



**VVR-IAS**  
INDIA'S Best Trainers for  
General Studies

# GS PRELIMS TEST SERIES 2017

## TEST-09 : ANSWER KEY (GEOGRAPHY)

- |         |         |         |         |          |
|---------|---------|---------|---------|----------|
| 1. (D)  | 21. (B) | 41. (D) | 61. (D) | 81. (B)  |
| 2. (D)  | 22. (A) | 42. (D) | 62. (A) | 82. (D)  |
| 3. (A)  | 23. (C) | 43. (D) | 63. (B) | 83. (D)  |
| 4. (A)  | 24. (A) | 44. (C) | 64. (C) | 84. (A)  |
| 5. (A)  | 25. (A) | 45. (A) | 65. (A) | 85. (B)  |
| 6. (B)  | 26. (D) | 46. (D) | 66. (B) | 86. (C)  |
| 7. (B)  | 27. (A) | 47. (C) | 67. (A) | 87. (D)  |
| 8. (D)  | 28. (B) | 48. (D) | 68. (A) | 88. (D)  |
| 9. (D)  | 29. (A) | 49. (D) | 69. (D) | 89. (D)  |
| 10. (D) | 30. (D) | 50. (C) | 70. (D) | 90. (C)  |
| 11. (D) | 31. (C) | 51. (C) | 71. (B) | 91. (C)  |
| 12. (A) | 32. (D) | 52. (C) | 72. (C) | 92. (B)  |
| 13. (C) | 33. (B) | 53. (C) | 73. (D) | 93. (D)  |
| 14. (D) | 34. (D) | 54. (C) | 74. (D) | 94. (C)  |
| 15. (B) | 35. (C) | 55. (C) | 75. (A) | 95. (B)  |
| 16. (B) | 36. (A) | 56. (D) | 76. (A) | 96. (A)  |
| 17. (C) | 37. (D) | 57. (D) | 77. (A) | 97. (D)  |
| 18. (D) | 38. (C) | 58. (C) | 78. (D) | 98. (A)  |
| 19. (D) | 39. (D) | 59. (C) | 79. (D) | 99. (C)  |
| 20. (D) | 40. (C) | 60. (C) | 80. (B) | 100. (D) |

## GEOGRAPHY (T-09)

1. (D)

*Exp.*

All climatic features affect the climate of India.

St-1, areas near the coast have equable or mariline climate and interior locations are deprived of moderating influence of the sea. St-2, there is linkage of weather changes often observed between the India and the pacific oceans. Changes have been noticed over the surface level pressure. If there is high pressure over the Indian Ocean then there is low over the pacific ocean and viceversa. This relation is called the southern oscillation

St-3 the westerly jet stream which blows at a very high speed during winter over the subtropical zone. This stream is bi-furcated by the Himalayan ranges. Divided into two branches north and south. The southern branch blows eastwards south of the Himalayas along 25 degree north latitude. This jet stream is responsible for bringing western disturbances from the Mediterranean region in to the Indian sub continent. Winter rains, heat storms in north western plains and occasional heavy snowfall in hilly areas are caused by this phenomenon.

St-4, la-Nina presence is good for India. It is the harbinger of heavy monsoon showers in India.

2. (D)

3. (A)

*Exp.*

The entire operations of cultivation are mechanized in extensive cultivation as compared to the intensive cultivation.

4. (A)

*Exp.*

Exp: Crops like Ragi, Bajra, Moong, Gram etc. which are capable to bear dryness are produced in these agriculture regions. Jute and Sugarcane are crops of humid land.

5. (A)

*Exp.*

North West India does have semi arid region but that itself is not a favourable characteristic, it's the Western disturbance that favours Wheat production.

6. (B)

7. (B)

*Exp.*

Forests (land use category): It is important to note that area under actual forest cover is different from area classified as forest.

The latter is the area which the Government has identified and demarcated for forest growth. The land revenue records are consistent with the latter definition. Thus, there may be an increase in this category without any increase in the actual forest cover

8. (D)

*Exp.*

Common Property Resources

Land, according to its ownership can broadly be classified under two broad heads - private land and common property resources (CPRs). While the former is owned by an individual or a group of individuals, the latter is owned by the state meant for the use of the community.

CPRs provide fodder for the livestock and fuel for the households along with other minor forest products like fruits, nuts, fibre, medicinal plants, etc. In rural areas, such land is of particular relevance for the livelihood of the landless and marginal farmers and other weaker sections since many of them depend on income from their livestock due to the fact that they have limited access to land. CPRs also are important for women as most of the fodder and fuel collection is done by them in rural areas. They have to devote long hours in collecting fuel and fodder from a degraded area of CPR.

CPRs can be defined as community's natural resource, where every member has the right of access and usage with specified obligations, without anybody having property rights over them. Community forests, pasture lands, village water bodies and other public spaces where a group larger than a household or family unit exercises rights of use and carries responsibility of management are examples of CPRs.

9. (D)

**10. (D)****Exp.**

Green revolution did not succeed in all the states. Only few states and crops were major beneficiaries.

**11. (D)****Exp.**

Maize is a food as well as fodder crop grown under semi-arid climatic conditions and over inferior soils. This crop occupies only about 3.6 per cent of total cropped area. Maize cultivation is not concentrated in any specific region. It is sown all over India except eastern and north-eastern regions. The leading producers of maize are the states of Madhya Pradesh, Andhra Pradesh, Karnataka, Rajasthan and Uttar Pradesh. Yield level of maize is higher than other coarse cereals. It is high in southern states and declines towards central parts.

**12. (A)****Exp.**

Some states utilize large proportion of their ground water potential which has resulted in ground water depletion in these states. The over-use of ground water resources has led to decline in ground water table in these states. In fact, over withdrawals in some states like Rajasthan, and Maharashtra has increased fluoride concentration in ground-water, and this practice has led to increase in concentration of arsenic in parts of West Bengal and Bihar

**13. (C)****Exp.**

Physiological density = total population / net cultivated area

Agricultural density = total agricultural population / net cultivable area

Agricultural population includes cultivators and agricultural labourers and their family members

**14. (D)****Exp.**

Global commons is a term typically used to describe international, supranational, and global resource domains in which common-pool resources are found. Global commons include the earth's shared natural resources, such as the high oceans, the atmosphere, outer space and the Antarctic in particular.

**15. (B)****Exp.**

- Dust particles are generally concentrated in the lower layers of the atmosphere; yet, convectional air currents may transport them to great heights. The higher concentration of dust particles is found in subtropical and temperate regions due to dry winds in comparison to equatorial and polar regions.
- The proportion of gases changes in the higher layers of the atmosphere in such a way that oxygen will be almost in negligible quantity at the height of 120 km.

**16. (B)****17. (C)****18. (D)****Exp.**

- The basic ingredients used to make a thunderstorm are moisture, unstable air and lift. You need moisture to form clouds and rain. You need unstable air that is relatively warm and can rise rapidly. Finally, you need lift. This can form from fronts, sea breezes or mountains.
- Despite their small size, all thunderstorms are dangerous. Every thunderstorm produces lightning, which kills more people each year than tornadoes.
- A thunderstorm is a storm with lightning and thunder.

**19. (D)****20. (D)****21. (B)****Exp.**

- The air in contact with the land gets heated slowly and the upper layers in contact with the lower layers also get heated. This process is called conduction. Conduction takes place when two bodies of unequal temperature are in contact with one another, there is a flow of energy from the warmer to cooler body. The transfer of heat continues until both the bodies attain the same temperature or the contact is broken. Conduction is important in heating the lower layers of the atmosphere.
- The transfer of heat through horizontal movement of air is called advection. Horizontal movement of the air is relatively more important than the vertical movement. In middle latitudes, most of diurnal (day and night) variation in daily weather are caused by advection alone.

22. (A)

*Exp.*

- When a cyclone approaches there is a fall in the pressure of air, while in case of anticyclone reverse happens.
- In cyclones isobars are closer causing a strong pressure gradient force generating high velocity of winds.
- NH'Cyclone: anti-clockwise & Anti-cyclone: clock-wise
- SH'Cyclone: clock-wise & Anti-cyclone: anti-clockwise

23. (C)

24. (A)

*Exp.*

- Polar jet streams have been found to flow at the highest speeds.
- The jet streams are westerly currents. The polar jets are very strong and occur at lower altitudes (7-12 km above the surface), while the weaker sub-tropical jets occur at higher altitudes (10-16 km above the surface)
- Polar night jet stream- These jet streams become very strong westerly circulation with high wind velocity during winters but their velocity decreases during summers and the direction becomes easterly

25. (A)

*Exp.*

- Between the latitude of 350 and 400 N and S of equator, the rain is heavier on the eastern coasts and goes on decreasing towards the west.
- Between the latitudes of 450 and 650 N and S of equator, due to westerlies rainfall is first received on the western margins of the continents and it goes on decreasing towards the east.

26. (D)

*Exp.*

- On June 21 or 22 the Earth is positioned in its orbit so that the North Pole is leaning 23.5° toward the Sun. During the June solstice (also called the summer solstice in the Northern Hemisphere), all locations north of the equator have day lengths greater than twelve hours, while all locations south of the equator have day lengths less than twelve hours (see table given below).
- On December 21 or 22 the Earth is positioned so that the South Pole is leaning 23.5 degrees toward the Sun. During the December solstice (also called the winter

solstice in the Northern Hemisphere), all locations north of the equator have day lengths less than twelve hours, while all locations south of the equator have day lengths exceeding twelve hours.

- On September 22 or 23, also called the autumnal equinox in the Northern Hemisphere, neither pole is tilted toward or away from the Sun. In the Northern Hemisphere, March 20 or 21 marks the arrival of the vernal equinox or spring when once again the poles are not tilted toward or away from the Sun. Day lengths on both of these days, regardless of latitude, are exactly 12 hours.

27. (A)

*Exp.*

- Circum-navigation of the earth: The first voyage around the world by Ferdinand Magellan and his crew, from 1519 to 1522 proved beyond doubt that the earth is spherical. No traveller going round the world by land or sea has ever encountered an abrupt edge, over which he would fall. Modern air routes and ocean navigation are based on the assumption that the earth is round.
- Sunrise and sunset: The sun rises and sets at different times in different places. As the earth rotates from west to east, places in the east see the sun earlier than those in the west. If the earth were flat, the whole world would have sunrise and sunset at the same time. But we know this is not.
- The lunar eclipse: The shadow cast by the earth on the moon during the lunar eclipse is always circular. It takes the outline of an arc of a circle. Only a sphere can cast such a circular shadow.
- Planetary bodies are spherical: All observations from telescopes reveal that the planetary bodies, the Sun, Moon, satellites and stars have circular outlines from whichever angle you see them. They are strictly spheres. Earth, by analogy, cannot be the only exception.

28. (B)

*Exp.*

- Black Hole is formed from a very massive neutron star.
- The presence of a black hole can be felt by the effect of its gravitational field on its neighbouring objects in the sky. e.g. - if a star moves in a circle without any visible

star in the centre we can conclude there's a black hole in the centre.

**29. (A)**

*Exp.*

- The moon's gravitational pull to a great extent and to a lesser extent the sun's gravitational pull, are the major causes for the occurrence of tides. Another factor is centrifugal force, which is the force that acts to counter balance the gravity. Together, the gravitational pull and the centrifugal force are responsible for creating the two major tidal bulges on the earth.
- Meteorological effects such as winds and atmospheric pressure changes do not contribute to the origin of tides.
- Both the tide and ebb is experienced twice at every place on the earth's water surface within 24 hours.
- The tidal bulges on wide continental shelves have more height.

**30. (D)**

**31. (C)**

*Exp.*

Alps is also formed at the convergence of two continental plates.

**32. (D)**

*Exp.*

Batholith- the very large dome that cools in the deeper depth consisting mainly of granite rocks.

Lacolith- Dome shaped intrusive body with conduit from below

Lapolith - They are intrusive, saucer shape, concave to the sky.

**33. (B)**

*Exp.*

New crust is created at the divergent boundary.

Due to the high density of oceanic plate, it gets subducted in ocean-continent convergence which eventually forms mountain at the continent. Statement three is correct.

**34. (D)**

*Exp.*

Pyroxene consists of (CAMIS) calcium aluminum, magnesium, iron, silica. Green or black in color.

Mica consists of (PAMIS)( potassium, aluminum, magnesium, aluminium silica) Used in the electrical instrument.

Feldspar consists of silica and oxygen. Half the earth's crust is made up of feldspar.

**35. (C)**

*Exp.*

Solifluction is quite common in areas where surface melting of deeply frozen ground and long continued rain occurs frequently. When the upper portion gets saturated and when the lower parts are impervious to water percolation, flowing occurs in the upper part.

**36. (A)**

**37. (D)**

*Exp.*

All the processes that move, elevate and build up earth's crust come under diastrophism.

Orogenic Processes- Mountain building  
Epeirogenic- Uplift or warping of a large part of earth's crust.

**38. (C)**

**39. (D)**

*Exp.*

Water of high salinity is denser than the water of low salinity. Hence, water of low salinity flows on the surface of water of high salinity

And water of high salinity flows downward. Temperature- Low temperature water of the pole flows towards equator from the bottom and high temperature equatorial water flows towards pole.

Earth's rotation causes ocean current to move right in northern hemisphere and left in the southern.

A landmass always obstructs and diverts current.

**40. (C)**

*Exp.*

A canyon is narrower at the base and wider at the top having step like sides.

Canyons are generally formed in horizontal bedded sedimentary rocks while gorges are formed in hard rocks.

Statement three is correct.

**41. (D)**

*Exp.*

Movement of water saturated clay down low angle terrace is called earthflow. The materials involved in the landslides are comparatively dry.

Mudflow occurs in the area of high rainfall and low vegetation. Statement three is correct.

42. (D)

*Exp.*

Ox bow lakes are formed in the lower course of the river. Cataracts and Gorge are formed in the upper course.

43. (D)

*Exp.*

The tropical zone experiences low daily and annual range of temperature.

The area north of the tropic of cancer experiences high daily and annual range of temperature.

44. (C)

*Exp.*

Warm sea surface temperatures in the western Pacific pump heat and moisture into the atmosphere above. In a process known as atmospheric convection, this warm air rises high into the atmosphere and, if the air is moist enough, causes towering cumulonimbus clouds and rain. This now-drier air then travels east before descending over the cooler eastern tropical Pacific. The pattern of air rising in the west and falling in the east with westward-moving air at the surface is referred to as the Walker Circulation. In El-Nino year this cycle is reversed due to warmer eastern Pacific Ocean.

45. (A)

*Exp.*

During south-west Monsoon period after having rains for few days, if rain fails to occur for few days then it is called as a break in the monsoon. Blowing of winds parallel to the west coast causes monsoon break in western India.

46. (D)

*Exp.*

Tamil coast receives rainfall due to north eastern winds capturing moisture from Bay of Bengal region. Temperate cyclones coming from Mediterranean region causes rainfall in Punjab-Haryana region. Arunachal Pradesh and Assam receives rainfall about 25 to 30 cm rainfall during this season.

47. (C)

*Exp.*

The variability of rainfall is computed in terms of coefficient of variation. It is a change or deviation from the mean value of rainfall.

The variability of rainfall is highest in Northern parts of Jammu and Kashmir, western Rajasthan and interior parts of Deccan Plateau.

48. (D)

*Exp.*

Koepfen has classified Indian climatic system in 8 subregions.

1. Amw (Monsoon type with short dry winter season):

This climate is found in the western coastal region, south of Mumbai.

2. As (Monsoon type with the dry season in high sun period): Coastal Tamil Nadu and adjoining areas of Andhra Pradesh are included in it.

3. Aw (Tropical Savanah type): This climate is found in most parts of the peninsular plateau barring Coromandel and Malabar coastal strips.

4. BShw (Semi-arid Steppe type): Some rain shadow areas of Western Ghats, a large part of Rajasthan and contiguous areas of Haryana and Gujarat have this type of climate.

5. BWhw (Hot desert type): Most of the western Rajasthan has hot desert type of climate

6. Cwg (Monsoon type with dry winters): This type of climate is found in most parts of the Ganga Plain, eastern Rajasthan, Assam and in Malwa Plateau.

7. Dfc (Cold, Humid winters type with shorter summer): Some of the north-eastern states such as Sikkim, Arunachal Pradesh and parts of Assam have this type of climate

8. E (Polar Type): The higher areas of Jammu & Kashmir and Himachal Pradesh experience polar climate.

49. (D)

*Exp.*

The Sholas are a mosaic of mountain evergreen forests and grasslands. They are found only in high altitude (>1500 m) regions within the tropics, and are limited to the southern part of the Western Ghats. They are found particularly in Nilgiri, Anaimalai and Palani hills.

50. (B)

*Exp.*

Dugong Dugon is a marine sea cow found in Gulf of Mannar. It is an endangered

species. It is herbivorous animal mainly dependent on seagrass.

51. (C)

*Exp.*

The term "molasses" refers to the sandstones, shale's and conglomerates formed as terrestrial or shallow marine deposits in front of rising mountain chains.

52. (C)

*Exp.*

Photu la is situated on Zaskar Range in Kashmir.

Palghat pass is situated on Annaimalai hills of Kerala.

53. (C)

*Exp.*

The Narmada flows in trough fault and fills the cracks with its detritus material because of which it lacks deltaic material required for delta formation. Submerge nature of India's western coast hinders delta formation.

54. (C)

*Exp.*

Laterite soils are poor in organic matter nitrogen phosphate and calcium. Iron oxide and potash are in excess which makes this soil not suitable for cultivation. The fine-grained red soil is normally good for cultivation while the coarse-grained red soil is not good for cultivation. Saline soil contains salts hence not good for cultivation.

55. (C)

*Exp.*

Conditions required

Presence of strong coriolis force. Absence of strong vertical wind wedge which prevents vertical transport of latent heat.

56. (D)

*Exp.*

Agricultural drought is a soil moisture drought. If the area has more than 30% of area under irrigation then it is excluded from drought prone category.

57. (D)

58. (C)

*Exp.*

Gondwana coal can be found in damodar valley, Mahanadi valley where as Tertiary coal can be found in In Assam and Himalayan foothills.

59. (C)

60. (C)

*Exp.*

Forest Type	Total Forest Area (in per cent)
Tropical Moist Deciduous	37
Tropical Dry Deciduous	28
Tropical Wet Evergreen	8
Montane Sub-Tropical Pine	6.6
Tropical Semi-Evergreen	4
Montane Wet Temperate	3.6
Montane Most Temperate	3.4
Syb-Tropical Dry Evergreen	2.5
Alpine	2.1
Littoral and Swamp	0.6
Sub-tropical Broad Leaved	0.4
Montane Dry Temperate	0.3
Tropical Dry Evergreen	0.2

61. (D)

62. (A)

*Exp.*

Biogas is a type of gas that is formed by the biological breakdown of organic matter in an oxygen deficient environment. It is counted as an eco friendly bio fuel. Biogas contains 60% methane and carbon dioxide. It can be employed for generating electricity and also as automotive fuel. For example; each household builds its own plant to channel waste from the domestic toilet and nearby shelters for animals, usually pigs, cows into a sealed tank. The waste ferments and is naturally converted into gas and compost, resulting in improved sanitary conditions at home.

63. (B)

*Exp.*

Human migration is the movement by people from one place to another with the intention of settling temporarily or permanently in the new location. The movement is typically over long distances and from one country to another, but internal migration is also possible. Migration may be individuals, family units or in large groups.

There are 2 factors ie push and pull factor which might be real or perceptual.

Push factors are those that force the individual to move voluntarily, and in many cases, they are forced because the individual risk something if they stay.

Pull factors are those factors in the destination region that attract the

individual or group to leave their home. Those factors are known as place utility, which is the desirability of a place that attracts people. Better economic opportunities, more jobs, and the promise of a better life like better health and education facilities often pull people into new locations

64. (C)

65. (A)

*Exp.*

Aravalli range is an old folded mountain range. They lie parallel to the monsoon winds causing no interception hence very little rainfall.

66. (B)

*Exp.*

The region is isolated from rest of the world by Himalayan range in the north and Indian ocean in the south. This isolation has evolved a unique culture of Indian subcontinent

67. (A)

*Exp.*

A group of islands that lie in close proximity is known as archipelago

68. (A)

*Exp.*

Indian coal :- sulphur content is low, about 0.5 per cent. high ash fusion temperature of about 1,500C

69. (D)

*Exp.*

- Population ageing is the process by which the share of the older population becomes proportionally larger.
- Sub-replacement fertility is a total fertility rate (TFR) that (if sustained) leads to each new generation being less populous than the previous one in a given area.
- Demographic trap is combination of high fertility (birth rates) and declining mortality (death rates) in developing countries, resulting in a period of high population growth rate (PGR). But, not majority of people may be in the working age group.
- Demographic dividend, as defined by the United Nations Population Fund (UNFPA) means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)

70. (D)

71. (B)

*Exp.*

ILDP is under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. The 'Indian Leather Development Programme' (ILDP) a central sector scheme, is under implementation with an approved outlay of Rs. 990.36 crore, during 12th Plan period with the following six sub-schemes: Integrated Development of Leather Sector (IDLS) Human Resource Development (HRD) Mega Leather Cluster scheme Support to Artisan scheme - For formation of Self-help groups (SHGs), product development, capacity building, providing centralized common facilities centers and marketing linkages. Leather Technology, Innovation & Environmental Issues Establishment of Institutional Facilities.

72. (C)

*Exp.*

Consequent to India's ratification of the WTO Agreement on Trade Facilitation (TFA) in April 2016, the National Committee on Trade Facilitation (NCTF) has been constituted. The establishment of the Committee is part of the mandatory, institutional arrangement of the TFA.

Objective: To have a national level body that will facilitate domestic co-ordination and implementation of TFA provisions. It will play the lead role in developing the pan-India road map for trade facilitation. It will be instrumental in synergizing the various trade facilitation perspectives across the country and will also focus on an outreach programme for sensitization of all stakeholders about TFA.

Type- This is a prime, inter - ministerial body on trade facilitation.

Chaired by- Cabinet Secretary

Housed by- Its Secretariat will be housed within the Central Board of Excise and Customs (CBEC), in the Directorate General of Export Promotion, New Delhi.

73. (D)

*Exp.*

The Ministry of Drinking Water and Sanitation, in partnership with Ministry of Youth Affairs and Sports, and Ministry of Water Resources, River Development and Ganga Rejuvenation, is intensifying support



to the five States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, to make all villages along the banks of the Ganga Open Defecation Free (ODF). The campaign, being a collaborative effort between the Swachh Bharat Mission, local youth leaders and the Namami Gange project.

**74. (D)**

**Exp.**

Unified Payments Interface (UPI) system was recently launched by RBI. UPI system was developed by National Payments Corporation of India (NPCI), the umbrella organisation for all retail payments in the country.

NEFT process typically takes a little more than an hour and is available only during the bank's working hours.

Unlike NEFT, in Real Time Gross Settlement (RTGS), fund transfers handled on one-to-one basis. Large value transactions, typically over Rs. 2 lakhs, are carried out using this method. This is also done during working hours.

Immediate Payment Service (IMPS) is a more recent form of fund transfer that is gaining popularity. A user is given a 7-digit Mobile Money Identifier (MMID) Code. The sender initiates payment using mobile bank by giving the MMID code and registered mobile number of the beneficiary. Most banks offer this service free-of-cost now. It is a round-the clock immediate payment service.

The UPI is an improved version of IMPS. To initiate the payment, UPI invokes this virtual identity of the beneficiary and transfers money in real-time. It works on single-click 2-factor authentication.

**75. (A)**

**Exp.**

The objectives of the project are to address the legal needs of the marginalised and vulnerable sections of society, particularly women, children, and Scheduled Castes and tribal communities, who do not have the requisite means to ensure that their rights are guaranteed. The Department of Justice has been implementing "Access to Justice for Marginalised People" with the UNDP's support. The first phase of the project (2009-2012) focused on both the demand as well

as supply side of justice.

The "Access to Justice" project is being implemented in the eight North-Eastern States, and Jammu and Kashmir, at a total cost of Rs.30 crore for five years (2012-17).

**76. (A)**

**Exp.**

The Group of Twenty (G20) is an international forum that brings together the world's leading industrialised and emerging economies. The Group of Twenty (G20) comprises 19 countries plus the European Union.

The G20 started in 1999 as a meeting of Finance Ministers and Central Bank Governors in the aftermath of the Asian financial crisis. In 2008, the first G20 Leaders' Summit was held, and the group played a key role in responding to the global financial crisis. Its decisive and coordinated actions boosted consumer and business confidence and supported the first stages of economic recovery.

The G8 seeks cooperation on economic issues facing the major industrial economies, while the G20 reflects the wider interests of both developed and emerging economies.

**77. (A)**

**Exp.**

LIDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses combined with other data recorded by the airborne system generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

A LIDAR instrument principally consists of a laser, a scanner, and a specialized GPS receiver. Airplanes and helicopters are the most commonly used platforms for acquiring LIDAR data over broad areas. Two types of LIDAR are topographic and bathymetric. Topographic LIDAR typically uses a near-infrared laser to map the land, while bathymetric lidar uses water-penetrating green light to also measure seafloor and riverbed elevations. LIDAR systems allow scientists and mapping professionals to examine both natural and manmade environments with accuracy, precision, and flexibility.

78. (D)

*Exp.*

A magnetar is a type of neutron star with an extremely powerful magnetic field. The magnetic field decay powers the emission of high-energy electromagnetic radiation, particularly X-rays and gamma rays.

Like other neutron stars, magnetars are around 20 kilometres (12 mi) in diameter and have a mass 2-3 times that of the Sun. Magnetars are differentiated from other neutron stars by having even stronger magnetic fields, and rotating comparatively slowly, with most magnetars completing a rotation once every one to ten seconds, compared to less than one second for a typical neutron star.

This magnetic field gives rise to very strong and characteristic bursts of X-rays and gamma rays. The active life of a magnetar is short. Their strong magnetic fields decay after about 10,000 years, after which activity and strong X-ray emission cease.

79. (D)

*Exp.*

Polymetallic nodules (also known as manganese nodules) are potato-shaped, largely porous nodules found in abundance carpeting the sea floor of world oceans in deep sea. Besides manganese and iron, they contain nickel, copper, cobalt, lead, molybdenum, cadmium, vanadium, titanium, of which nickel, cobalt and copper are considered to be of economic and strategic importance. India signed a 15 year contract for exploration of Polymetallic Nodules (PMN) in Central Indian Ocean Basin with the International Seabed Authority (ISA) (an Institution set up under the Convention on Law of the Sea to which India is a Party) on 25th March, 2002 with the approval of Cabinet. India is presently having an area of 75,000 sq.km., located about 2000 km away from her southern tip for exploration of PMN.

80. (B)

*Exp.*

Multilateral funding agency Asian Development Bank has approved \$631 million for building India's first coastal industrial corridor between Visakhapatnam and Chennai. (not Gujarat's Mundra port and Mumbai)

Multilateral funding agency Asian Development Bank to fund this project to spur development on India's eastern coast and enable seamless trade links with other parts of South and Southeast Asia.

81. (B)

*Exp.*

The Trade in Services Agreement (TiSA) is a trade agreement currently being negotiated by 23 members of the World Trade Organisation (WTO), including the EU. Together, the participating countries account for 70% of world trade in services. TiSA is based on the WTO's General Agreement on Trade in Services (GATS), which involves all WTO members. The key provisions of the GATS - scope, definitions, market access, national treatment and exemptions - are also found in TiSA.

The talks are based on proposals made by the participants. TiSA aims at opening up markets and improving rules in areas such as licensing, financial services, telecoms, e-commerce, maritime transport, and professionals moving abroad temporarily to provide services.

82. (D)

*Exp.*

The NIIF will be established as one or more Alternate Investment Funds (AIF) under the SEBI Regulations. NIIF was formed as a category II AIF, as a Trust, under Indian Trust Act on 28 December 2015 along with the formation of National Investment and Infrastructure Fund Trustee Ltd. and National Investment and Infrastructure Fund Ltd. India Infrastructure Finance Company Ltd (IIFCL) was appointed as Investment Advisor to NIIF Ltd and IDBI Capital Market Services Ltd as Advisor to NIIF Trustee Ltd initially for 6 months and 1 year respectively.

If set up as Category I and II AIFs, then NIIF will be eligible for a pass through status under the Income Tax Act. A 'pass-through' status means that the income generated by the fund would be taxed in the hands of the ultimate investor, and the fund itself would not have to pay tax on the same. In the case of category III AIF, where pass through status is not available, all income received by NIIF will be taxable at its level and any distribution made to the unit holders (investors) would be tax exempt.



The NIIF can have various sector-specific or investor-specific close ended Schemes ("funds") and each fund may issue various classes of units. Government along with other investor(s) would subscribe to the units of various funds. The units, investment strategy and accounts of each fund shall be distinct from and independent of the other funds.

**83. (D)**

**84. (A)**

*Exp.*

The Government has constituted the "National Council of Senior Citizens (NCSrC)" by renaming of the "National Council for Older Persons (NCOP)". The mandate of the National Council of Senior Citizens is to advise the Central and State Governments on the entire gamut of issues related to the welfare of senior citizens and enhancement of their quality of life, with special reference to the following:

Policies, programmes and legislative measures;

Promotion of physical and financial security, health and independent and productive living; and

Awareness generation and community mobilization.

It is headed by the Minister for Social Justice & Empowerment. The Council includes representatives of relevant Central Ministries. Five States are represented on the Council by rotation. Adequate representation is given to non-official members representing Non-Government Organisations, Academic bodies, Media and Experts on Ageing issues from different fields.

**85. (B)**

*Exp.*

M/s General Insurance Corporation of India (GIC-Re), along with several other Indian Insurance Companies, have launched the India Nuclear Insurance Pool (INIP) with a capacity of Rs. 1500 crore on 12th June, 2015, to provide insurance to cover the liability as prescribed under Civil Liability for Nuclear Damage (CLND) Act 2010. The INIP will address liability related concerns of suppliers under the CLND Act 2010 and will pave the way for Indian as well as foreign suppliers to participate in the Indian Nuclear Power Projects.

**86. (C)**

*Exp.*

Union Minister of State (IC) for Power, Coal, New & Renewable Energy and Mines, Piyush Goyal launched TARANG mobile app, e-trans and DEEP e-bidding portals. The portals have been launched with the objective to bring transparency in the power transmission sector of the country.

TARANG mobile app - It stands for Transmission App for Real Time Monitoring and Growth. It will act as a monitoring tool to track upcoming projects.

e-trans - It is web platform for e-bidding and e-reverse auction for Tariff Based Competitive Bidding (TBCB) for transmission projects.

DEEP (Discovery of Efficient Electricity Price) - It is an e-bidding portal for medium term (1-5 years) purchase of power.

**87. (D)**

*Exp.*

An IDA International Dark Sky Reserve is a public or private land possessing an exceptional or distinguished quality of starry nights and nocturnal environment that is specifically protected for its scientific, natural, educational, cultural, heritage and/or public enjoyment. Reserves consist of a core area meeting minimum criteria for sky quality and natural darkness, and a peripheral area that supports dark sky preservation in the core. Reserves are formed through a partnership of multiple land managers who have recognized the value of the natural nighttime environment through regulations and long term planning.

**88. (D)**

*Exp.*

Statement 1: LEMOA does not create any obligations on either Party to carry out any joint activity, nor does it oblige the parties to supply troops in case of a requirement by the other party.

Statement 2: USA has already declared India a major defence partner, but not a "strategic" defence partner status which is enjoyed by its closest allies obliging the USA to share cutting-edge technology with them. Since India is not a strategic partner, 2 will be wrong.

Statement 3: It does not provide for the establishment of any bases or basing arrangements, as clarified by the Minister of Defence.

89. (D)

*Exp.*

LPI is released by the World Bank. LPI index measures countries across six components- Customs, infrastructure, international shipments, logistics quality and competence, tracking and tracing, and timeliness.

It is an interactive benchmarking tool that helps countries to identify challenges and opportunities in trade logistics and also to improve their performance.

90. (C)

*Exp.*

The incorporation of SDC is part of the ambitious Sagarmala Programme by the Government of India which aims to harness India's 7,500 km long coastline, 14,500 km of potentially navigable waterways and strategic location on key international maritime trade routes.

Statement 1: It is incorrect, as the SDC is under the control of the Ministry of Shipping.

91. (C)

*Exp.*

Pradhan Mantri Ujjwala Yojana (PMUY) aims to safeguard the health of women & children by providing them with a clean cooking fuel - LPG, so that they don't have to compromise their health in smoky kitchens or wander in unsafe areas collecting firewood.

Pradhan Mantri Ujjwala Yojana was launched by Hon'ble Prime Minister Shri Narendra Modi on May 1st, 2016 in Ballia, Uttar Pradesh. Under this scheme, 5 Cr LPG connections will be provided to BPL families with a support of Rs.1600 per connection in the next 3 years. Ensuring women's empowerment, especially in rural India, the connections will be issued in the name of women of the households. Rs. 8000 Cr. has been allocated towards the implementation of the scheme. Identification of the BPL families will be done through Socio Economic Caste Census Data.

It has no provision for basic health check facility. Hence Statement 2 is wrong.

92. (B)

*Exp.*

At the event, Shri J P Nadda, launched Bedaquiline - new anti-TB drug for Drug Resistant TB as part of the RNTCP. The drug

is a new anti-TB drug for treatment of MDR-TB. This new class of drug is a diarylquinoline that specifically targets Mycobacterial ATP synthase, an enzyme essential for supply of energy to Mycobacterium tuberculosis and most other mycobacteria. This drug is indicated for use in the treatment of drug-resistant TB.

93. (D)

*Exp.*

A basic income (also called unconditional basic income, Citizen's Income, basic income guarantee, universal basic income or universal demogrant) is a form of social security in which all citizens or residents of a country regularly receive an unconditional sum of money, either from a government or some other public institution, in addition to any income received from elsewhere.

94. (C)

*Exp.*

Investor-state dispute settlement (ISDS) or investment court system (ICS) is a system through which individual companies can sue countries for alleged discriminatory practices. The practice was made widely known through the Philip Morris v. Uruguay case, where the tobacco company Philip Morris sued Uruguay after having enacted strict laws aimed at promoting public health. If an investor from one country (the "home state") invests in another country (the "host state"), both of which have agreed to ISDS, and the host state violates the rights granted to the investor under public international law, then that investor may bring the matter before an arbitral tribunal. While ISDS is often associated with international arbitration under the rules of ICSID (the International Centre for Settlement of Investment Disputes of the World Bank), it often takes place under the auspices of international arbitral tribunals governed by different rules or institutions, such as the London Court of International Arbitration, the International Chamber of Commerce, the Hong Kong International Arbitration Centre or the UNCITRAL Arbitration Rules. ISDS has been criticized because the United States has never lost any of its ISDS cases, and that the system is biased to favor American companies and American trade over other Western

countries, and Western countries over the rest of the world.

**95. (B)**

*Exp.*

NPPA is an organization of the Government of India which was established, inter alia, to fix/revise the prices of controlled bulk drugs and formulations and to enforce prices and availability of the medicines in the country, under the Drugs (Prices Control) Order, 1995.

The organization is also entrusted with the task of recovering amounts overcharged by manufacturers for the controlled drugs from the consumers.

It also monitors the prices of decontrolled drugs in order to keep them at reasonable levels. It is under the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.

**96. (A)**

*Exp.*

It is parasitic disease transmitted by the sand fly.

Statements (1) and (2) are correct.

**97. (D)**

*Exp.*

The International Solar Alliance is an alliance of more than 120 countries, most of them being sunshine countries, which come either completely or partly between

the Tropic of Cancer and the Tropic of Capricorn.

The alliance's primary objective is work for efficient exploitation of solar energy to reduce dependence on fossil fuels.

This initiative was first proposed by Indian Prime Minister Narendra Modi in a speech in November 2015 at Wembley Stadium, in which he referred to sunshine countries as suryaputra ("sons of the sun").

The alliance is a treaty-based inter-governmental organization.

**98. (A)**

*Exp.*

The scheme "Upgrading the Skills and Training in Traditional Arts/Crafts for Development (USTTAD) was launched in May, 2015.

**99. (C)**

*Exp.*

Kerala, with a rural population of approximately 3.5 crores, is also the largest State so far to have achieved the ODF Status, after Sikkim (~6 lakhs) and Himachal Pradesh (~70 lakhs).

The State of Kerala became the third State overall and the largest State so far to be declared Open Defecation Free (ODF) under the Swachh Bharat Mission (SBM) (Gramin).

**100. (D)**