## GEOGRAPHY

PAPER - III

Note : This paper contains seventy five (75) objective type questions of two (2) marks each. All questions are compulsory.

1. The concept of Padiplain is associated with :
(1) W.M. Davis
(2) L.C. King
(3) W. Penk
(4) C.A. Cotton
2. The direction of a horizontal line on an inclined rock strata is known as :
(1) Anticline
(2) Dip
(3) Syncline
(4) Strike
3. Who stated that the slope profiles are convex, plane or concave according to the circumstances of the uplifting action?
(1) Penck
(2) Davis
(3) Johnson
(4) Wood

3
5. Match List - I with the List - II and select the correct answer from the code given below :
List - I
(Scholar)
List - II
(Theory)
(a) Hall and Dana
(i) Sea floor Spreading
(b) Hutton
(ii) Thermal Contraction Theory
(c) Harry Hess
(iii) Theory of Geosyncline
(d) Jeffrey
(iv) Doctrine of Uniformitarianism

Code :
(a) (b) (c) (d)
(1) (i) (ii) (iv)
(iii)
(2) (ii) (i) (iii) (iv)
(3) (iv) (ii) (i) (iii)
(4) (iii) (iv) (i) (ii)

N-08017
6. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : There is close relationship between volcanic activities and plate margins.
Reason (R): A vast majority of the world's volcanoes are associated with the convergent plate margins.
Code :
(1) Both $(A)$ and (R) are true and (R) is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
7. Match List - I with the List - II and select the correct answer from the code given below :

List - IList - II
(Topography)

## (Landforms)

(a) Glacial
(i) Alluvian fan
(b) Marine
(ii) Yardangs
(c) Fluvial
(iii) Arate
(d) Aeolian
(iv) Tombolo

Code :
(a) (b) (c) (d)
(1) (ii) (i) (iii) (iv)
(2) (iv) (ii) (i) (iii)
(3) (iii) (iv) (ii) (i)
(4) (iiii) (iv) (i) (ii)
8. Match List - I with the List - II and select the correct answer from the code given below :

> List - I
> (Author)
(a) J.A. Steers
(b) S.W. Wooldridge
(c) Walther Penck
(d) Thornbury

List - II
(Book)
(i) Morphological Analysis of Landforms
(ii) Principles of Geomorphology
(iii) Unstable earth
(iv) Spirit and purpose of Geography

## Code :

|  | (a) | (b) (c) (d) |  |  |
| :--- | :--- | :--- | :--- | :--- |
| (1) | (ii) | (iii) | (iv) | (i) |
| (2) | (i) | (iv) | (ii) | (iii) |
| (3) | (iv) | (ii) | (i) | (iii) |
| (4) | (iiii) (iv) | (i) | (ii) |  |

9. Which one of the following is the correct average slope of a typical 'front' in weather phenomena ?
(1) $1: 150$
(2) $1: 100$
(3) $1: 50$
(4) $1: 5$
10. Match List - I with the List - II and select the correct answer from the code given below :

List - IList - II
(Conferences/Reports)
(a) Global climate changeimpacts in the United States
(Held in/Published in)
(b) Stokholm Conference
(i) 2007
(ii) 1992
(c) Fourth Assessment Report of the IPCC
(iii) 1972
(d) Rio Conference
(iv) 2009

Code :
(a) (b) (c) (d)
(1) (i) (ii) (iii) (iv)
(2) (ii) (i) (iii) (iv)
(3) (iv) (iii) (ii) (i)
(4) (iv) (iii) (i) (ii)
11. In which one of the following atmospheric layers temperature remains constant?
(1) Stratosphere
(2) Tropopause
(3) Mesosphere
(4) Troposphere
12. Which one of the following is the correct sequence of surface components of pressure and wind from the equator to the poles?
(1) Polar easterlies, Westerlies, Subtropical highs, Trade winds
(2) Subtropical highs, Westerlies, Trade winds, Polar easterlies
(3) Trade winds, Polar easterlies, Westerlies, Subtropical highs
(4) Trade winds, Subtropical highs, Westerlies, Polar easterlies
13. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : Above 1000 meter altitudes most winds follow a geostrophic or near-geostrophic course.
Reason (R): The friction layer of the atmosphere extends to only about 1000 meters above the ground.
Code :
(1) Both $(A)$ and (R) are true and (R) is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.

N-08017
14. Which one of the following isotherms for the average temperature of the Warmest month is generally accepted as equator ward edge of the Tundra climate ?
(1) 28 C
(2) 108 C
(3) 58 C
(4) 158C
15. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : The trade winds are predominantly easterly.

Reason (R) : An easterly wind blows from west to east.

Code :
(1) Both $(A)$ and $(R)$ are true and (R) is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true, but $(R)$ is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
16. Which one of the following types of climate is appropriate for BWh in Koppen's World Climate classification?
(1) Subtropical Desert Climate
(2) Subtropical Steppe Climate
(3) Midlatitude Desert Climate
(4) Midlatitude Steppe Climate
17. Which one of the following values of temperature is correct for the average freezing point for seawater in Arctic and Antarctic seas ?
(1) 28 C
(2) 08 C
(3) -28 C
(4) -108 C
18. Match List - I with the List - II and select the correct answer from the code given below :

$$
\begin{gathered}
\text { List - I } \\
\text { (Plate name) }
\end{gathered}
$$

(a) Indo-Australian plate
(b) Cocos plate
(c) Pacific plate
(d) Nazca plate

List - II
(Direction of movement)
(i) East
(ii) West
(iii) North
(iv) North-West

Code :
(a) (b) (c) (d)
(1) (iii) (iv) (i) (ii)
(2) (iii) (iv) (ii) (i)
(3) (iii) (ii) (i) (iv)
(4) (i) (ii) (iii) (iv)
19. Which one of the following periods when the sea level around the world, was as much as 130 meters lower than today?
(1) Holocene
(2) Pleistocene
(3) Miocene
(4) Cambrian
20. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : The moon produces greater percentage of Earth's tides than the Sun.
Reason $(R)$ : The Sun is closer to the Earth than the Moon.
Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both $(A)$ and $(R)$ are true, but $(R)$ is not a correct explanation of $(A)$.
(3) (A) is true, but ( $R$ ) is false.
(4) (A) is false, but (R) is true.
21. Which one of the following terms is appropriate for plants that endure seasonal climatic fluctuations from year to year?
(1) Perennials
(2) Annuals
(3) Seasonal
(4) Bi -annuals
22. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : The regional boundaries of biomes are some-what arbitrary.
Reason (R) : All kinds of major biomes are existing both in ocean and land.
Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both $(A)$ and $(R)$ are true, but $(R)$ is not a correct explanation of $(A)$.
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
23. Match List - I with the List - II and select the correct answer from the code given below :
List - IList - II

## (Zoogeographic regions)

(a) Orientel
(b) Nearctic
(c) Neotropical
(d) Palaearctic

## (Country)

(i) Brazil
(ii) Sumatra
(iii) Netherland
(iv) USA

Code :

|  | (a) | (b) (c) (d) |  |  |
| :--- | :--- | :--- | :--- | :--- |
| (1) | (iii) | (i) | (iv) | (ii) |
| (2) | (iii) | (iv) | (ii) | (i) |
| (3) | (ii) | (iv) | (i) | (iiii) |
| (4) | (iv) | (ii) | (i) | (iii) |

24. The term 'cultural landscape' was developed by :
(1) C. Darwin
(2) C.O. Sauer
(3) A. Humboldt (4) C. Ritter
25. Who among the following emphasized on the behavioural environment in Geography ?
(1) Johnston
(2) Kirk
(3) Gregory
(4) Burton
26. Who among the following developed the concept of mental map ?
(1) Gould and White
(2) Boulding and Haggerstrand
(3) Downs and Stea
(4) Saarinen
27. Who among the following geographers focused on man-centered geography ?
(1) Huntington
(2) Semple
(3) Jefferson
(4) Ratzel
28. Who was the first Greek Scholar to calculate the circumference of the earth ?
(1) Aristotle
(2) Herodotus
(3) Anaximender
(4) Eratosthenes
29. "Space is Socially or Culturally Constructed " is the view under :
(1) Behaviouralism
(2) Logical Positivism
(3) Structuralism
(4) Post Modernism
30. Match List - I with the List - II and select the correct answer from the code given below :

## List - I

(Geographer)
(a) Albert Damangeon
(b) Friedrick Ratzel
(c) Halford J. Mackinder
(d) Isaiah Bowman

List - II
(School of Geography)
(i) German school of geography
(ii) French school of geography
(iii) British school of geography
(iv) American school of geography

Code :
(a) (b) (c) (d)
(1) (i) (ii) (iv) (iii)
(2) (ii) (i) (iv)
(iii)
(3) (ii) (i) (iii) (iv)
(4) (iv) (ii) (iii) (i)
31. Who wrote the book 'Meteorologica'?
(1) Aristotle
(2) Posidonius
(3) Plato
(4) Erastosthenes
32. Which one of the following continents recorded highest density of population as per United Nations Population Fund 2015 data?
(1) Europe
(2) Asia
(3) North America
(4) Australia
33. Japan's population pyramid would most likely resemble to that of :
(1) USA
(2) Brazil
(3) Denmark
(4) India
34. Consider the following statements :

Developing countries have registered increase in population despite significant decline in fertility rates because of :
(a) Increase in Life Expectancy Rate
(b) Increase in Infant Mortality Rate
(c) Falling Death rate
(d) Better Living conditions
(1) (a), (b) and (d) are correct
(2) (a), (c) and (d) are correct
(3) (a), (b), (c) are correct
(4) (b), (c) and (d) are correct
35. Which one of the following statements represents Population Pyramid with Wide base :
(1) Declining Fertility Rates
(2) High Fertility Rates
(3) Declining Death Rates
(4) High Death Rates
36. Which one of the following depicts correct statement of Population Threshold for any service ?
(1) Maximum distance that people can travel to use a service
(2) Minimum distance required for opening a service
(3) Minimum population size required for a service
(4) Maximum population size required for a service
37. Match List - I with List - II and select the correct answer from the code given below :

> List - I (Term)
(a) Site of human settlements
(b) Situation of human settlements
(c) Pull factor in Migration
(d) Migration field

Code :
(a) (b) (c) (d)
(1) (i) (iv) (ii) (iii)
(2) (ii) (iii) (i) (iv)
(3) (iii) (ii) (iv) (i)
(4) (iv) (ii) (i) (iii)

N-08017
38. Match List - I with the List - II and select the correct answer from the code given below :

> List - I
> (Term)
(a) Central City
(b) Network City
(c) Urban Influence Zone
(d) Urbanized Area

$$
\begin{gathered}
\text { List - II } \\
\text { (Definition) }
\end{gathered}
$$

(i) Continuous built-up landscape with high density of buildings with no reference to political boundary
(ii) Areas outside city with urban characteristics
(iii) Urban area contained within the official boundaries of the main city around which suburb develops
(iv) Two or more independent but complementary cities having high speed transport corridors

Code :
(a) (b) (c) (d)
(1) (i) (ii) (iv) (iii)
(2) (iii) (iv) (ii) (i)
(3) (ii) (iv) (iii) (i)
(4) (iv) (ii) (i) (iii)
39. Locate the following places in Multiple Nuclei theory of urban structure in the figure and match it with the list given below :


IV

## List :

(a) Wholesale and Light Manufacturing
(b) High class residential
(c) Medium class residential
(d) Industrial Suburb

Code :
(I) (II) (III) (IV)
(1) (b) (c) (a) (d)
(2) (a) (b) (c) (d)
(3) (a) (c) (b) (d)
(4) (c) (d) (a) (b)
40. Which one of the following does not have role in push factors that seem to be operative in rural India ?
(1) Rapid increase in the population growth
(2) High pressure of population on arable land
(3) Low per capita income and glaring disparity between levels of income of urban and rural areas
(4) Slow but consistent increase in amenities in rural areas and increase in per capita income
41. Which one of the following defined regional growth pole as a "set of expanding industries located in an urban area and including further development of economic activity throughout its zone of influence".
(1) A.O. Hirchman
(2) F. Perroux
(3) Boudeville (4) B.J.L. Berry
42. Match List - I with the List - II and select the correct answer from the code given below :

List - I
(Number of likely settlements of different orders )
(a) $8,32,128$
(b) $4,13,40$
(c) $3,20,141$
(d) $2,27,351$

Code :
(a) (b) (c) (d)
(1) (iv) (iii) (ii) (i)
(2) (iv) (ii) (iii) (i)
(3) (i) (iii) (ii) (iv)
(4) (iv) (iii) (i) (ii)
43. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : The Green Revolution contributed to aggravation of poverty rather than its solution.

Reason (R): Wealthy and landed farmers realised that Green Revolution together with agricultural mechanisation provided great potential for self cultivation. They began to withdraw land from share cropping and rental market. As a consequence, a large number of tenants and peasants lost their jobs.

## Code :

(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but $(R)$ is false.
(4) (A) is false, but $(R)$ is true.
44. Which activity Contributes to water pollution more than any other throughout the world ?
(1) Agriculture
(2) Hydro-electricity power generation
(3) Manufacturing industries
(4) Urbanization
45. Which of the following Ocean routes is the most important and busiest route in the world ?
(1) The Cape Route
(2) North Pacific Route
(3) South Atlantic Route
(4) North Atlantic Route
46. Which one of the following was not assured by Weber in his least-cost theory?
(1) Agglomeration economies lead to high transport and labour cost
(2) Labour is infinitely available
(3) Location with high transport costs may be attractive because of a cheap labour supply
(4) Transport costs were uniform by distance and weight in any direction
47. From the transport network graph given below, select one of the following code to depict 'Diameter Index' Correctly.

(1) 2
(2) 4
(3) 3
(4) 1
48. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : Between Durgapur-Asansol-Chittaranjan and numerous collieries and connected activities the Asansol sub-division represents one of larger industrial complexes in the world.

Reason (R): The substantial coal reserves and output, iron and steel output and engineering industry in the Asansol sub-division outside the Calcutta Metropolitan district are found.

Code :
(1) Both (A) and (R) are true and (R) is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true , but $(R)$ is not the correct explanation of $(A)$.
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
49. Who among the following political scholars appealed in 1949 for "a more geographical political geography"?
(1) Hartshorne
(2) G.E. Pearcy
(3) R.H. Fifield
(4) George T. Renner
50. Who wrote the book known as the 'World Political Geography'?
(1) G.E. Pearcy
(2) Stephen B. Jones(3
3) J.K. Wright
(4) Hartshorne
51. Match List - I with the List - II and select the correct answer from the code given below :

List - I
(Tribe)
(a) Bhils
(b) Gonds
(c) Santhals
(d) Garo

$$
\begin{array}{r}
\text { List - II } \\
\text { (Habitat) }
\end{array}
$$

(i) Shillong plateau
(ii) Eastern Jharkhand
(iii) Chattisgarh
(iv) Aravalli

Code :
(a) (b) (c) (d)
(1) (iv) (iii) (ii) (i)
(2) (i) (ii) (iii) (iv)
(3) (iii) (i) (iv) (ii)
(4) (ii) (iii) (iv) (i)

N-08017
52. The concept of 'Cultural landscape ' was popularised by :
(1) Wilber Zelinsky
(2) Carl Sauer
(3) Anne Buttimer (4) Ratzel
53. The paradoxical situation of co-existence of the patrilineal society and the dominating position of women characterize :
(1) Tharu Tribe
(2) Khasi Tribe
(3) Gond Tribe
(4) Bhil Tribe
54. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : Joint family institution is linked with the economically less developed area.
Reason (R): Educated and well placed white collar employees go for nuclear family.
Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of (A).
(2) Both (A) and (R) are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
55. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : Metros are emerging as efficient, viable and alternate means of transportation in metropolitan cities in our country.

Reason (R): Old and unplanned cities with rapidly growing population are burdened with multimode of transportation in India.

Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both (A) and (R) are true, but (R) is not a correct explanation of (A)
(3) (A) is true, but (R) is false.
(4) (A) is false but $(R)$ is true.
56. Match List - I with the List - II and select the answer from the code given below :

List - I
(Approach)
(a) Development index
(b) Consensus
(c) Subjective integration
(d) Human development

List - II
(Development index)
(i) Average development rating based on opinions of a presumably qualified sample group.
(ii) Composite development scores based on a combination of numerous sub-scores for individual indicators.
(iii) Per capita income, longivity of live and social well-being.
(iv) A set of adhoc regions, the classes and boundaries of which are determined on the basis of field experiences combined with subjective assessment.

Code :
(a) (b) (c) (d)
(1) (ii) (iv) (iii) (i)
(2) (ii) (i) (iv) (iii)
(3) (i) (iv) (iii) (ii)
(4) (ii) (i) (iii) (iv)
57. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : MNREGA constituted very ambitious rural development programme of India.

Reason (R): Building basic infrastructure got linked to provide minimum number of days guaranteed employment.

Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both $(A)$ and $(R)$ are true, but $(R)$ is not a correct explanation of $(A)$.
(3) (A) is true, but $(R)$ is false.
(4) (A) is false, but $(R)$ is true.

N-08017
58. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : Urban agglomerations and metropolitan cities are growing rapidly in India.
Reason (R): Satellite towns are not sufficiently and significantly developed to release the pressure of urban population.

## Code :

(1) Both $(A)$ and (R) are true and (R) is the correct explanation of (A).
(2) Both $(A)$ and $(R)$ are true , but $(R)$ is not a correct explanation of $(A)$.
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
59. Which one of the following statements is very correct in context of the concept of Growth pole and growth centres?
(1) Both the Growth pole and Growth centres are uniformly distanced in the region.
(2) Lower order Growth centres are located quite far away as compared to higher order Growth centres.
(3) Higher order Growth centres are located far away while lower order Growth centres are located closer to one and an other.
(4) There does not exist any rule in the distance between Growth pole and Growth centres.
60. The percentage of decadal growth of population (2001-2011) is the highest in which of the following states ?
(1) West Bengal
(2) Maharashtra
(3) Uttar Pradesh
(4) Arunachal Pradesh
61. Which one of the following is responsible for concentration of slum population in India ?
(1) Commercial plantation activities are dominant.
(2) Manufacturing activities in organised sector are dominant.
(3) Service activities in organised sector are dominant.
(4) Manufacturing and Service activities in non-formal sector are dominant.
62. Which one of the following states is leading producer of Coffee in India ?
(1) Kerala
(2) Karnataka
(3) Assam
(4) Tamil Nadu
63. Match List - I with the List - II and select the correct answer from the code given below :

List - I
(Hydel Power Projects)
(a) Sharavathi
(b) Balimela
(c) Obra
(d) Shanan

List - II
(States)
(i) Odisa
(ii) Uttar Pradesh
(iii) Karnataka
(iv) Punjab

Code :
(a) (b) (c) (d)
(1) (i) (iii) (iv) (ii)
(2) (ii) (iii) (iv) (i)
(3) (ii) (iv) (i) (iii)
(4) (iii) (i) (ii) (iv)
64. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : Northern part of Ganga plain has very few irrigation canals.
Reason (R) : This area receives high rainfall and has plenty of underground water.
Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both (A) and (R) are true, but (R) is not a correct explanation of (A).
(3) $(A)$ is true, but $(R)$ is false.
(4) (A) is false, but $(R)$ is true.
65. Match List - I with the List - II and select the correct answer from the code given below :

## List - I

(Crops)
(a) Raw cotton
(b) Mustard
(c) Maize
(d) Wheat

List - II
(Largest producer state, 2016-17)
(i) Uttar Pradesh
(ii) Rajasthan
(iii) Gujarat
(iv) Andhra Pradesh

Code :
(a) (b) (c) (d)
(1) (iii) (iv) (ii) (i)
(2) (iv) (iii) (i) (ii)
(3) (iii) (ii) (iv) (i)
(4) (i) (ii) (iii) (iv)

N-08017
66. Match List - I with the List - II and select the correct answer from the code given below :
List - IList - II

## (Mountains/Ranges)

(a) Nilgiri
(b) Satpura
(c) Aravalli
(d) Himalaya

## (Peaks)

(i) Sagarmatha
(ii) Mt . Abu
(iii) Dhupgarh
(iv) Dodabetta

Code :
(a) (b) (c) (d)
(1) (iii) (iv) (i) (ii)
(2) (i) (ii) (iii) (iv)
(3) (iv) (iii) (ii) (i)
(4) (iii) (iv) (ii) (i)
67. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : With every successive census in India, the growth of population results in greater increase in slum population.
Reason (R): Both the area and the population of India have been increasing continuously.
Code :
(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both $(A)$ and $(R)$ are true , but $(R)$ is not a correct explanation of $(A)$.
(3) (A) is true, but ( $R$ ) is false.
(4) (A) is false, but $(R)$ is true.
68. Which one of the following phenomenal relationships is depicted by an ergograph ?
(1) Temperature and absolute humidity
(2) Rainfall and runoff
(3) Crop production and rainfall
(4) Crop season and weather conditions
69. Which one of the following altitudes belongs to sun synchronous polar orbit?
(1) 30,000 to $36,000 \mathrm{~km}$
(2) 2,000 to $6,000 \mathrm{~km}$
(3) 300 to 1000 km
(4) 5,000 to $15,000 \mathrm{~km}$
70. Which one of the following terms is correct for calculation of Skewness Coefficient ( $\beta 1$ ) ?
(1) $\beta 1=\frac{\Sigma\left(X_{I}-\bar{X}\right)}{N} / \frac{\Sigma\left(X_{I}-\bar{X}\right)^{2}}{N}$
(2) $\beta 1=\frac{\Sigma\left(X_{I}-\bar{X}\right)^{2}}{N} / \frac{\Sigma\left(X_{I}-\bar{X}\right)^{3}}{N}$
(3)

(4)

$$
\beta_{1}=\frac{\Sigma\left(X_{I}--\right.}{N} \not{ }^{2} / \beta^{3} \frac{\Sigma\left(X_{I}--X^{2}\right)^{3}}{N}
$$

71. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :
Assertion (A) : Standard Deviation of a series is the measure of its variation.
Reason (R): Standard Deviation is needed to compare the variation between two or more series.

## Code :

(1) Both $(A)$ and $(R)$ are true and $(R)$ is the correct explanation of $(A)$.
(2) Both (A) and (R) are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.
72. Consider the following statements :
(a) Tele-communication satellites are mostly Geostationary satellites usually placed at an altitudes of more than $30,000 \mathrm{~km}$.
(b) Resource satellites are sun synchronous usually placed at an altitude of $300-1000 \mathrm{~km}$. Which of the above statements are true ?
(1) (a) only
(2) both (a) and (b)
(3) (b) only
(4) neither (a) nor (b)
73. Which one of the following sensors is an active remote sensing sensor ?
(1) Photo Camera
(2) Multiframe Camera
(3) Multiband Scanner
(4) Radar
74. Consider the following figures X and Y :


Which one of the following statements is correct ?
(1) Figure X is small-scale map and distance between A and B is 40 metres.
(2) Figure Y is large scale map and distance between C and D is 4 km .
(3) Figure $X$ is large scale map and figure $Y$ is small-scale and distance between $A$ and $B$ and C and D are 40 metres and 20 km , respectively.
(4) Figure X is large scale and figure Y is small-scale. The ground distance between A and B , and C and D are equal.
75. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R). Select your answer from the code given below :

Assertion (A) : Dot map is especially useful when the values are distributed unevenly and sporadically.

Reason (R): Smaller the statistical unit, more accurate is the Dot map.
Code :
(1) Both (A) and (R) are true and (R) is the correct explanation of (A).
(2) Both (A) and (R) are true, but (R) is not a correct explanation of (A).
(3) (A) is true, but (R) is false.
(4) (A) is false, but (R) is true.

```
-oOo-
```

