## PUMDET-2017

Subject : GEOGRAPHY

Time Allowed: 1Hour 30 Minutes

Maximum Marks: 100

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Booklet No. .....

#### INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

- This question paper contains 50 MCQ type objective questions. Each question has four answer options given, viz. A, B, C and D.
- 2. Only one answer is correct. Correct answer will fetch full marks 2. Incorrect answer or any combination of more than one answer will fetch ½ mark. No answer will fetch 0 mark.
- 3. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C or D.
- 4. Use only Black/Blue ball point pen to mark the answer by complete filling up of the respective bubbles.
- 5. Mark the answers only in the space provided. Do not make any stray mark on the OMR.
- Write question booklet number and your roll number carefully in the specified locations of the OMR. Also fill appropriate bubbles.
- 7. Write your name (in block letter), name of the examination centre and put your full signature in appropriate boxes in the OMR.
- 8. The OMRs will be processed by electronic means. Hence it is liable to become invalid if there is any mistake in the question booklet number or roll number entered or if there is any mistake in filling corresponding bubbles. Also it may become invalid if there is any discrepancy in the name of the candidate, name of the examination centre or signature of the candidate vis-a-vis what is given in the candidate's admit card. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
- Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
- 10. Hand over the OMR to the invigilator before leaving the Examination Hall.

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- 1. Which of the following does not matches?
  - (A) William Bunge-Theoretical Geography
  - (B) David Harvey—Social Well being: A Spatial Perspective
  - (C) David Smith— Human Geography: A Welfare Approach
  - (D) R. Peet Modern Geographical Thought
- As opposed to the objective reality of nature used in Quantitative Revolution phase, the Behavioural geographers proposed subjective reality and further recognized
  - (A) Human action as determined by cognitive knowledge.
  - (B) Human being is economically rational.
  - (C) Human actions are determined by various agencies.
  - (D) Human action determined by nature.
  - 3. Which one of the following does not match?
    - (A) C. Sauer Cultural geography
    - (B) D. Hervey Radical geography
    - (C) F. Ratzel Political geography
    - (D) H. J. Johnston Political geography
- 4. Which one of the following books is not correctly matched with its author?
  - (A) All Possible World Preston E. James
  - (B) Ideology, Science and Human Geography— Isaiah Bowman
  - (C) Makers of Modern Geography R. E. Dickinson
  - (D) A Hundred Years of Geography T. W. Freeman
- 5. Who among the following is not associated with Structuralism?
  - (A) Louise Althuser
  - (B) Jean Piaget
  - (C) Harold Carter
  - (D) Roland Barthes

- 6. Which of the following was a brilliant contribution of the ancient India scientists?
  - (A) Invention of Zero
  - (B) Invention of Complex Number
  - (C) Calculus
  - (D) Matrix
- The subjugation of women by the men through societal hegemony is called
  - (A) Gender embodiment
  - (B) Women discrimination
  - (C) Patriarchy
  - (D) Gender relation
- 8. Which one of the following could be the best indicator of social-well being?
  - (A) Population growth rate
  - (B) Life-expectancy
  - (C) Migration Rate
  - (D) Urbanization rate
  - Which of the following is not true for Capitalism?
    - (A) The people united shall never be defeated.
    - (B) The freer the market, the freer the people.
    - (C) Consumption is the sole end and purpose of all production.
    - (D) The rise of fall of wages is common to all states or society.
  - 10. Which among the following is false?
    - (A) Chile and Argentina Antecedent Boundary
    - (B) Scotland and England Relic Boundary
    - (C) France and Germany Subsequent Boundary
    - (D) India and Myanmar Superimposed Boundary

1	<ol> <li>The growth of metropolitan cities is best explaine</li> </ol>	d
by	which combination of factors:	

- (I) Extension of spatial boundaries
- (II) Immigration
- (III) High birth rate
- (IV) Annexation of peripheral settlements
- (A) (I), (II), (III)
- (B) (I), (III), (IV)
- (C) (III), (IV), (I)
- (D) (I), (II), (IV)

## 12. Match List I with List II and select the correct answer from the codes given below:

List I

List II

- (a) Migration Theory
- (i) Edwin Cannon
- (b) Optimum Population Theory
- (ii) S. Stouffer
- (c) Demographic Transition Theory
- (iii) E. G. Ravenstein
- (d) Intervening Opportunities Theory
- (iv) W. Thompson

(iv)

(ii)

(i)

Codes

- (a) (iii)
- (b)
- (c) (d)
- (B) (iii)

(A)

- (i)
- (ii) (iv)
- (C) (iii)
- (i) (iv)
- (ii)
- (D) (iv)
- (i)
- (iii) (ii)

# 13. Which of the following states is the stage of population explosion?

- (A) Early expanding
- (B) Late expanding
- (C) High Stationary
- (D) Low Stationary

## The hexagonal market area, as proposed by Losch was modelled to ensure

- (A) the minimization of transportation cost.
- (B) the continuous capital flow.
- (C) the continuous market area.
- (D) the continuous supply of labour.

- 15. Which of the following is referred to as 'Buried sunshine'?
  - (A) Petroleum
  - (B) Gold
  - (C) Diamond
  - (D) Coal

## 16. Which of the following combination of statements are correct?

- 1. Lignite and low grade bituminous coal were formed during quaternary period.
- Dolomite is used as refractory material and flux in iron and steel industry.
- Solar energy, wind, hydel power and biogas are renewable resources
  - (A) 1 2 3
  - (B) 1 2
  - (C) 2 3
  - (D) 1 3
- 17. The location of paper industries is highly influenced by which one of the following factors?
  - (A) Transport connectivity
  - (B) Availability of capital
  - (C) Availability and nearness of raw material
  - (D) Nearness of market
- 18. The Gobind Ballabh Pant Sagar is associated with which multipurpose project?
  - (A) Bhakra-Nangal
  - (B) Rihand
  - (C) Hirakud
  - (D) Narmada
- 19. Which one of the following rivers does not originate from Tibet?
  - (A) Sutlej
  - (B) Jhelum
  - (C) Indus
  - (D) Brahmaputra

#### PUMDET17/GEOGRAPHY

- 20. A river channel which is perfectly rectangular in cross-section has a depth of 50m and a width of 1.5km. Compute its wetted perimeter at the bankfull stage of discharge.
  - (A) 1500m
  - (B) 7500m
  - (C) 1600m
  - (D) 75000m
- 21. Which of the following conditions, while discussing sinuosity indices, is never true?
  - (A) Valley Sinuosity Index = Channel Sinuosity Index
  - (B) Valley Sinuosity Index/Channel Sinuosity
    Index = 1
  - (C) Valley Sinuosity Index < Channel Sinuosity Index
  - (D) Valley Sinuosity Index > Channel Sinuosity
    Index
  - 22. The concept of the Graded Stream was given by
    - (A) G. K. Gilbert
    - (B) W. M. Davis
    - (C) J. W. Powell
    - (D) J. Playfair
- Anticlinal valleys and synclinal ridges would be symbolic of a landscape having undergone
  - (A) Exhumation
  - (B) Reversal of topography
  - (C) Downfaulting
  - (D) Upthrusting
- 24. The correct sequence of the following features towards sea from the coast is
  - (A) Berm, Low tide terraces, Long shore trough, Long shore Bar
  - (B) Long shore trough, Long shore Bar, Berm, Low tide terraces
  - (C) Long shore terraces, Berm, Long shore Bars, Long shore trough
  - (D) Long shore Bar, Low tide terraces, Berm, Long shore trough

- 25. The volcanoes that make up the Hawaiian Islands are the result of which process?
  - (A) Hot spot activity
  - (B) Seafloor spreading
  - (C) Rifting of continental plates
  - (D) Subduction of an ocean plate
- 26. Amount of force exerted on rock layers influences the way they
  - (A) vibrate
  - (B) collide
  - (C) bend
  - (D) subduct
- 27. What type of fault typically places older rocks over younger rocks?
  - (A) Thrust and Reverse
  - (B) Normal
  - (C) Strike-Slip
  - (D) Only Thrust
- 28. Which of the following lists of metamorphic rocks shows them in order of increasing metamorphic grade?
  - (A) Gneiss, Phyllite, Schist, Slate
  - (B) Slate, Phyllite, Schist, Gneiss
  - (C) Slate, Schist, Phyllite, Gneiss
  - (D) Phyllite, Slate, Schist, Gneiss
- 29. The volume of ocean water is  $1338 \times 10^6 \,\mathrm{km^3}$ . The runoff from rivers is  $44.7 \times 10^3 \,\mathrm{km^3/year}$  and the runoff from groundwater is  $2.2 \times 10^3 \,\mathrm{km^3/year}$ . The precipitation on the ocean is  $1270 \,\mathrm{mm/year}$ . The ocean area is  $361.3 \times 10^6 \,\mathrm{km^2}$ . The residence time of water molecules in the ocean (in years) is:
  - (A) 2646
  - (B) 1056
  - (C) 3467
  - (D) 987

- 30. The unit hydrograph has one unit of
  - (A) rainfall duration.
  - (B) direct runoff.
  - (C) the time base of direct runoff.
  - (D) peak discharge.
- 31. The presence of both water and ice in cloud gives it a unique precipitation making ability because
  - (A) presence of water naturally leads to the formation of raindrops.
  - (B) vapour pressure over ice is greater than vapour pressure over water.
  - (C) vapour pressure over water is greater than vapour pressure over ice.
  - (D) air saturates more easily in this condition.
- 32. A geological formation which is essentially impermeable for flow of water even though it may contain water in its pores is called
  - (A) Aquifer
  - (B) Aquifuge
  - (C) Aquitard
  - (D) Aquiclude
- 33. Which one of the following sets shows the correct soil order in sequence of increasing age?
  - (A) Entisol, ultisol, mollisol, alfisol
  - (B) Entisol, mollisol, alfisol, ultisol.
  - (C) Entisol, alfisol, ultisol, mollisol
  - (D) Entisol, ultisol, mollisol, alfisol
  - 34. Choose the correct answer

Species richness on Islands is affected by

- (I) island area.
- (II) distance between an island and original colonists.
- (III) degree of island isolation.
- (A) (II)
- (B) (II) and (III)
- (C) (I), (II) and (III)
- (D) (I) and (II)

- 35. Endemic species are
  - (A) species localized in a specific region.
  - (B) critically endangered species.
  - (C) rare species.
  - (D) cosmopolitan in distribution.
- 36. Conservation within the natural habitat is called
  - (A) Exsitu Conservation
  - (B) Insitu Conservation
  - (C) Invitro Conservation
  - (D) Invivo Conservation
- 37. Which of the following is an example of secondary atmospheric circulation?
  - (A) Polar westerlies
  - (B) Nor'wester
  - (C) Sea breeze
  - (D) Monsoon
- 38. Which of the following conditions is not required for development of tropical cyclone?
  - (A) A pre-existing, large-scale flow pattern
  - (B) Moist and unstable air
  - (C) Equatorial location
  - (D) Warm oceanic surface
- 39. Transportation of soil materials from upper horizon to lower horizon being carried in suspension by water is more appropriately termed as
  - (A) Leaching
  - (B) Lessivage
  - (C) Illuviation
  - (D) Mineralization

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- 40. The constant to be used for the computation of the Ruggedness Index in an Inch Sheet would be
  - (A) 5280
  - (B) 63360
  - (C) 1000
  - (D) 1720
- 41. The topographical sheet 73F/NE would be drawn at R.F.
  - (A) 1:1000
  - (B) 1:1000000
  - (C) 1:10000
  - (D) 1:100000
- 42. The representation of rhumb lines as straight segments thus conserving the angles with the meridians is a typical property of
  - (A) Peter's Projection
  - (B) Bonne's Projection
  - (C) Mercator Projection
  - (D) Molleweide's Projection
- 43. Remote sensing is an efficient way to collect data. Which of the following statements is true?
  - (A) If the pixel of resolution is small, relatively little information is recorded.
  - (B) The equipment is not limited to the visible spectrum—satellites can also measure heat.
  - (C) The first Landsat satellite for civilian uses was launched in 1990.
  - (D) Modern satellites for civilian uses can depict pixels 3 x 3 inches in size.
- If Spearman's Rank Correlation Co-efficient is
   then
  - (A) all the total variation is explained by the regression line.
  - (B) the rankings of the two variables partially agree.
  - (C) the rankings of the two variables totally different.
  - (D) the rankings of the two variables totally agree.

- 45. Choose the word that is most nearly opposite in meaning to the word in capital letter CENTRIFUGAL
  - (A) Centripetal
  - (B) Ephemeral
  - (C) Barometric
  - (D) Algebric
- 46. Choose the word that is most nearly similar in meaning to the word in capital letter AUXILIARY
  - (A) Righteous
  - (B) Ancillary
  - (C) Prospective
  - (D) Archaic
- 47. The following analogy question presents a related pair of words linked by a colon. Four pairs of words follow the linked pair. Choose the pair of words whose relationship is most like the relationship expressed in the original linked pair:

PAN: CAMERA

(A) Filter: Lens

(B) Charge : Battery

(C) Rotate: Periscope

(D) Ban: Book

48. The following sentence completion question contains two blanks. The blanks signify that a set of words has been left out. Below the sentence are four sets of words. Choose the set of words that best reflects the sentence's overall meaning.

The earth is a planet bathed in light; it is therefore
that many of the living organisms that have
evolved on the earth have \_\_\_\_\_ the biologically
advantageous capacity to trap light energy.

- (A) Anomalous; Endangered
- (B) Unsurprising; Developed
- (C) Predictable; Forfeited
- (D) Expectable; Relinquished

49. Complete the sentence using the correct preposition.	50. Complete the following sentence using the right set of words.
I have been waiting for you two hours.  (A) since (B) for (C) around (D) from	Each galaxy is surrounded by a giant sphere of dark matter more than 10 times The visible portion of the galaxy.  (A) so wide as  (B) the width of  (C) as wide as  (D) of the width to