

**UPSC Prelim-2015  
G.S. Paper-I (A-Series) Questions and Answers with Explanation**

Answer	Explanation
1. (c)	
2. (a)	
3. (b)	
4. (d)	
5. (a)	Tropical Cyclones/Hurricanes are totally absent from the South Atlantic and from the South-Eastern part of the Pacific apparently because the water is too cold and because high pressure dominates.
6. (d)	
7. (c)	
8. (b)	Electricity Generation has more than 10% weightage in GDP higher compared to Steel(6.7%), Coal(3.8%) and Fertilizers (1.25%)
9. (b)	Keibul Lamjao National Park is unique in being a swamp with floating vegetation that (called phumdis)/(Loktak Lake) supports a rich biodiversity.
10. (a)	About NIF National Innovation Foundation-India is an autonomous body of the Department of Science and Technology, Government of India, based on the Honey Bee Network Philosophy, which provides institutional support to grassroots innovators and outstanding traditional knowledge holders from the unorganized sector of the society. Building upon the Honey Bee Network Philosophy, the National Innovation Foundation-India (NIF), started functioning in March 2000 as India's national initiative to strengthen the grassroots technological innovators. NIF is committed to look for grassroots innovators who have developed technological innovations in any field of human survival without any outside help.
11. (c)	Nitrogen-containing fertilizers can cause soil acidification wh High application rates of nitrogen-containing fertilizers combined with the high water-solubility of nitrate leads to increased runoff into surface water as well as leaching into groundwater pollution added.
12. (b)	IUCN Action-hundreds of conservation projects all over the world from the local level to those involving several countries, all aimed at the sustainable management of biodiversity and natural resource. Official Observer status at the United Nations General Assembly, CITES is an international agreement to which States (countries) adhere voluntarily. States that have agreed to be bound by the Convention ('joined' CITES) are known as Parties. Although CITES is legally binding on the Parties-in other words they have to implement the Convention-it does not take the place of national laws. Rather it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.

13. (a)	
14. (b)	As the two Equatorial Currents (North Equatorial and South Equatorial) none from east to west there is a piling of water in the western part of the Ocean basin and this leads to the flow of surface water from west to east (called Counter Equatorial Current). Because the Coriolis effect is minimal at the equator, much of water is not turned toward higher latitudes. Instead, it piles up at the western margin of an Ocean basin and as a result there is a Counter Equatorial Current from West to east.
15. (a)	
16. (b)	The Rowlatt Committee was based on the recommendations of the Act were passed in March 1919 while Simon Commission was Constituted in 1927.
17. (b)	
18. (a)	Fly ash is a heterogeneous material. $\text{SiO}_2$ , $\text{Al}_2\text{O}_3$ , $\text{Fe}_2\text{O}_3$ and occasionally $\text{CaO}$ are the main chemical components present in fly ashes. Owing to its <u>pozzolanic</u> properties, fly ash is used as a replacement for <u>Portland cement in concrete</u>
19. (c)	
20. (d)	
21. (d)	
22. (c)	Reduction in SLR will mean that banks can keep less of their Net Demand and Time Liabilities in specific forms like government securities, thereby freeing up some money, encouraging them to give loans on lower interest rates.
23. (c)	As opposed to viral based vectors for gene therapy, non-viral vectors such as nanoparticles are safer, more flexible in their range of cellular targets, and can carry larger cargoes than viruses.
24. (b)	
25. (c)	
26. (d)	
27. (b)	Rajya Sabha does not have the power to reject or amend money bills. It may only suggest amendments. Lok Sabha has exclusive power to vote on demands for grants.
28. (b)	The Government of India Act, 1919 proposed division of Subjects into the Central List and the Provincial List. Any subject not specifically transferred to the provinces was a Central subject.
29. (c)	
30. (d)	IceCube is a particle detector at the South Pole that records the interactions of a nearly massless subatomic particle called the neutrino. IceCube searches for neutrinos from the most violent astrophysical sources: events like exploding stars, gamma-ray bursts, and cataclysmic phenomena involving black holes and neutron stars. The IceCube telescope is a powerful tool to search for dark matter and could reveal the physical processes associated with the enigmatic origin of the highest energy particles in nature. In addition, exploring the background of neutrinos

	produced in the atmosphere, IceCube studies the neutrinos themselves; their energies far exceed those produced by accelerator beams. IceCube is the world's largest neutrino detector, encompassing a cubic kilometer of ice.
31. (c)	
32. (c)	NFC works in the 13.56 MHz radio frequency spectrum using less than 15mA of Power to communicate data over distances that are usually far less than 20cm. NFC works using magnetic induction: a reader emits a small electric current which creates a magnetic field that in turn bridges the physical space between the devices. That field is received by a similar coil in the client device where it is turned back into electrical impulses to communicate data such as identification number status information or any other information. When a secure channel is established, the information is encrypted and only an authorized device can decode it.
33. (b)	Golan Heights-Plateau on the Syrian border with Israel is bitterly contested in the Arab-Israeli wars and annexed by Israel.
34. (c)	
35. (b)	
36. (d)	
37. (a)	Refer Article 108
38. (d)	
39. (d)	
40. (b)	
41. (c)	It was in the first battle of Pampal (1526) that Babur defeated Ibrahim Lodi primarily with the help of Canons. He was related to Timur, from his father's side. Arch and dome in architecture had already been introduced by Turks in Delhi Sultanate.
42. (d)	
43. (a)	
44. (d)	<ol style="list-style-type: none"> <li>1. Executive Power of Union is rested in the President.</li> <li>2. Cabinet Secretary is the ex-officio chairman of CSB.</li> </ol>
45. (c)	
46. (b)	
47. (c)	
48. (b)	The first woman President of the Indian National Congress was Annie Bhasant in 1917. Badruddin Tyabji was the President at Madras session held in 1887.
49. (a)	Green Climate Fund has been founded under the aegis of United Nations Framework for Climate Change (UNFCCC)
50. (c)	ISRO got the Indira Gandhi prize for Peace, Disarmament and Development for 2014 was given for Mars Orbiter Mission.

51. (a)	Cabinet Mission which arrived in March 1946 recommended a federal government.
52. (d)	
53. (b)	Amnesty International is a global Human Rights Movement and a NGO.
54. (b)	(a) Lingaraja Temple - 11 <sup>th</sup> Century A.D. (b) Rock-cut Elephant – Mauryan Time (c) Rock-cut Monuments at Mahabalipuram were built in the 7 <sup>th</sup> -8 <sup>th</sup> Century A.D. by Pallava rulers. (d) Varaha image at Udayagiri belonged to Gupta times of the 4 <sup>th</sup> and 5 <sup>th</sup> Century A.D.
55. (b)	
56. (d)	
57. (b)	India is a member of East Asia Summit and has a free trade agreement with ASEAN.
58. (c)	Although India has huge deposits of high grade iron-ore, her coal reserves, especially high grade coking coal for smelting iron-ore are limited. Many steel plants are forced to import metallurgical coal. For eg steel plant at Vishakhapatnam imports coal from Australia.
59. (a)	
60. (c)	Budget Division of finance ministry functioning under Department of Economic Affairs is in charge of preparing the budget. Public Account of India, unlike consolidated Fund of India, is kept under the executive authority of President.
61. (d)	(d) is a better answer than (a). R. C. Lahoti when he was the CJI, in a speech delivered in the Supreme Court referred to the Supreme Court as the custodian of the constitution. It's also true that Mr. Pranab Mukherjee on the eve of taking oath as the President of India in July 2012 stated that he was about to become the custodian of the Constitution. But the Supreme Court being the final interpreter of the Constitution is assigned the job of maintaining the supremacy of the constitution and thus act as the Custodian of the Constitution.
62. (b)	Under the Accelerated Irrigation Benefits Programme, the financial help was given to State governments to complete their Irrigation projects to increase the irrigation facilities in the country.
63. (c)	The Genetic Engineering Appraisal Committee (GEAC) is the apex body constituted in the Ministry of Environment and Forests under 'Rules for Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms/Genetically Engineered Organisms or Cells 1989', under the Environment Protection Act, 1986.
64. (c)	The six countries in Mekong-Ganga cooperation are: India, Thailand, Myanmar, Cambodia, Laos and Vietnam.
65. (b)	
66. (b)	The Western Disturbances' i.e. the Temperate Cyclones are brought to NW India by Westerlies. The first statement is wrong because the latitudes mentioned are between 30 <sup>o</sup> W and 60 <sup>o</sup> S.
67. (d)	

68. (a)	Swadeshi Movement launched in 1905 created a rift within the Congress.
69. (a)	
70. (d)	The centrifugal forces result from the motion of the Earth and moon around their common centre of gravity. Since all points on the surface of the Earth describe the same path during a revolution around the common centre of gravity (Earth and Moon), the centrifugal force on the earth has everywhere the same magnitude and direction. But the forces of attraction have a different direction, and differ in magnitude. The residual forces act as the resultant of these two forces.
71. (a)	Indian Remote Sensing satellites The data from these satellites are used for several applications covering agriculture, water resources, urban planning, rural development, mineral prospecting, environment, forestry, ocean resources and disaster management.
72. (c)	
73. (d)	The deployment of IndARC, the country's first underwater moored observatory in the Kongsfjorden fjord, half way between Norway and the North Pole, represents a major milestone in India's scientific endeavours in the Arctic region
74. (c)	
75. (a)	
76. (c)	
77. (b)	
78. (a)	
79. (c)	
80. (b)	Equatorial Type Region Climate is where the term 'Season' is meaningless. In the equatorial region the terms 'Weather' and 'Climate' are interchangeable.
81. (b)	The growth rate of Real GDP has declined since 2008-09 even if GDP at Market Prices has been increasing.
82. (d)	1. The LC of a State cannot be larger in size than one-third of the LA of that State. 2. The Chairman of the LC of the State is to be elected by the members of the LC.
83. (d)	
84. (c)	The term Ecosystem was used by A. G. Tansley (1935) to describe a discrete unit that consist of living and non-living parts interacting together to form a stable system. SKM
85. (c)	
86. (c)	Public Debt and Public Revenue are components of Fiscal Policy.
87. (c)	
88. (a)	India, despite having nuclear deals with multiple nations is not a member of NPT, and the same is the case with Israel and Pakistan.

89. (b)	
90. (b)	Capital-Augmenting technological progress means that existing capital goods are being used in a more productive manner.
91. (d)	In a Presidential form of Government, Executive is responsible to the people not to the Parliament. In a Parliamentary form of Government, Executive is responsible to Parliament. In India, Council of Ministers is collectively responsible to Lok Sabha.
92. (d)	H1N1 flu is also known as swine flu. Surface antigens (foreign proteins)-hemagglutinin (H) and neuraminidase (N).
93. (d)	A toilet in which biological degradation of human waste by Anaerobic Bacteria inoculums takes place. Bio Digester disposes human waste in 100% eco-friendly manner and generates color less, odorless water and inflammable Methane-Gas for cooking, water heating and room heating etc. as a by product.
94. (c)	
95. (a)	Hydrogen is the basic fuel, but fuel cells also require oxygen. One great appeal of fuel cells is that they generate electricity with very little pollution—much of the hydrogen and oxygen used in generating electricity ultimately combine to form a harmless byproduct, namely water.
96. (a)	
97. (b)	
98. (a)	Budget Deficit can be reduced either by controlling government expenditure or by increasing government revenue. Introducing new welfare schemes and expanding industries, both need more government expenditure, so deficit will increase.
99. (c)	
100. (c)	IREDA is also an NBFC because it provides loans for Projects for generating electricity through renewable sources.