Dear Aspirants,

These tests are formed to help you crack the 2020 IAS Prelims. You may give these tests to analyze where you stand with your preparation. If you are unable to find answers to the questions of the test please feel free to contact RAO IAS Institute, Lucknow for the Answer key. Also stay tuned for more such tests. This test if given with complete discipline can become a sure shot way to your success in prelims 2020.

For Answer key contact: 9335247918, or email us @ raoias.lko@gmail.com 1. The theory of Continental Drift was given by _____ in _____

- 2. What is Pangea?
- 3. What is a Nebula?

4. Consider the following statements:

i) The inner planets of the solar system are lighter while the giant outer planets are rocky and heavier.

ii) The terrestrial planets were formed in the close vicinity of the parent star where it was too warm for gasses to condense to solid particle.

Which statement is/are correct?

For Questions 5-12:

Answer:

- (a) if both A and R are true and R is the correct explanation of A
- (b) if both A and R are true but R is not the correct explanation of A
- (c) if A is true but R is false

(d) if A is false but R is true

5. Consider the following statements:

A: Poles are nearer to centre of the earth than equator.

R: The gravitation force is greater near the poles and less at the equator.

6. Consider the following statements:

A: There are different seasons and different lengths of day and night due to revolution of the earth.

R: The axis of the Earth is inclined to the plane of ecliptic at an angle of 66 $\frac{1}{2}^{\circ}$

7. Consider the following statements:

A: Most porous rocks are also permeable rocks.

R: Some rocks are porous but impermeable like clay.

8. Consider the following statements:

A: Out of the eight planets, Mercury, Venus, Earth and mars are called as the inner planets

R: They lie between the sun and the belt of asteroids.

9. A: Venus is considered as 'Earth's Twin'

R: It has close proximity with earth in size, mass and density

10. A: Vernier scale enables to estimate the fraction of a division in both linear and angular measurements with greater accuracy.

R: It consists of a moving scale which slides along a primary scale.

11. A: Graben is a major relief feature resulting from the faulting activities. It is, infact, a valley or narrow trough bounded by one or more parallel faults.

R: Blocks of the Earth's crust may be relatively raised or lowered between more or less parallel faults. The lower part known as graben is formed due to the subsidence of middle part between two normal faults.

12. A: The tarai soils in India are rich in nitrogen and organic matter but are deficient in phosphate.

R: These soils are generally covered by tall grass and forests.

13. Arrange the 8 planets of our solar system in order of their density from most dense to least dense.

14. Consider the following statements:

i) From the surface to the central parts, we have layers like Crust, Mantle, Outer core and Inner core.

ii) From the crust to the core, the density of the material decreases. Which statement is/are correct?

15. Which one of the following has the longest duration: Era, Eons, Epoch, Period ..., ..., ..., ..., ...

16. What is gravity anomaly?

17. What is the difference between a hypocenter and epicenter?

18. Lithosphere refers to the portion of depth upto _____ km from the surface of the earth.

19. Consider the following statements:i) The shadow zone of S-waves is much larger than that of P-wavesii) The entire zone beyond 105° does not receive P-wavesWhich statement is/are correct?

20. What is the difference between volcanic rocks and plutonic rocks?

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21. Which part of the earth is known as the land of the midnight sun?

Which geographical phenomenon is responsible for dawn and twilight? 22.

23. The summit of which mountain is popularly known as Lighthouse of the Mediterranean?

24. Which of the following is/are examples of composite volcano? Mt. Vesuvius, Mt. Fuji, Mt. Popacatapetl, Mt Chimborazo.

25. Which volcanic island is found between Java and Sumatra?

- What is solifluction? 26.
- What is aquifer? 27.

28. The high altitude forest which has dwarfed trees is known as_____

29. Large coffee plantation in Brazil is known as _____

30. Diorite Rock is an example of which kind of rock?

31. What is the difference between canyon and gorges and fill in the blanks Indus_____ in Kashmir and Bryce _____ Utah, USA

32. Match the following:	
i) River Piracy	Beheaded stream
ii) Elbow of capture	Beheading or capture
iii) Misfit	Valley below the elbow of capture
iv) Wind Gap	Bend at which piracy occurs

A lens shaped igneous intrusion situated beneath an anticlinal fold or in the base of a 33. syncline is called _____

34. Aretes are sharp ridges which develop between the adjacent _____

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Physical Geography

Name: Total Marks: 100

35. Which one of the following geomorphic phenomenons produces ribbon lakes which are sometimes referred to as Finger Lakes? Glacier/ River Valley/ Earthquake/ Eruption of volcano

36. What is a moraine? Define lateral, medial and terminal moraine.

37. What is fjord?

38. Match the following:	
Genetic Phases	Resultant tides
a) The sun and the moon are at right angles with the earth	Spring Tide
b) The sun, the moon and the earth are in a straight line	Neap Tide
c) The moon is nearest to the earth	Apogean Tide

39. On maps places with an equal degree of cloudiness are joint by lines known as

40. Arrange the following cities in order of their average annual temperature from minimum to maximum.

Delhi , Mumbai, Chennai, Kolkata

41. Arrange the following cities in order of their average Annual Rainfall from minimum to maximum.

Delhi , Mumbai, Chennai, Kolkata

42. Name the geographer who invented the scale 1805 for estimating wind speed after whom the wind scale is named.

43. Explain the following:i) Batholithsii) Lacolithsiii) Sillsiv) Dykes

44. Convectional Current Theory was propounded by whom and when?

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Physical Geography

Name: Total Marks: 100

45. Where is Nazca plate located?

46. Where is Caroline plate located?

47. Polar fleeing force relates to which of the following: Revolution of the earth. Rotation of the Earth, Gravitation, Tides

48. Arrange the following in increasing order of their hardness: feldspar, talc, calcite, quartz, topaz, corundum, diamond

49. What is lateral corrosion and vertical corrosion?

50. What is a piedmont glacier?

51. A relatively small rotating funnel that extends downward from the base of a towering cloud with thunder, lightning and strong gusty wind is known as_____

52. Match List I (Climatic Conditions) with List II (Tree Species) and select the correct answer using the codes given below the lists:

List I (Climatic Conditions)	List II (Tree Species)
A. Temperate	1. Oak
B. Hot Deserts	2. Acacia
C. Equatorial	3. Spruce
D. Mediterranean	4. Mahogany

53. A submarine mountain rising more than 1000 metres above the ocean floor is known as

54. Consider the following statements:

55. In USA which one of the following regions receives heavy rainfall throughout the year under the influence of westerlies:

North Western, North Eastern, South Western, South Eastern

^{1.} Among the major oceans, Indian Ocean is warmer than the Atlantic and Pacific oceans in both the hemispheres.

^{2.} The average surface temperature of Pacific Ocean is higher than that of the Atlantic Ocean in the southern hemisphere.

^{3.} Among the major oceans, the Atlantic Ocean is the coldest in the equatorial region. Which statement is/are correct?

56. Alps mountains are spread over which 4 countries: France, Italy, Switzerland, Romania, Austria, Spain, Belgium

57. Summer rains in Australia broadly decreases from: East-West, West- East, North-South, South-North

58. On the banks of which river is the city of Kathmandu located?

59. Of the following who enunciated that, "all history should be studied geographically and all geography historically"

60. Among the following regions of India which one receives comparatively least amount of annual rainfall?

- a) An 80km wide coastal belt from Nellore to point Calimere
- b) The middle and lower Assam Valley
- c) North-Eastern Rajasthan
- d) The coastal plains of Gujarat South of Narmada

61. Bhakra Nangal Multipurpose River Valley project is a joint venture of which states?

62. There is submarine ridge in the Bay of Bengal. What is it called? Ninety East Ridge, Mozambique Ridge, Chagos-Lacadive Ridge, Carlsberg Ridge

63. Consider the following statements

1. The continental shelves of Lakshadweep are originated due to coral reefs.

2. The continental shelves of western coast are due to faulting and submergence.

Which of the statement(s) given above is/are correct?

64. Consider the following statements:

1. Temperature of surface water is comparatively higher in the northern hemisphere than in the southern hemisphere.

2. The isotherms in the southern hemisphere are not regular and do not follow the latitudes while they (isotherms) are regular and follow the latitudes in the northern hemisphere. Which of the statement(s) given above is/are correct?

65. Consider the following:

Gulf of California, Mediterranean sea, Baltic sea.

In terms of decreasing salinity which one of the following is the correct sequence:

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66. Regular oscillations in the water surface of the large water bodies are formed because of

- a) Gravitational effect of moon
- b) Difference in temperature of sea water and the air
- c) Rotation of Earth
- d) Friction of wind on the water surface
- 67. Chernozems are:
 - a) Silica rich temperate grassland soil
 - b) Iron rich humid upland soils
 - c) Humus rich dark brown colour soils in semi arid region
 - d) Humus rich tropical grassland soils

68. The shifting cultivation that is leading to soil erosion in Brazil is known as_____

69. Match List I with List II	
List I	List II
Мар Туре	Information Content
a) Choropleth	Quantitative map showing imaginary lines joining
	places of equal value for any distribution.
b) Isopleth	Qualitative map showing areal distribution by
	symbols, index, letters, etc.
c) Chorochromatic	Qualitative map showing areal distribution by
	shades and tints
d) Choroschematic	Quantitative map showing regional variation of
	distribution using shades

- 70. Where are the following centers located?
 - 1. Centre for environmental management of degraded ecosystem:
 - 2. Centre of Social Forestry and Eco- Rehabilitation
- 71. Match List I (Natural Hazards) with List II (Areas) and select the correct answer using the codes given below the lists:

List I (Natural Hazards)	List II (Areas)
A. Cyclones	1. Mid-eastern India
B. Droughts	2. Plains of Uttar Pradesh and Bihar
C. Earthquakes	3. Jharkhand and Northern Orissa
D. Floods	4. Himalayan foothill
	zone

- 72. Match List I (Type of Vegetation) with List II (Region) and select the correct answer using the codes given below the lists:
 - List I (Type of Vegetation)
 - A. Mangrove
 - B. Tropical wet evergreen
 - C. Tropical wet deciduous
 - D. Dry Savanna and Steppe

- List II (Region)
- 1. Orissa
- 2. Western Ghats
- 3. West Bengal
- 4. Gujarat

73. Which soil is produced by granite and gneiss of weathering?

- 74. The Meghalaya Plateau is largely formed of (a) Cretaceous lava (b) Gondwana rocks (c) Dharwarian Quartzites (d) Tertiary sedimentary rocks 75. The Kathiawar Peninsula is an example of (a) Emerged shorelines (b) Submerged shorelines (d) Dalmatian shorelines (c) Ria shorelines 76. The Western Syntaxial bend of the Himalayas is near (a) Zaskar Range (b) Pir Panjal Range (c) Nanga Parbat (d) Siwalik Hills 77. The south-western part of California is known for which type of agriculture? 78. Which one of the following regions is practising most intensive subsistence farming ? (a) Pampas Region (b) Murray — Darling Basin (c) California Valley (d) Monsoon Asia 79. Match List I (Biomes) with List II (Species) and select the correct answer using the codes given below the lists: List I (Biomes) List II (Species) A. Coniferous forest 1. Spruce B. Tropical rain forest 2. Rubber C. Tropical deciduous forest 3. Sal D. Temperate forest 4. Oak 80. Match List I (Regions) with List II (Characteristics) and select the correct answer using the codes given below the lists: List I (Regions) List II (Characteristics) A. Selvas 1. Tropophytes 2. Mosses and lichens **B.** Savannas C. Monsoon lands 3. Epiphytes
 - D. Tundras

81. Plants having thorny leaves and penetrating roots are classified as _____

82. Plants of tropical and sub-tropical regions are called_____

- 83. The important species of the Mediterranean biome are
 - (a) Mahagony, ebony, rosewood
 - (b) Cork, olive, citrus trees
 - (c) Eucalyptus, oak, wattle
 - (d) Pine, cedar, fir

- 4. Grasses and trees

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Physical Geography

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84. Which of the following conditions are associated with El Nino phenomena?

- (a) Heavy rains in South America and droughts in Australia
- (b) Droughts in South America and heavy rains in Australia
- (c) Heavy rains in both South America and Australia
- (d) Droughts in both South America and Australia

85. Match List I (Deposits) with List II (Locations) and select the correct answer using the codes given below the lists:

List I (Deposits)

A. Silt

- B. Red clay
- C. Ooze
- D. Gravel

List II (Locations)

- 1. Continental shelves
- 2. Oceanic plains
- 3. Continental slopes
- 4. Oceanic deeps
- 86. Oozes are associated with which type of deposits?
- 87. Consider the following statements:
 - Salinity of water in the equatorial oceans decreases because
 - 1. large rivers like Amazon and Congo enter into the sea.
 - 2. evaporation is less.
 - 3. waters from Arctic and Antarctic mix with the waters of Equator.
 - 4. of heavy rainfall.
 - Which of these statements are correct?
- 88. The ocean relief is generally
 - (a) more diverse than that of the continents
 - (b) more uniform than that of the continents
 - (c) showing minor variations only
 - (d) not much of a significance
- 89. In the northern hemisphere, tropical cyclones and middle latitude cyclones are similar in that both
 - (a) Originate over warm ocean
 - (b) Intensify with increasing height above the ground
 - (c) Generally move from east to west
 - (d) Have winds that blow counter-clockwise around their centres
- 90. Match List I (Types of Cloud) with List II (Mechanisms for Formation) and select the correct answer using the codes given below the lists :

List I (Types of Cloud)

A. Convective cloud

- B. Layer cloud
- C. Orographic cloud
- D. Funnel cloud
- List II (Mechanisms for Formation)
- 1. Forced lifting of stable air
- 2. Adiabatic expansion and cooling due to rapid local reduction in pressure
- 3. Local ascent of warm, buoyant air parcel in a conditionally unstable environment
- 4. Forced lifting of air as it passes over mountains or hills

91. Match List I (Cloud) with List II (Characteristics) and select the correct answer using the codes given below the lists :

List I (Cloud)	List II (Characteristics)
A. Cirrus	1.Rain giving
B. Stratus	2. Feathery appearance
C. Nimbus	3. Vertically growing
D. Cumulus	4.horizontally spreading

92. Warming in the Earth's stratosphere is mainly caused by

- (a) Release of latent heat energy during condensation
- (b) Frictional heating caused by meteorites
- (c) Chemical reaction between ozone and chlorofluorocarbons
- (d) Absorption of solar radiation by ozone
- 93. The blueness of the sky is mainly due to what?
- 94. Laterite is produced by
 - (a) Hydration and carbonation
 - (b) Hydrolysis and oxidation
 - (c) Leaching and oxidation
 - (d) Hydration and calcification
- 95. Between which parallels are major deserts located?

96. Explain the following:

- a) Hamada
- b) Reg
- c) Erg
- 97. What is a Wadi?
- 98. What is uvala?
- 99. What is dolomite?
- 100. What is a Karst region?