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TEST BOOKLET

Sl. No. : **0054**

Subject : **GEOGRAPHY**

Post : **Lab. Asst.-cum-Storekeepers**

**WRITTEN EXAMINATION FOR RECRUITMENT OF NON-TEACHING POSTS
(JUNIOR ASSISTANTS, PHYSICAL EDUCATION TEACHERS(P.E.Ts) AND
LABORATORY ASSISTANT-CUM-STOREKEEPERS) IN GOVT. DEGREE
COLLEGES, ODISHA**

Time Allowed : 2 Hours

Maximum Marks: 150

: INSTRUCTIONS TO CANDIDATES :

1. **IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET CONTAINS 16 PAGES AND 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 **Roll No.** on the Test Booklet in the Box provided alongside. **DO NOT** write anything else on the Test Booklet.

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3. The Test Booklet contains **100** questions. Each question comprises four options. You have to select the correct answer which you want to mark (darken) on the OMR Answer Sheet. In any case, choose **ONLY ONE** answer for each question. If more than one answer is darkened, it will be considered wrong.
4. You have to mark (darken) all your answers only on the **OMR Answer Sheet using BLACK BALL POINT PEN** provided by the State Selection Board. You have to do rough work only in the space provided at the end of the Test Booklet. See instructions in the OMR Answer Sheet.
5. All questions carry equal marks. While **1.5** marks will be awarded for each correct answer, each wrong answer will result in negative marking of **0.50** mark.
6. Before you proceed to mark (darken) the answers in the OMR Answer Sheet to the questions in the Test Booklet, you have to fill in some particulars in the OMR Answer Sheet as per the instructions in your Admit Card.
7. On completion of the Examination, you should hand over the **original copy of OMR Answer Sheet** issued to you to the Invigilator before leaving the Examination Hall. You are allowed to take with you the candidate's copy (second copy) of the OMR Answer Sheet along with the Test Booklet for your reference.

Candidate's full signature

Invigilator's signature

P.T.O.

SEAL

1. Which of the following evidences helped in the reestablishment of the Continental Drift Hypothesis?

(A) Biological evidences	(B) Geological evidences
(C) Jig-saw-fit	(D) Palaeomagnetic evidences
2. According to Alfred Wegener, during which geological period did the supercontinent "Pangaea" exist?

(A) Cambrian	(B) Carboniferous
(C) Devonian	(D) Silurian
3. Which of the following is not a characteristic of the convergent plate boundaries?

(A) Mountain building	(B) Plate subduction
(C) Transform faulting	(D) Volcanism
4. Which of the following minor lithospheric plates does not form a boundary with the Pacific Plate?

(A) The Caribbean Plate	(B) The Cocos Plate
(C) The Nazca Plate	(D) The Philippine Plate
5. What is the nature of movement of the Indian plate?

(A) Eastward	(B) Northward
(C) North-westward	(D) Westward
6. "Mountains have roots." Whose theory of Isostasy emphasizes upon this?

(A) Airy	(B) Dutton
(C) Hayford and Bowie	(D) Pratt
7. The 'concept of Isostasy' is primarily the contribution of Sir Archdeacon Pratt. He was a –

(A) Geographer	(B) Geologist
(C) Mathematician	(D) Surveyor
8. Which of the following processes of mass wasting is primarily responsible for the formation of talus slopes at the foot of the cliffs?

(A) Debris flows	(B) Landslides
(C) Rockfalls	(D) Soil creep

9. Which of the following processes of physical weathering is active in the high mountain areas?
 - (A) Block separation
 - (B) Exfoliation
 - (C) Freezing and thawing
 - (D) Granular disintegration
10. Who propounded the concept of 'cycle of erosion'?
 - (A) G.K. Gilbert
 - (B) J.W. Powell
 - (C) W. Penck
 - (D) W.M. Davis
11. The poorly sorted deposits near the base of the strong slopes driven by the action of gravity is known as :
 - (A) Alluvium
 - (B) Colluvium
 - (C) Lacustrine
 - (D) Moraine
12. At which stage of weathering in the process of soil formation does the decomposition reach the penultimate stage with only few resistant minerals surviving?
 - (A) Final
 - (B) Juvenile
 - (C) Senile
 - (D) Virile
13. Which soil found in the Deccan Plateau in India has been formed due to decomposition of volcanic rocks?
 - (A) The Karewas
 - (B) The Kari
 - (C) The Regur
 - (D) The Terai
14. Which of the following erosional actions is not a characteristic of running water?
 - (A) Abrasion
 - (B) Corrosion
 - (C) Hydraulic action
 - (D) Plucking
15. Which of the following types of landforms is formed by wind deposition?
 - (A) Alluvial plain
 - (B) Lacustrine plain
 - (C) Loess plain
 - (D) Till Plain
16. "Serrated ridges" are also known as –
 - (A) Aerates
 - (B) Cirques
 - (C) Eskers
 - (D) Horns
17. Which of the following landform features is produced by coastal erosion?
 - (A) Drumlin
 - (B) Notch
 - (C) Popcorn
 - (D) Yardang

18. Which of the following erosional features is otherwise called the "sheep rock"?
- (A) Gara (B) Monadnock
(C) Roche Moutonnee (D) Stalagmite
19. Which of the following pairs is incorrectly matched?
- (A) Aeolian topography – U Shaped valley (B) Fluvial topography – V shaped valley
(C) Glacial topography – Hanging Valley (D) Karst topography – Blind valley
20. A large delta has been formed by the Mahanadi, Brahmani and Baitarani Rivers together in the Odisha coast. It is a/an –
- (A) Arcuate delta (B) Bird's-foot delta
(C) Composite delta (D) Cuspate delta
21. Which type of beaches usually form in the estuaries?
- (A) Muddy beaches (B) Pebbly beaches
(C) Rocky beaches (D) Sandy beaches
22. In which of the following areas of India is 'radial pattern' drainage noticed?
- (A) The Amarkantak Plateau (B) The Aravalli Hills
(C) The Meghalaya Plateau (D) The Sahyadri Mountains
23. "The rate at which the solar radiation is received by the earth-atmosphere system" is known as –
- (A) Albedo (B) Radiation window
(C) Short wave radiation (D) Solar constant
24. At which of the following parallels is the "Thermal Equator" located?
- (A) 10°N (B) 5°N
(C) 0° (D) 5°S
25. The area bounded by the Tropic of Capricorn and the Antarctic circle is called –
- (A) The North Temperate Zone (B) The South Frigid Zone
(C) The South Temperate Zone (D) The Torrid Zone

26. Which of the following marginal gases constitutes only 0.0417% of the entire atmosphere (dry air)?
- (A) Argon (B) Carbon dioxide
(C) Helium (D) Neon
27. In which layer of the atmosphere there is high concentration of ions?
- (A) Troposphere (B) Stratosphere
(C) Mesosphere (D) Thermosphere
28. What is the Normal Lapse Rate noticed within the Troposphere?
- (A) 3.4°C/Km (B) 4.6°C/Km
(C) 6.4°C/Km (D) 7.8°C/Km
29. Which of the following measures of humidity is expressed in terms of percentage?
- (A) Absolute Humidity (B) Mass Mixing Ratio
(C) Relative Humidity (D) Specific Humidity
30. The normal barometric pressure at Puri is approximately –
- (A) 990 mb (B) 1000 mb
(C) 1010 mb (D) 1020 mb
31. In which among the following locations in India, rice will take the maximum time to cook?
- (A) Kanyakumari (B) Dehradun
(C) Kedarnath (D) Nagpur
32. Which of the following instruments is used to measure wind speed?
- (A) Anemometer (B) Barometer
(C) Hygrometer (D) Wind vane
33. Which pressure belt in the world is known as the “Horse Latitude”?
- (A) Equatorial Low (B) Mid-latitude Low
(C) Polar High (D) Sub-tropical High

34. Which one of the following is a periodic wind noticed on the earth surface?
- (A) The Monsoon (B) The Polar Easterly
(C) The Trade Wind (D) The Equatorial Westerly
35. Which of the following local winds descends downwards along the valley sides towards the valley bottom in the night?
- (A) Anabatic wind (B) Anti-valley wind
(C) Katabatic wind (D) Mountain wind
36. In which of the following areas storm with rainfall occurs in the summer afternoons due to Nor'westers?
- (A) The Assam valley (B) The Kaveri delta
(C) The Konkan coast (D) The Upper Ganga Plains
37. Which of the following local winds is different from the other three in terms of its thermal properties?
- (A) Bora (B) Khamsin
(C) Harmattan (D) Loo
38. Which of the following relief features in the oceans is associated with plate subduction?
- (A) Abyssal hill (B) Mid-oceanic ridge
(C) Oceanic trench (D) Submarine canyon
39. The Sunda trench is located adjacent to the –
- (A) Indonesian archipelago (B) Japanese archipelago
(C) Kurile archipelago (D) West Indian archipelago
40. Which of the following volcanic islands is different from the other three in terms of its location?
- (A) Azores (B) Canary
(C) Hawaii (D) Iceland
41. The Carlsberg Ridge is situated in the –
- (A) Arctic Ocean (B) Atlantic Ocean
(C) Indian Ocean (D) Pacific Ocean

42. Which of the following types of breaking sea waves develops on the gently sloping shorelines?
 (A) Collapsing waves (B) Plunging waves
 (C) Spilling waves (D) Surging waves
43. Which of the following ocean currents in Indian Ocean is characteristically similar to the Benguela current?
 (A) The Agulhas Current (B) The Madagascar Current
 (C) The Somali Current (D) The West Australian Current
44. Which of the following ocean currents is associated with upwelling?
 (A) The Brazil Current (B) The Gulf Stream
 (C) The East Australian Current (D) The Humboldt Current
45. Which of the following ocean currents can be distinguished from the other three on the basis of thermal properties?
 (A) The Greenland Current (B) The Kuroshio current
 (C) The Labrador Current (D) The Oyashio Current
46. Which Theory of Tides has been propounded by P S Laplace?
 (A) Dynamic Theory (B) Equilibrium Theory
 (C) Progressive Wave Theory (D) Stationary Wave Theory
47. What is the time gap between two successive high tides?
 (A) 12 hours (B) 12 hours 26 minutes
 (C) 24 hours (D) 24 hours 52 minutes
48. In which of the following rivers of India 'Tidal bore' is prominently noticed?
 (A) The Godavari (B) The Hooghly
 (C) The Narmada (D) The Pennar
49. How many parallels of latitude can be drawn on the globe at an interval of one degree?
 (A) 178 (B) 179
 (C) 180 (D) 181
50. Select the appropriate sequence of the phrases given hereunder to arrive at a correct definition of "Longitude".
 (a) Longitude of a place is (b) the angular distance; (c) between the place and the equator;
 (d) between the place and the prime meridian; (e) at the center of the earth; (f) at the center of its latitudinal circle.—
 (A) (a); (b); (c); (e) (B) (a); (b); (c); (f)
 (C) (a); (b); (d); (e) (D) (a); (b); (d); (f)

51. Identify the incorrect statement from among the following.
- (A) All meridians are half circles.
 - (B) All parallels except the equator are small circles.
 - (C) The meridians are parallel to each other
 - (D) Two opposite meridians together are apparently equal to the circumference of the equator.
52. The circumference of which of the following parallels of latitude in either of the hemispheres is apparently half the circumference of the equator?
- (A) 30°
 - (B) 45°
 - (C) 60°
 - (D) 75°
53. Consider the latitude and longitude of four locations given in the following options. Which one of these is not located in the mainland India?
- (A) 8° N and 78° E
 - (B) 27° N and 71° E
 - (C) 27° N and 92° E
 - (D) 34° N and 77° E
54. The Prime Meridian passes through which of the following European nations?
- (A) Italy
 - (B) Netherlands
 - (C) Norway
 - (D) Spain
55. Which among the following is not a measure of central tendency?
- (A) Mean
 - (B) Median
 - (C) Mode
 - (D) Variance
56. The following table presents the size class distribution of villages in an area. Which of these class-groups can be identified as the median class?
- | | | | | | |
|----------------|---------|-----------|-----------|-----------|------------|
| Class Groups : | 0 – 200 | 200 – 400 | 400 – 600 | 600 – 800 | 800 – 1000 |
| Frequency : | 10 | 25 | 45 | 65 | 35 |
- (A) 200 – 400
 - (B) 400 – 600
 - (C) 600 – 800
 - (D) 800 – 1000
57. Find the mode of the following data and select the correct answer from among the given options.
- Data: 79, 26, 48, 75, 37, 57, 77, 56, 25, 64, 84, 42, 88, 45, 67, 39, 57, 98, 74, 59, 48, 82, 63, 29, 71, 61, 82, 39, 44, 72, 68, 49, 48, 57, 71, 82, 93, 71, 57
- (A) 48
 - (B) 57
 - (C) 71
 - (D) 82

58. Statistical measures are computed for the 'number of household' data of ten villages as given below. If, however after verification, the last two observations are rectified as 48 and 78 respectively, then which of the following measures is going to change?

Number of household Data : 48, 75, 37, 48, 77, 56, 25, 64, 84, 42

- (A) Mean (B) Median
(C) Mode (D) Range of data
59. The following table presents the mean and standard deviation of annual rainfall (in cm) at four stations in India, calculated for a period of 30 years. Which of the stations can be said to be receiving the most erratic rainfall among the four?

Stations	A	B	C	D
Mean	80	125	250	500
Standard Deviation	10	20	25	60

- (A) Station A (B) Station B
(C) Station C (D) Station D
60. Which of the following measures of dispersion is expressed as "the percentage share of standard deviation to that of mean"?

- (A) Coefficient of Variation (B) Mean Deviation
(C) Quartile Deviation (D) Variance
61. Calculate the mean deviation of the following data series and select the correct answer from among the given options.

Data Series : 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

- (A) 0.00 (B) 18.66
(C) 27.27 (D) 30.00
62. A student computed product moment correlation coefficients between the dependent variable Y and the independent variables – X_1 , X_2 , X_3 and X_4 , which are given in the options below. Which of the same is apparently erroneous?

- (A) Y with X_1 : -0.894 (B) Y with X_2 : 0.012
(C) Y with X_3 : 0.734 (D) Y with X_4 : 1.124

63. Which one of the following diagrams is suitable for bivariate analysis?
- (A) The Frequency curve (B) The Histogram
(C) The Ogive (D) The Scattergram
64. Which one of the following has a typologically different environment from the other three?
- (A) The Amazonia (B) The Antarctica
(C) The London Conurbation (D) The Sahara desert
65. What type of hazard is the "Bhopal Gas Tragedy"?
- (A) Biological (B) Chemical
(C) Physical (D) Psychological
66. Which of the following has characteristically a different biotic environment than the other three?
- (A) The Atacama (B) The Kalahari
(C) The Pampas (D) The Thar
67. Which among the following factors is the most significant one in causing Tsunamis in the oceans?
- (A) Glacier calving (B) Landslide
(C) Seismicity (D) Volcanic eruption
68. What are the tropical cyclones called in Western Australia?
- (A) Cyclone (B) Hurricane
(C) Typhoon (D) Willy-willies
69. Detritivores are –
- (A) Autotrophs (B) Carnivores
(C) Decomposers (D) Herbivores
70. Which of the following trophic levels has the maximum number of individuals?
- (A) Producers (B) Primary Consumers
(C) Secondary Consumers (D) Tertiary Consumers

71. Which of the following is the producer in a pond ecosystem?
 (A) Phytoplankton (B) Shrimp
 (C) Small fry (D) Zooplankton
72. Which of the following natural cycles is directly propelled by sunlight?
 (A) Carbon cycle (B) Nitrogen cycle
 (C) Phosphorous cycle (D) Sulphur cycle
73. Which of the following is not a bio-geochemical cycle?
 (A) Nitrogen cycle (B) Oxygen cycle
 (C) Ozone cycle (D) Water cycle
74. Which of the following roles is played by lightning in the Nitrogen Cycle?
 (A) Ammonification (B) Denitrification
 (C) Nitrification (D) Nitrogen fixation
75. Which of the following best describes the symbiotic relationship between two organisms?
 (A) A living species that lives by feeding upon the detrital remains of the other organisms
 (B) A living species that benefits at the expense of other species
 (C) Two living species deriving benefit from each other
 (D) Two mutually independent organisms that share the same habitat
76. Halocarbons (CFCs) are constituted of –
 (A) Carbon, Chlorine and Fluorine (B) Carbon, Chlorine and Oxygen
 (C) Carbon, fluorine and Oxygen (D) Chlorine, fluorine and Oxygen
77. Which of the following pairs of substances are primarily responsible for the process of 'Eutrophication' in the water bodies?
 (A) Calcium and Nitrogen (B) Carbon and Potash
 (C) Nitrogen and Phosphorous (D) Potash and Phosphorous
78. Three of the following types of wastes can be categorized as 'hazardous wastes'. Identify the one which is non-hazardous –
 (A) Electrical appliances (B) Fertilisers
 (C) Food and kitchen waste (D) Paints and chemicals
79. "The resources that occur everywhere, e.g. air", are better known as –
 (A) Commonalities (B) Rarities
 (C) Ubiquities (D) Uniquities

80. Distinguish the resource from the other three on the basis of exhaustibility?
- (A) Coal (B) Ground water
(C) Iron ore (D) Sunshine
81. Which of the following is typologically a 'community resource' in India?
- (A) Cremation ground (B) Homestead
(C) Large reservoir (D) Stream course
82. 'Until a value has been discovered along with the technical know-how to extract it from nature, an element in nature is neutral'. Who opined this?
- (A) Bowman (B) Hamilton
(C) Keynes (D) Zimmerman
83. The *relatively small-scale production of fruits, vegetables and flowers as cash crops*, frequently sold directly to consumers is known as –
- (A) Horticulture (B) Market gardening
(C) Mixed farming (D) Truck gardening
84. In which of the following areas of India 'Transhumance' is commonly noticed?
- (A) The Kashmir Himalayas (B) The Kutch Peninsula
(C) The Maikal Hills (D) The Western Ghats
85. Which of the Von Thunen's rings specializes in the production of perishable commodities?
- (A) First (B) Second
(C) Third (D) Fourth
86. Which location theorist postulated the concept of 'Locational Triangle'?
- (A) Hoover (B) Losch
(C) Smith (D) Weber
87. Under which of the following categories can the raw materials used in the heavy industries (e.g., bauxite or iron ore) categorised?
- (A) Fixed and Pure (B) Fixed and Weight losing
(C) Ubiquitous and Pure (D) Ubiquitous and Weight losing

88. Which of the following types of maps can be categorised as a 'cartogram'?
- Map of a continent showing political boundaries
 - Map of a country showing location of industries
 - Map showing the accessibility of a region
 - Map showing the physiography of an area
89. Which of the following graphical presentations helps in analyzing the cropping season vis-à-vis the climatic conditions?
- Climograph
 - Hythergraph
 - Ergograph
 - Line graph
90. The temperature of a place is above 60°F and the relative humidity below 40% throughout the year. Following Taylor's climograph, the climate of the place, can be categorised as –
- Keen
 - Muggy
 - Raw
 - Scorching
91. The imaginary line joining the places of equal rainfall on a map is known as –
- Isogon
 - Isohyet
 - Isoster
 - Isotach
92. Which of the following types of maps uses linear pattern symbolization?
- Contour map
 - Geological map
 - Population distribution map
 - Settlement location map
93. Which pattern of data is used for preparing the isopleth maps?
- Positional
 - Linear
 - Areal
 - Volumetric
94. For showing the spatial distribution of which of the following parameters of an area on the maps is the choropleth method **not** suitable?
- Literacy rate
 - Location of settlements
 - Road density
 - Yield rate of a crop

95. The following table presents the district-wise density of population (persons/Km²) in Odisha. Which technique of classification of data is most suitable for preparing a choropleth map showing the spatial distribution of population density?

District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Density	430	667	242	610	800	216	630	217	488	251	199	601	254	545	157
District	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Density	200	231	268	682	157	137	248	91	106	158	261	274	134	142	106

- (A) Location quotient (B) Median and quartiles
(C) Mean and standard deviation (D) Uniform classes
96. The literacy rate of which state in India is the highest among the states?
(A) Goa (B) Himachal Pradesh
(C) Kerala (D) Mizoram
97. Many people from the villages of Odisha migrate to Surat for working in the textile mills. This type of migration can be categorised as –
(A) Rural to rural (B) Rural to Urban
(C) Urban to rural (D) Urban to urban
98. Which among the following countries has witnessed negative growth of population during 2000-2010 period?
(A) China (B) Japan
(C) Russia (D) United States
99. The states with the highest percentage of urban population in India as per the 2011 Census, in descending order, are –
(A) Maharashtra, Tamil Nadu, Gujarat (B) Maharashtra, Tamil Nadu, Punjab
(C) Tamil Nadu, Maharashtra, Gujarat (D) Tamil Nadu, Maharashtra, Punjab
100. Which of the following countries is different from the other three in terms of the shape of its population pyramid?
(A) Canada (B) Germany
(C) Italy (D) Japan

SPACE FOR ROUGH WORK

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SEAL