

COMMON P. G. ENTRANCE TEST – 2020

Test Booklet No. :

**DEPT. OF HIGHER EDUCATION, GOVT. OF ODISHA
TEST BOOKLET**

Subject Code **21**

Subject **GEOGRAPHY**

Time Allowed : **90 Minutes**

Full Marks : **70**

: INSTRUCTIONS TO CANDIDATES :

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. You have to enter your **Hall Ticket No.** on the Test Booklet in the Box provided alongside. **DO NOT** write *anything else* on the Test Booklet.
3. **YOU ARE REQUIRED TO FILL UP & DARKEN HALL TICKET NO. & TEST BOOKLET NO. IN THE ANSWER SHEET AS WELL AS FILL UP TEST BOOKLET SERIAL NO. & ANSWER SHEET SERIAL NO. IN THE ATTENDANCE SHEET CAREFULLY. WRONGLY FILLED UP ANSWER SHEETS ARE LIABLE FOR REJECTION AT THE RISK OF THE CANDIDATE.**
4. **This Test Booklet contains 70 items (questions). Each item (question) comprises four responses (answers). You have to select the correct response (answer) which you want to mark (darken) on the Answer Sheet. In case, you feel that there is more than one correct response (answer), you should mark (darken) the response (answer) which you consider the best. In any case, choose ONLY ONE response (answer) for each item (question).**
5. You have to mark (darken) all your responses (answers) **ONLY** on the **separate Answer Sheet** provided by using **BALL POINT PEN (BLUE OR BLACK)**. See instructions in the Answer Sheet.
6. All items (questions) carry equal marks. All items (questions) are compulsory. Your total marks will depend only on the number of correct responses (answers) marked by you in the Answer Sheet. **There is no negative marking.**
7. **After you have completed filling in all your responses (answers) on the Answer Sheet and after conclusion of the examination, you should hand over to the Invigilator the Answer Sheet issued to you. You are allowed to take with you the candidate's copy / second page of the Answer Sheet along with the Test Booklet, after completion of the examination, for your reference.**
8. Sheets for rough work are appended in the Test Booklet at the end.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

1. Which one of the following is the correct average range of worldwide variations in sea water salinity ?

(A) 34% to 37%

(B) 27% to 29%

(C) 37% to 39%

(D) 21% to 26%

2. Match the list -I with the list – II and select the correct answer from the code given below :

List – I

List – II

(a) Glacial

(i) Plunge Pool

(b) Marine

(ii) Yardangs

(c) Fluvial

(iii) Arate

(d) Aeolian

(iv) Tombolo

Code :

(a) (b) (c) (d)

(A) (ii) (i) (iii) (iv)

(B) (iv) (ii) (i) (iii)

(C) (iii) (iv) (ii) (i)

(D) (iii) (iv) (i) (ii)

3. Which one of the following sequences of land use according to Von Thunen's model is correct from central city to the periphery ?

(A) Market gardening and fresh milk, firewood and lumber, intensive crop farming

(B) Firewood and lumber, intensive crop farming, market gardening and fresh milk

(C) Intensive crop farming, market gardening and fresh milk, firewood and lumber

(D) Market gardening and fresh milk, intensive crop farming, firewood and lumber

4. Ecological Niche refers to :

(A) Interaction between man and environment

(B) The functional role of an organism in the ecosystem

(C) Interdependence of man and plant

(D) None of the above

5. Which of the following occupation is classified as secondary activity ?
 (A) Carpenter (B) Coal mixer
 (C) School teacher (D) Farmer
6. What is the type of climate of India according to Koppen's Climatic Classification ?
 (A) Et (B) Am
 (C) Bwh (D) Csa
7. The projection in which shape is preserved is called as :
 (A) Azimuthal projection (B) Orthographic projection
 (C) Conformal projection (D) Gnomonic projection
8. Which of the following is the correct formula for Spearman's Rank Correlation Coefficient :
 (A) $r = 1 - \frac{6 \sum_{i=1}^n d^2}{n^3 - n}$ (B) $r = \sigma_x - \frac{6 \sum_{i=1}^n d^3}{n^3 - n}$
 (C) $r = 1 - \frac{6 \sum_{i=1}^n d^2}{n^3 - n}$ (D) $r = 1 - \frac{6 \sum_{i=1}^n d^2}{n - n^3}$
9. "The dominant idea of all geographical progress is that of terrestrial unity." This statement is attributed to :
 (A) Friedrich Ratzel (B) Vidal-de-la-Blache
 (C) Richard Hartshorne (D) Jean Brunhes
10. Which one of the following altitudes belongs to sun synchronous polar orbit ?
 (A) 30000 to 36000 km (B) 2000 to 6000 km
 (C) 300 to 1000 km (D) 5000 to 15000 km
11. The term adiabatic change of temperature stands for :
 (A) Fall of temperature after precipitation
 (B) Heating and cooling of an ascending or descending air through compression of expansion
 (C) Heating of ascending air
 (D) Cooling of descending air

12. The normal atmospheric pressure at sea level is :
- (A) 920mb (B) 960mb
(C) 1003mb (D) 1013mb
13. The controversial Sindol hydro-power project is located in which among the following states of India ?
- (A) Maharastra (B) Himachal Pradesh
(C) Arunachal Pradesh (D) Odisha
14. Who postulated the concept of horizontal displacement of tectonic movement ?
- (A) F. B. Tayler (B) Lothian Green
(C) Gregory (D) Tozo Wilson
15. The direction of a horizontal line on an inclined rock strata is a :
- (A) Dip (B) Strike
(C) Syncline (D) Anticline
16. Gutenberg discontinuity is found between the :
- (A) Crust and mantle
(B) Mantle and core
(C) Upper core and lower core
(D) Upper mantle and lower mantle
17. Which of the following is the state has negative population growth is according to Census 2011 ?
- (A) Kerala
(B) Nagaland
(C) Goa
(D) Tamil Nadu
18. The greatest share of fisheries comes from :
- (A) Deep seas
(B) Continental shelves
(C) Deep ocean trenches
(D) Fresh waters

19. Green Revolution is a technological package, consisting of :

1. High yielding variety of seeds
2. Land reforms
3. Assured irrigation facility
4. Use of chemical fertilizers

Code:

- (A) 1, 2 and 3 are correct
(B) 2, 3 and 4 are correct
(C) 1, 3 and 4 are correct
(D) Only 3 is correct

20. Match list-I with list-II and select the answer from the given code :

List - I

List - II

- | | |
|--------------|---------------------|
| (a) Prairies | (i) Asia |
| (b) Veldt | (ii) South America |
| (c) Steppes | (iii) North America |
| (d) Pampas | (iv) Africa |

Code :

- (a) (b) (c) (d)
(A) (i) (ii) (iii) (iv)
(B) (iii) (iv) (i) (ii)
(C) (iv) (iii) (i) (ii)
(D) (ii) (iii) (i) (iv)

21. Who developed the cumulative causation theory in 1956 ?

- (A) Boudeville (B) Gunnar Myrdal
(C) Francois Perroux (D) Rostow

22. Which one of the following is an example of epigenetic (discordant) drainage ?

- (A) Godavari (B) Krishna
(C) Satluj (D) Cauveri

23. Which among the following soil is predominantly found in Rarh Region of West Bengal ?
- (A) Alluvial Soil (B) Red Soil
(C) Black Soil (D) Acid Sulfate Soil
24. Which of the following Indian States/UT has the maximum percentage of mangrove cover in the country ?
- (A) Gujarat
(B) West Bengal
(C) Andaman and Nicobar
(D) Odisha
25. Arrange the following maps in descending order of scale and select the correct answer from the codes given below :
- (i) Atlas map
(ii) Cadastral map
(iii) Topographical map
(iv) Wall maps
- Code :**
- (A) (ii), (iii), (iv), (i) (B) (i), (iv), (iii), (ii)
(C) (i), (ii), (iii), (iv) (D) (iv), (iii), (ii), (i)
26. Which one of the following equations represents a true mathematical properties of mean ?
- (A) $\Sigma(X - \bar{X}) = \text{minimum}$
(B) $\Sigma(X - \bar{X}) = 0$
(C) $\Sigma(X - \bar{X}) = \text{maximum}$
(D) $\Sigma(X - \bar{X}) = \text{infinite}$
27. Who propounded the Demographic Transition model of population ?
- (A) Malthus
(B) Thompson and Notestein
(C) Dr. D. R. Khuller
(D) Karl Marx and William Churchill Semple

28. Match the List - I with List - II and select the correct answer from the code given below :

List - I (Emitter)	List - II (Emitted Products)
(a) Decaying plants	(i) Carbon monoxide
(b) Volcanoes	(ii) Salt spray
(c) Ocean	(iii) Hydrogen sulphide
(d) Forest fires	(iv) Sulphur oxides

Code:

- (a) (b) (c) (d)
(A) (iii) (iv) (i) (ii)
(B) (iii) (iv) (ii) (i)
(C) (iii) (ii) (iv) (i)
(D) (ii) (iii) (i) (iv)
29. The Organic Theory of state was propounded by :
(A) Ratzel (B) Mackinder
(C) Isaiah Bowman (D) Haushoffer
30. Arrange the following Indian Cities from most populated to least populated according to Census 2011?
(i) Bangalore
(ii) Hyderabad
(iii) New Delhi
(iv) Mumbai
(A) (iv) – (iii) – (ii) – (i) (B) (iv) – (iii) – (i) – (ii)
(C) (iii) – (iv) – (ii) – (i) (D) (iii) – (iv) – (i) – (ii)
31. Darwin's subsidence theory is related to :
(A) Marine terraces (B) Coral reefs
(C) Cycle of erosion (D) Tides
32. First Satellite of NASA was :
(A) Sputnik 2 (B) Sputnik 1
(C) Explorer 1 (D) Terra 1

33. Slope replacement model was propounded by :
- (A) Wood (B) Davis
(C) Penk (D) Strahler
34. Who among the following scholars laid down the foundation of dichotomy of general versus special geography ?
- (A) Immanuel Kant
(B) Sebastian Munster
(C) Bernhard Varenius
(D) Peter Apian
35. Which of the following is not a Green-house gas ?
- (A) CO (B) CO₂
(C) CH₄ (D) Water Vapor
36. Which one of the following terms is appropriate for the mixing zone of two biomes ?
- (A) Environment (B) Ecology
(C) Ecosound (D) Ecotones
37. The following question has two set of statements. One labelled as Assertion (A) and the other labelled as Reason (R). Choose your answer from the codes given.
- Assertion (A) : The troposphere is the dense lower part of the atmosphere in which all the weather phenomenon likes condensation and storms occur.
- Reason (R) : In troposphere the atmospheric temperature decreases with altitude.
- Code :**
- (A) Both (A) and (R) are true and (R) is the correct explanation of (A)
(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
(C) (A) is true, but (R) is false
(D) (A) is false, but (R) is true
38. Which of the following is not a type of volcano ?
- (A) Strombolian (B) Pelean
(C) Volcanian (D) Indonesian

39. Match List-I with List-II and select the correct answer by using the codes given below :

List – I

List – II

- | | |
|-----------------|-----------------------------------|
| (i) Planimeter | (a) area measure of a map |
| (ii) Pantograph | (b) elevation of land surface |
| (iii) Barometer | (c) map reduction and enlargement |
| (iv) Clinometer | (d) air pressure of a place |

Code :

- | | | | |
|----------|-------|------|-------|
| (a) | (b) | (c) | (d) |
| (A) (ii) | (iii) | (iv) | (i) |
| (B) (i) | (iv) | (ii) | (iii) |
| (C) (ii) | (iv) | (i) | (iii) |
| (D) (i) | (iii) | (iv) | (ii) |

40. Which one of the following scales is correctly measure the rank-size distribution of settlements ?

- | | |
|--------------|-------------|
| (A) Nominal | (B) Ordinal |
| (C) Interval | (D) Ratio |

41. Which of the following is a non-point source of water pollution ?

- (A) Factories
- (B) Sewage treatment plants
- (C) Urban and suburban runoffs
- (D) All of the above

42. The approach that some of the geographical facts according to Ritter, cannot be explained scientifically, is termed as :

- | | |
|------------------|----------------|
| (A) Ecological | (B) Regional |
| (C) Teleological | (D) Locational |

43. Which one of the following sequences is the correct one in a littoral zone from land to sea ?

- (A) Foreshore, Backshore, Nearshore, Offshore
- (B) Backshore, Foreshore, Nearshore, Offshore
- (C) Offshore, Nearshore, Foreshore, Backshore
- (D) Nearshore, Offshore, Backshore, Foreshore

44. Which one of the following instrument is used for determination of degree of stability or instability of an air parcel ?
- (A) Viscometer (B) Radiosoundes
(C) SONAR (D) pH meter
45. Name the part of Himalaya extending from river Sutlej to Kali in the Physiographic division of the Himalayan Mountain ?
- (A) Nepal Himalaya (B) Punjab Himalaya
(C) Kashmir Himalaya (D) Kumaon Himalaya
46. Which one of the following winds usually blows in the Zone of Hadley Cell ?
- (A) Monsoon winds (B) Trade winds
(C) Westerlies (D) Polar winds
47. 'Mid-Oceanic Ridge' is the result of which type of plate movement ?
- (A) Transverse (B) Divergent
(C) Convergent (D) Folding
48. Which one is the best grade of coal among the following ?
- (A) Bituminous (B) Anthracite
(C) Lignite (D) Peat
49. Cephalic index, which is to classify human races, is calculated as :
- (A) Ratio between the length and breadth of the nose
(B) Ratio between the length of head and weight of human body
(C) Ratio between flatness and length of the head
(D) Ratio between breadth and length of the head
50. A map with the scale of 1:50000 is enlarged to 5-times, which one of the following scales is correct for the enlarged map ?
- (A) 1: 2500 (B) 1: 250000
(C) 1: 100000 (D) 1: 10000
51. Which of the following option resembles correlation coefficient on the basis of value of "r" ?
- (A) $+1.0 \geq r \leq -1.0$ (B) $+1.0 \geq r \geq -1.0$
(C) $+1.0 \leq r \geq -1.0$ (D) $+1.0 \leq r \leq -1.0$

52. Among the following scholars who coined the term 'Cosmography' and then divided it into 'Uranography' and Geography :

- (A) Ritter (B) Peschal
(C) Humboldt (D) Verinius

53. What is the abbreviation of GPS ?

- (A) Global Positioning System
(B) Geographic Positioning System
(C) Geodetic Positioning System
(D) Generic Precise System

54. The concept of sustainable development rests on the following principles :

- (A) Intergeneration transferability
(B) Social justice
(C) Transfrontier responsibility
(D) Intergeneration transferability, social justice, trans-frontier responsibility

55. 'Montreal Protocol' is related to :

- (A) Global Warming
(B) Ozone Depletion
(C) Air Pollution
(D) Water Pollution

56. Salinity of water increases when :

- (A) Evaporation is low (B) Wind velocity is low
(C) Rainfall is low (D) Humidity is low

57. Which of the following pairs is correctly matched ?

- (a) BWh = Hot desert climate
(b) ET = Ice cap climate
(c) Cwb = Subtropical highland climate
(d) Cfb - Temperate oceanic climate

Select the correct answer :

- (A) (a), (b), (c) and (d) (B) (a), (c) and (d)
(C) (a) and (d) (D) (a) and (b)

65. Which of the following represent a process of chemical weathering ?
- (A) Thermal expansion and contraction
 - (B) Hydration and Hydrolysis
 - (C) Mass Exfoliation
 - (D) Frost Action and Crystal Growth
66. Which one of the following groups of natural elements in living matters make up more than 99% of Earth's biomass ?
- (A) S, H, Na
 - (B) H, O, C
 - (C) N, Ca, K
 - (D) H, Ca, N
67. Paternoster lakes are :
- (A) Lakes formed on glacial stairways
 - (B) Lakes having volcanic origin
 - (C) Lakes formed by a shallow stretch of water caused by sea erosion
 - (D) Crescent shaped lakes formed due to cut-off of a river meander
68. A reef separated from the main land or inland shore by a deep lagoon is known as :
- (A) Fringing Reef
 - (B) Atoll Reef
 - (C) Barrier Reef
 - (D) Patch Reef
69. Which one of the following sediment deposits covers the largest percentage of the ocean floor ?
- (A) Terrigenous
 - (B) Cosmogenous
 - (C) Biogenous
 - (D) Hydrogenous
70. Which of the following is a cold wind ?
- (A) Foehn
 - (B) Punas
 - (C) Sirroco
 - (D) Chinook



SPACE FOR ROUGH WORK

58. Which state among the following has the highest reserves of coal in India ?
- (A) Chhattisgarh (B) West Bengal
(C) Odisha (D) Madhya Pradesh
59. According to Wentworth's method : $\theta = \tan^{-1} \frac{N \times 1}{3361}$, the variable 'T' means :
- (A) The number of crossing
(B) The hachures interval
(C) The contour interval
(D) The grids interval
60. Flat-topped sub-marine mountains are called :
- (A) Sea mounts (B) Abyssal mounts
(C) Guyots (D) Sea Volcanoes
61. Which one of the following states has the highest sex ratio according 2011 census ?
- (A) Andhra Pradesh (B) Chhattisgarh
(C) Meghalaya (D) Manipur
62. India shares highest boarder length with which neighbouring country ?
- (A) Pakistan (B) Nepal
(C) Bangladesh (D) China
63. When did the first five-year plan started in India?
- (A) 1961- 1966
(B) 1956-1961
(C) 1951-1956
(D) 1947-1952
64. What is the formula of standard deviation of ungrouped data ?

(A) $\sqrt{\frac{\sum(x-\bar{x})^2}{n}}$

(B) $\sqrt{\frac{\sum f(x-\bar{x})^2}{n}}$

(C) $\frac{\sum(x-\bar{x})^2}{n}$

(D) $\sqrt{\frac{\sum|x-\bar{x}|}{n}}$