with erosional work of wind.
2. Describe the landforms formed by the depositional work of wind.

Q.5. Short notes (4 marks each)

1. Mechanism of wind erosion.
2. Mushrrom rock
3. Yardangs
4. Zeugen
5. Inselberg

6. Sand Dunes
7. Barkhans
8. Loess

CHAPTER – IX
WORK OF GLACIER

Q.1. Objectives (One mark each)

A. Multiple choice questions :-

1. A hanging valley provides on ideal site for--
   a. Waterfall b. Lake c. Settlement d. Agriculture

2. Roche moutonees found in glaciated region is
   a. depositional feature b. erosional feature
   c. lateral morraine d. terminal morraine

3. The deposits laid down by glaciers are called--
   a. Creavasse b. meanders c. moraines d. flood plain

4. Glaciers are--
   a. rivers found is mountain areas
   b. moving masses of snow and ice
   c. deposition of mud
   d. none of these

5. Cirque is
   a. arm chair shaped depression.
   b. a pyramidel peak
   c. deposition of mud
   d. none of these

6. All of the following features are produced by glacial deposition except.
   a. Roche moutonee b. moraine c. Esker d. Drumline

7. 'U' shaped valley is associated with the
   a. erosional work of glacier b. depositional work of glacier
   c. erosional work of river d. erosional work of wind

8. Drumlins are --
   a. mounds of glacial deposits
   b. narrow ridges of sands and gravels
   c. glacial erosional feature
   d. none of these

9. The valley of the tributary of a glacier is called
   a. yardang b. deltas
   c. hanging valley d. 'v' shaped valley

B. State whether the following statements are true or false.

1. The moving ice mass downslope under the impact of gravity is called glacier.
2. Cirques are an arm-chair shaped feature formed by river.
3. Cirques are an arm-chair shaped feature formed by depsitional work of glacier.
4. Medical moraines is the glacial deposition in the middle part of the glacier.
5. Roches moutonnee is a glacial erosional feature.
6. A hanging valley provides an ideal site for waterfall.
7. Drumlins are mounds of glacial deposits generally oval shaped.
8. The deposition at the end of the glacier is known as Terminal moraines.
9. The moraines that are deposited parallel to the sides of the valley are called lateral moraines.

C. Answer in one sentence.

1. State the different types of moraines.
2. What is glacier?
3. Give any two features formed by erosional work of glacier.
4. Give any two features formed by depositional work of glacier.
5. What is lateral moraines?

Q.2. Short answers questions (4 marks each)

1. How are 'U' shaped valleys formed?
2. What is hanging valley?
3. What are cirques?
4. Explain the types of moraines.
5. How Drumlins are formed?
6. What are kames?
7. How is out wash plains formed?
8. Describe the processes of glacial erosion.
9. Describe the Roches Moutonnees.

Q.3. Write answers in brief (6 marks each)

1. Describe any two features of glacial erosion.
2. Distinguish between 'U' shaped valley and Hanging valley.
3. Explain the cirques and Roches moutonees.
4. Describe the following features with diagrams.
5. Explain any three features formed by glacial deposition.

Q.4. Answers the following questions (8 marks each)

1. Describe the various landforms associated with the erosional work of glacier.
2. Describe the features formed by depositional work of glacier.
3. Explain the following landforms with diagram--
   a. 'U' shaped valley
   c. Moraines

Q.5. Short notes (4 marks each)
1. Processes of glacial erosion
2. 'U' shaped valley
3. Hanging valley
4. Cirques
5. Roches Moutonnees
6. Moraines
7. Drumlins

CHAPTER – X
WORK OF SEA WAVES

Q.1. Objectives (One mark each)

A. Multiple choice questions :-

1. Beaches spits and bars formed by the process of ---
   a. erosion b. denudation c. deposition d. transportation

2. Offshore bars form mainly by
   a. longshore drift b. Constructive waves
   c. Destructive waves d. excavation of materials from sea surface

3. A bar which joins an island to the main land or joins two islands is known as—
   a. Tombolo b. Nehrung c. offshore bar d. Bay-head bar

4. Sea caves formed by
   a. Erosional work of river b. Erosional work of wind
   c. Erosional work of sea waves. d. deposional work of sea waves

5. Beach is formed by
   a. depositional work of sea waves.
   b. depositional work of river
   c. depositional work of glacier
   d. depositional work of wind

6. ------- is the product assoicated with erosional work of sea waves.
   a. Beach b. Lagaons c. Sea cliff d. Spits

7. Sea caves are formed by.
   a. erosional work of river b. erosional work of sea waves
   c. erosional work of glacier d. erosional work of wind

8. Wave cut platform is formed by--
   a. erosional work of sea waves b. depositional work of sea waves
   c. erosional work of wind d. depositional work of wind

B. State whether the following statements are true or false--

1. Lake chilka and pulkit ara the examples of lagoons in India.
2. Beaches are formed by the work of wind.
3. Sea cliff is assoicated with the erosional work of sea waves.
4. Sea caves are associated with the depositional work of sea waves.
5. Mudflats are develops by the depositional work of sea waves.

C. Answers in one sentence.

1. Write any two landforms formed by the erosional work of sea waves.
2. Write any two landforms formed by the depositional work of sea waves.
3. What is Tombol?
4. What is beach?

Q.2. Write short answers (4 marks each)

1. Describe the mechanism of marine erosion.
2. How sea cliff and wave cut platform are formed?
3. Describe the lagoons.
4. How are beaches formed?

Q.3. Write answers in brief (6 marks each)

1. Describe any three landforms associated with the erosional work of sea waves.
2. Describe any three landforms formed by the depositional work of sea waves.
3. Describe the following features.
   a. Sea caves and sea arch b. Beaches
4. Explain the following landforms--
   a. Sea cliff and wave cut platform b. Lagoons

Q.4. Answers the following (8 marks each)

1. Describe the landforms associated with the depositional work of sea waves.
2. Explain the landforms formed by the erosional work of sea waves.

Q.5. Short notes (4 marks each)

1. Mechanism of marine erosion
2. Sea cliff and wave cut platfrom
3. Sea caves and sea arch
4. Beaches.
5. Lagoons

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F.Y.B.Sc. Paper –II

Atmosphere and Hydrosphere

CHAPTER – I

Structure and composition of Atmosphere

QUESTION FOR 1 MARKS:

Choose the correct option –

1) Atmospheric layer that reflects radio waves is called _____
   a) Exosphere b) Stratosphere c) Troposphere d) Ionosphere

2) The layer of the atmosphere which is the region of clouds and changing weather condition is _____
   a) Troposphere b) Stratosphere c) Ionosphere d) Homosphere

3) How much percentage of water vapour contain in the atmosphere?
   a) 5 – 10 b) 0 – 5 c) 10 – 15 d) 15 – 20

4) Which is the following is not correct?

Gases	% in the atmosphere
a) Nitrogen	78.00
b) Oxygen	21.00
c) Argon	00.93
d) Carbon dioxide	01.03

5) Normal Lapse Rate in the atmosphere is _____
   a) 6’5 degrees C per 1000m. b) 5’0 degrees C per 1000m.
   b) 6’0 degrees C per 1000m. d) None of these.

6) The height of the troposphere at the equator is _____
   a) 10 km b) 20 km c)17 km d) 08 km

7) The height of the troposphere at the pole is _____
   a) 08 km b) 10 km c) 16 km d) 17 km

8) The upper limit of the troposphere is called _____
   a) Stratopause b) Tropopause
   c) Stratosphere d) Ozonosphere

9) The upper limit of the stratosphere is called _____
   a) Tropopause b) Stratopause c) Troposphere d) Ozonophere

10) Which layer acts as a protective cover for living life ?
   a) Tropopause b) Ozonelayer c) Stratosphere d) Troposphere

11) Upto What height, the composition of the atmosphere is fairly Uniform ?
a) 15000 feet b) 12000 feet c) 20000 feet d) 16000 feet

12) _____ is the lowermost layer of the atmosphere
a) Thermosphere b) Stratosphere
c) Troposphere d) Exosphere

13) Atmosphere contains highest proportion of _____ gas
a) Oxygen b) Carbon dioxide
c) Nitrogen d) Helium

14) The proportion of oxygen in the atmosphere is _____ %.
a) 78.00 b) 21.00 c) 00.93 d) 00.03

15) Atmosphere contains _____ % of Nitrogen gas.
a) 21.00 b) 78.00 c) 00.93 d) 00.03

16) There are _____ layer of atmosphere around the earth.
a) One b) Two c) Four d) Three

QUESTION FOR 2 MARKS :

1) Name the different payers of atmosphere from lower to upper level

2) What is atmosphere?

3) What are the elements of the atmosphere?

4) Define weather and climate

5) what is the normal lapse rate ?

QUESTION FOR 4 MARKS :

1) Write a note on Trsposphere

2) Write a note on Stratosphere

3) Write a note on Ionosphere

4) Write a note on Exosphere

QUESTION FOR 8 MARKS:

1) Explain with suitable diagram, the structure of the Earth's Atmosphere

3) Explain the composition of the Atmosphere

CHAPTER – 2
INSOLATION AND HEAT BUDGET

QUESTION FOR 1 MARK:

1) The radient energy that reaches the surface of the earth from the sun is called _____
   a) Insulation b) Insolation c) Isolation d) Convection

2) What is the approximate surface temperature of the sun?
   a) 5000 degrees C b) 7000 degrees C
   c) 6000 degrees C d) 11000 degrees C

3) Calorie is a unit of measurement of _____
   a) Rainfall b) Humidity c) Air pressure d) Heat

4) The albedo for the earth as a whole is about _____
   a) 40 % b) 50 % c) 46 % d) 35 %

5) 21st march is _____
   a) Autumnal equinox b) Winter solstice
   c) Vernal equinox d) Summer solstice

6) what is the average distance between the sun and the earth?
   a) 150000000 kms b) 149000000 kms
   c) 152000000 kms d) 151000000kms

7) How many percentage more insolation received at perihelion than aphelion ?
   a) 7 % b) 4 % c) 6 % d) 5 %

QUESTION FOR 2 MARKS :

1) Define solar constant

2) Define insolation

3) What do you mean by albedo of the earth?

4) State the factors affecting the distribution of insolation?

5) State the factors affecting the distribution of temperature?
6) What is perihelion and aphelion?
7) What factors are responsible for the ideal condition of inversion of temperature ?

8) Define Isotherm

QUESTION FOR 8 MARKS :

1) What is insolation ? describe the factors that determine the amount of insolation received on the earth's surface.

2) Explain the term " Insolation'' and discuss the factors governing its Intensity and effectiveness ?

3) What do you mena by heat bedget ? How does the earth maintain a heat balance ?

CHAPTER - 3
TEMPRATURE

QUESTION FOR 1 MARK :

1) Inversion of temperature implies _____
   a) Increase in temperature due to air subsistance.
   b) Decrease in temperature with increasing height.
   c) Increase in temperature with increasing height.
   d) Decrease in temperature due to expansion of air.

2) A ray of solar light changes its path while passing through the Atmosphere. This process is called _____
   a) Reflection b) Absorption c) Deflection d) Refraction

3) The term albedo implies the_____
   a) capacity to absorb heat
   b) capacity to modify the path of solar beam
   c) proportion of the light reflected by a surface
   d) amount of heat transferred to air by the surface

4) Which of the following are responsible for the maximum Reflection of light in the atmosphere?
   a) Oxygen molecules b) Water vapour c) Dust particles d) Ozone

5) Nearly how much amount of insolation is absorbed by the Atmosphere _____
   a) 14 % b) 16 % c) 6 % d) 27 %

6) Nearly how much amount of insolation is lost by deflection?
   a) 14 % b) 16 %
   c) 6 % d) 27 %

7) Nearby how much amount of insolation is lost in the atmosphere Due to reflection ?
   a) 14 % b) 16 % c) 6 % d) 27 %

QUESTION FOR 2 MARKS :

1) What do you mean by Frigid Zone?

2) What is meant by Torrid Zone?

3) What is meant by Temperate Zone?

4) Give an examples of the effects of prevailing winds on the distribution of temperature

5) Explain with examples, the effects of Ocean Currents on the distribution of temperature

6) How long night helps the process of inversion of temperature?

7) How mountainous areas are responsible for the process of inversion Of temperature?

QUESTION FOR 4 MARKS :

1) Write notes on :
   a) Inversion of temperature
   b) Lapse Rate
   c) Advection
   d) Conduction
   e) Convection
   f) Rediation
   g) Range of temperature
   h) Mean temperature

QUESTION FOR 8 MARKS:

1) Explain, with examples, how factors affect the horizontal distribution of Temperature

2) Explain the vertical distribution of temperature

CHAPTER – 4
AIR PRESSURE AND WINDS

QUESTION FOR 1 MARKS :

1) Westerlies bring _____
   a) seasonal rainfall
   b) perennial rainfall
   c) scanty rainfall
   d) Heavy rainfall

2) The winds blowing towards the equator are known as the _____
   a) Polar Winds b) Trade Winds
   c) Prevailing Winds d) Doldrum Winds

3) At the equator there is a belt of low pressure called _____
   a) Doldrums b) Horse Latitude
   c) Subtropical highs d) Anticyclones

4) monsoons are _____
   a) permanent winds b) temporary winds
   c) seasonal winds d) westerly winds

5) Trade winds are _____
   a) Moisturous b) hot and wet
   c) Dry d) wet

6) What happens to the wind belts when the pressure belts are shift?
   a) They shift in the opposite direction
   b) They shift in the same direction
   c) Wind belts do not shift with the pressure belts
   d) Wind belts shift with pressure belts only occasionally

7) What is the direction of prevailing winds at 45 degrees N?
   a) North easterly b) south easterly
   c) South Westerly d) north westerly

8) Roaring forties are _____
   a) High velocity trade winds
   b) High velocity westerly winds
   c) High velocity polar winds
   d) High Magnitude tidal waves due to high wind velocity

9) The maximum velocity of westerlies is observed over_____
   a) continents in the northern hemisphere
   b) Oceans in the southern hemisphere
   c) Continents in the southern hemisphere
   d) Ocenas in the northern hemisphere

10) Under which wind system does the direction of winds changes daily?
   a) trade winds b) monsoon winds
   c) land and sea breezes d) None of the above

11) Seasonal constrast in pressure between land and sea give rise to _____
   a) westerly winds b) land and sea breeze
   c) monsoon winds d) trade winds

12) when the wind is defected due to the rotation of the earth, it is Called as _____

a) geotropic wind b) polar wind c) westerlies d) trade wind

13) The lines joining the places if equal pressure at sea level are Called _____

a) Isotherm b) Isobars c) Isohyets d) None of these

14) The pressure belts are found more or less in regular pattern in the____

a) Northern hemisphere b) Southern hemisphere
c) Eastern hemisphere d) Western hemisphere

15) Which of the following belt is called doldrum?

a) equatorial low pressure belt
b) sub – tropical high pressure belt
c) sub – polar low pressure belt
d) none of these

12) Which of the following belt is called horse latitude ?

a) equatorial low pressure belt
b) sub – tropical high pressure belt
c) sub – polar low pressure belt
d) none of these

13) Aneroid barometer measures?

a) Atmosphere pressure b) Temperature
c) Rain fall d) None of these

18) coriolis force is cause by _____

a) The rotation of the earth
b) The rotation of the moon
c) The volcanic eruption
d) None of these

19) Westerlies blow in northern hemisphere?

a) From NW to SE b) From SW to NE
c) From East to West d) From West to East

20) what is relationship between atmospheric pressure and temperature?

a) when the temperature decreases, atmosphere pressure is also decreases

b) when the temperature increases, atmosphere pressure decreases and vice versa
c) There is no relation between the two
d) None of these

21) The standard air pressure at sea level is _____
a) 1060'3 mb b) 1010'5 mb c) 1013'2 mb d) 1012'3 mb

22) _____ winds are the type of planetary winds
a) Polar winds b) monsoon winds
c) Cyclones d) land and sea breezes

23) Trade winds are the type of _____ winds
a) Local Winds b) Planetary Winds
c) Seasonal winds d) periodic winds

24) Land and sea breezes are the type of _____ winds
a) Local b) Planetary c) Seasonal d) Periodic

WRITE CORRECT GROGRAPHICAL TERM FOR THE FOLLOWING :

1) The line joining the places having equal atmosphere temperature is called

2) The line joining the places having equal atmosphere pressure is Called

3) The winds blow exactly opposite to the trade winds are called

4) The different in pressure between any two places is called

QUESTION FOR 2 MARKS :

1) What is wind?

2) Define planetary winds

3) Define pressure gradient

4) Define Isobar

QUESTION FOR 4 MARKS :

1) Explain the land & sea breezes

2) write a note on mountain and valley winds

3) seasonal winds

QUESTION FOR 6 MARKS :

1) Write note on the vertical distribution of atmospheric pressure
2) Explain with figure the shifting of pressure belts

3) Bring out the effects of shifting of pressure belts.

4) Write a note on monsoon

QUESTION FOR 8 MARKS :

1) Explain with figure the distribution of air pressure and winds belts

2) Explain in detail the planetary winds

CHAPTER – 5
AIR MASSES

QUESTION FOR 1 MARKS :

1) Considered the following statements --
I) cyclones are also called lows
II) Anticyclones are also called highs
III) cyclones are also called highs
Iv) anticyclones are also called lows

of the above statements, the true ones are –
a) I only b) II only c) Both I and II d) both III and IV

2) A huge section of troposphere in which temperature and humidity are fairly uniform at any given level is called _____
a) Air drop b) Air pocket c) Air mass d) Air pressure

3) Low pressure areas surrounded by closed isobars are named _____
a) Anticyclones or lows b) Cyclones or lows
c) Anticyclones or highs d) Cyclones or highs

4) In a cyclone in the northern hemisphere wind blow_____
a) Anticlockwise b) Clockwise
c) Straight Center ward d) Radialy outward

13) Give the Correct Answer of following
a) What is meant by air masse?
b) What is meant by front?
c) What is meant by Cold air masse?
d) What is meant by Warm air masse?

QUESTION FOR 2 MARKS :
1) Explain the Terms :
a) m Ts b) m T c) m Tu
d) mPKu e) c P f) K

QUESTION FOR 4 MARKS:

1) Give, types of Anticyclones

2) Write Short Notes on:
   a) Cyclones b) Anticyclones
   c) Tropical Cyclones d) Temperate Cyclones

3) Bring out the salient features of the weather associated with cyclones

4) Bring out the salient features of the weather associated with anticyclone

QUESTION FOR 6 MARKS:

1) Compare Temperate and Tropical Cyclones

2) Give main characteristics of Anticyclones

QUESTION FOR 8 MARKS:

1) Classify the fronts and explain them in detail

2) Give geographical classification of air masses

3) What are the different types of air masses? Explain their Characteristics

4) Explain in detail, the Tropical cyclones

CHAPTER – 6
HUMIDITY AND PRECIPIPTATION

QUESTION FOR 1 MARKS:

1) The humidity stated in grammes of water vapor per cubic meter of moist air is called _____
   a) Absolute humidity b) specific humidity
   c) Relative humidity d) mixing ratio

2) The rainfall related to mountain is called _____
   a) Orographic rainfall b) Cyclonic rainfall
   c) Convectional rainfall d) Frontal rainfall

3) Water vapor beyond the dew point results in _____
   a) Precipitation b) Hailstorms
   c) Condensation d) Formation of ice

4) The relative humidity of the saturated air is _____
   a) 80% b) 50% c) 60% d) 100%

5) Up to what height humidity can be found in the atmosphere?

6) Name the forms of condensation

7) What do you mean by saturated air?

8) Name the forms of precipitation

9) Give appropriate term for the following-
   a) The line joining the places having equal rainfall is called_____
   b) The amount of water vapor present in the atmosphere is called ___
   c) The process of conversion of atmospheric water vapor into water___

QUESTION FOR 2 MARKS:

1) Define humidity

2) Rate of evaporation depends on which factors

3) Define Condensation

4) Water vapor holding capacity of the air depends on which factors?

5) What is the relationship between water vapor holding capacity of the air and its tempreture?

6) What is dew point?

7) Define Air mass?

8) What is Front?

9) What is Frost?
10) Define Isohyets?

11) Define Evaporation?

12) Define Condensation?

13) Define Saturation?

QUESTION FOR 4 MARKS:

1) Explain Relative Humidity

2) Explain Absolute Humidity
3) How Condensation takes place?

4) Notes on :
   a) Orographic Rainfall
   b) Conventional Rainfall
   c) Cyclonic Rainfall

5) Explain precipitation and their types

QUESTION FOR 6 MARKS:

1) What are the favorable conditions for the condensation?

2) What are the conditions necessary for the formation of snow in the atmosphere?

QUESTION FOR 8 MARKS:

1) Explain the type of rainfall

CHAPTER – 7
CONFIGURATION AND SUBMARINE RELIEF

QUESTION FOR 1 MARKS:

1) _____ is the part of ocean relief adjacent to the coast.
   a) Continental Slope b) Continental Shelf
   c) Abyssal Plain d) Oceanic Island

2) The long narrow depression on the ocean floor are called as _____
   a) Continental Slope b) Continental Shelf
   c) Abyssal Plain d) Trenches

4) The surface of the earth which covered by water is known is _____
   a) Hydrosphere b) Atmosphere
   c) Lithosphere d) Hemisphere

5) _____ is a coral island found in Indian Ocean.
   a) Mauritius b) Srilanka c) Maldives d) Nicobar

6) _____ is a volcanic island in Indian Ocean
   a) Mauritius b) Srilanka c) Maldives d) Nicobar

7) Srilanka is the _____ Island in the Indian Ocean.
   a) Vocalic b) Coral
   c) Continental d) Fold mt range

8) _____ is the deepest trench in the Indian Ocean.
   a) Ob trench b) Mauritius
   c) Java or Sunda d) Amirante

3) Give one term for each of the following statements:

a) The steep slope at the end of continental shelf.
b) The irregularities on the beds of the ocean or sea, lying submerged beneath the surface of the water.
c) The deep sea plain lying beyond continental slopes.
d) The rocks underlying deep ocean floor.
e) The oceanic regions of great depths with their bottom fall below the average level of the ocean floor.
f) The rocks forming the continental blocks.
g) The broader and longer mountain ranges on the ocean floor.
h) Valley like formations cut deep into continental slopes.
i) The long narrow ranges rising above the ocean floor
j) The depth of the sea is measure by which scale?

4) 1. The part of the Atlantic Rise that lies to the north of the equator is known as _____

2. The Part of the Atlantic lies that lies to the south of the equator is known as _____

3. The transverse ridge that lies to the west of challenger ridge is called as_____

4. The transverse ridge that lies to the east of challenger ridge is called as _____

5. Romanche Deep is a part of the _____ Ocean.

6.What is the depth was Blake Deep?

7.Sunda Deep is situated in _____ Ocean.

8.What do you mean by Abyssan Plain?

QUESTION FOR 2 MARKS:

1) Name the relief zones of ocean floor divided according to depth

2) Describe the term 'Continental Shelf '

3) Define submarine ridges

4) Define Oceanic trenches

QUESTION FOR 4 MARKS:

1) Write short notes on:
a) The Deep Sea Plains
b) The Continental Shelf

QUESTION FOR 8 MARKS:

1) Explain with the help of diagram the general structure of the ocean floor

2) Give an account of submarine relief of the Atlantic Ocean

3) Give an account of submarine relief of the Indian Ocean

4) Describe the general relief features of oceanic floor in detail

5) Describe structure and submarine relief features of Indian Ocean

CHAPTER – 8
SALINITY OF OCEAN WATER

QUESTION FOR 1 MARKS:

1) Ocean water contains maximum proportion of _____ salts.
   a) Magnesium Chloride b) Sodium Chloride
   c) Magnesium Sulphate d) Calcium Carbonate

2) The highest salinity of 237'5% is Observed in the water of _____
   a) The red sea b) The black sea
   c) The Dead sea d) The Caspian sea

QUESTION FOR 2 MARKS:

1) Define the salinity of ocean water

2) Why, the salinity of Dead sea is highest?

QUESTION FOR 8 MARKS:

1) Describe the factors affecting the distribution of salinity of sea water

2) Describe the salinity of the open ocean

3) Describe the salinity of Inland seas and lakes

4) Describe the salinity of the partially enclosed seas

CHAPTER – 9
OCEAN CURRENTS

QUESTION FOR 1 MARKS:

1) Which one of the following pairs of ocean currents meet each other Newfoundland?
   a) Canaries and Labrador b) Gulf stream & Labrador
   c) Gulf Stream and canaries d) Kuro shio and Kurail

2) _____ is the warm current in the North Atlantic Ocean.
   a) Kuro- Shio b) Labrador
   c) Benguela d) Gulf stream

QUESTION FOR 2 MARKS:

1) Give the definition of warm current

2) Define cold Currents of the Ocean.

QUESTION FOR 4 MARKS:

1) Why do currents in the north Indian Ocean Changes the direction in the summer and winter?

QUESTION FOR 8 MARKS:

1) Describe the causes of the origin of ocean currents

2) Describe the circulation of Ocean currents in the North Atlantic Ocean

3) Describe the circulation of Ocean currents in the South Atlantic Ocean

4) Describe the circulation of Ocean currents in the Indian Ocean

CHAPTER – 10
OCEAN DEPOSITS

QUESTION FOR 4 MARKS:

1) Write short notes on:

a) Palagic Deposits

b) Terrigenous Deposits

QUESTION FOR 6 MARKS:

1) Name the sources of ocean deposits

2) How the ocean deposits are distributed over the ocean floor? Describe

QUESTION FOR 8 MARKS:

1) Give a detailed account of the deposits of the ocean floor

2) Classify and describe the various types of oceanic deposits

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