

## PRELIMINARY QUESTIONS OF GS-I OCS-2017

1. **Which of the following Miss World Title holders are from India?**
  - 1) Diana Hayden
  - 2) YuktaMookhay
  - 3) Priyanka Chopra
  - 4) ManushiChillar

(A) (3) and (4)  
(B) (2) , (3) and (4)  
(C) (1), (2) and (3)  
(D) (1) , (2) (3) and (4)
2. **What is the rank of India in the Inclusive Development Index as given by the World Economic Forum?**

(A) 50th  
(B) 60th  
(C) 55th  
(D) 66<sup>th</sup>
3. **What is the theme of the International Day for the Disaster Reduction , 2017**

(A) Living with Disabilities and Disasters  
(B) Knowledge for life  
(C) Resilience is for life  
(D) Home safe home : Reducing Exposure , Reducing Displacement
4. **Give it Up campaign is related to which of the following?**

(A) Tobacco use  
(B) Alcohol use  
(C) LPG subsidy  
(D) None of the above
5. **Recently, International Union concerned scientists down listed which of the following from the list of endangered to vulnerable species?**

(A) Black necked crane  
(B) Snow leopard  
(C) Black falcon  
(D) Polar bear
6. **Taking in view Naxal attack in Sukma, Ministry of Home Affairs responsible to Naxal Problem was**

(A) Sampada scheme  
(B) Samadhan doctrine  
(C) Jigyasa initiative  
(D) None of the above
7. **Which of the following ports are used by China for its string of pearls policy?**

(A) Hambantota  
(B) Gwadar  
(C) Bandar Abbas  
(D) (A) and (B)
8. **The International Astronomical Union [IAU] has named two mountains ranges on the dwarf planet Pluto after whom?**

(A) Tenzing Norgay and ArunimaSinha  
(B) ArunimaSinha and Edmund Hillary  
(C) Edmund Hillary and KalpanaChwala  
(D) Tenzing Norgay and Edmund Hillary
9. **Name the Indian boxer who has won the gold medal in 2017 Asian Women's Boxing Champions?**

(A) KavitaChahal  
(B) Pinki Rani  
(C) Mary Kom  
(D) KavitaGoyat
10. **India has been re-elected as member of the Executive Board of which organization of UNO?**

(A) UNICEF  
(B) WHO  
(C) UNESCO  
(D) ICJ
11. **Which state became the first state of India to ratify GST bill?**

(A) Assam  
(B) Telangana  
(C) Bihar  
(D) Arunachal Pradesh

12. GST was introduced as the \_\_\_\_\_ Amendment Act.
- (A) 100  
(B) 101  
(C) 102  
(D) 103
13. Which of the following denomination note was introduced immediately after announcing Demonetization?
- (A) 200  
(B) 400  
(C) 2000  
(D) 1000
14. Which state govt. has put in force No helmet no petrol rule for two-wheeler riders?
- (A) Gujarat  
(B) Rajasthan  
(C) Andhra Pradesh  
(D) Tamil Nadu
15. Indica was Written by :
- (A) Strabo  
(B) Megasthenes  
(C) Justin  
(D) Pliny
16. The Rajtarangini composed by Kalhana in the twelfth century is the main source of
- (A) History of Assam  
(B) History of Nepal  
(C) History of Medieval Kashmir  
(D) Post Gupta Economics
17. Match the List – I with List – II and select the code given below :
- List – I [Scholars]
- (A) DayanandSaraswati  
(B) BalGangadharTilak  
(C) Max Muller  
(D) GanganathJha
- List – II [Original homeland of the Aryans]
- Central Asia  
Tibet  
SaptaSindhu Region  
Arctic Region
- Codes :
- (A) 2 4 1 3  
(B) 1 2 4 3  
(C) 2 1 4 3  
(D) 1 3 4 2
18. King Ashoka became Buddhist after he was horrified with the tyranny of Kalinga War. It was in :
- (A) 258 B.C  
(B) 260 B.C  
(C) 200 B.C  
(D) 327 B.C
19. Which of the following Odisha type Nagara style temples are found at Bhubaneswar?
1. Jagannath temple
  2. Lingaraja temple
  3. Sun temple
  4. Mukteswar temple
  5. Parasurameswara temple
- Choose the answers from the codes below :
- (A) 4 and 5  
(B) 2 only  
(C) 2, 4 and 5  
(D) 1, 3 and 5
20. The story that AlauddinKhilji invaded to secure Padmini, the queen of Rana Ratna Singh of Mewar , was vividly described by :
- (A) Malik Muhammad Jayasi in his epic Padmavat  
(B) Ibn-Batuta in his Rehla  
(C) Amir Khusraur in KhazainulFutuh  
(D) Col. J. Todd in Annals and Antiquities of Rajsathan
21. Who among these was never elected to the Presidentship of INC ?
- (A) George Yule  
(B) Alfred Webb  
(C) Khan Abdul Gaffar Khan [Badsha Khan]  
(D) Nawab Syed

22. Which among the following places were set up as Vedanta Centres when Swami Vivekananda visited U.S.A in 1899?
1. Chicago
  2. New York
  3. San Francisco
  4. Los Angels
- Codes :
- (A) 1 and 2
  - (B) 2 and 3
  - (C) 2 and 4
  - (D) 3 and 4
23. Who moved [and withdrew] a resolution for the enfranchisement of women in the 1917 Session of Indian National Congress?
- (A) Annie Besant
  - (B) Sarojini Naidu
  - (C) Kamaladevi Chattopadhyay
  - (D) Aruna Asaf Ali
24. V.D. Savarkar authored the book:
- (A) Eighteen Fifty Seven
  - (B) The Sepoy Mutiny
  - (C) The Indian War of Independence
  - (D) Rebellions in the Indian Mutinies
25. Which of the following peasant movements is not properly matched with the state in which it was launched?
- (A) Moplah Rebellion – Kerala
  - (B) Pabna Agrarian Movement – Maharashtra
  - (C) Kisan Sabha and Ekta [Unity] Movement – Uttar Pradesh
  - (D) Bardoli Satyagraha – Gujarat
26. Who founded the Satyabadi School with National Spirit in Odisha?
- (A) Acharya Harihar
  - (B) Madhudhan Rao
  - (C) Gopabandhu Das
  - (D) Krispasindhu Mishra
27. Who among these was not a member of the Cabinet Mission?
- (A) A.V. Alexander
  - (B) Archibald Wavell
  - (C) Stafford Cripps
  - (D) Pethick Lawrence
28. The greatest crisis that Akbar faced in 1580 – 81 was when :
- (A) Salim revolted
  - (B) The disgruntled nobles and officers declared Akbar's half-brother Mirza Hakim as their ruler
  - (C) Rana Pratap escaped from the battle of Haldighat
  - (D) Yusufzais revolted in the North West Frontier
29. Which of the following types, the Quartzite is related to ?
- (A) Igneous Rocks
  - (B) Sedimentary Rocks
  - (C) Metamorphic Rocks
  - (D) None
30. Which of the following towns of India is located on Tropic of Cancer?
- (A) Bhuj
  - (B) Bhopal
  - (C) Gandhinagar
  - (D) Banswada
31. On the basis of area which of the following is the correct descending order of Indian Union Territories?
- (A) Delhi, Pondicherry and Andaman and Nicobar
  - (B) Pondicherry , Andaman and Nicobar and Delhi
  - (C) Andaman and Nicobar , Delhi and Pondicherry
  - (D) Andaman and Nicobar, Pondicherry and Delhi
32. Which of the following mountains is the oldest?
- (A) Dinaric Alps
  - (B) Aravali
  - (C) Tienshan
  - (D) Satpura
33. Which of the following pairs of Indian Forests is not correctly matched?
- (A) Monsoon Forest – Teak
  - (B) Mangrove Forest – Sundari
  - (C) Evergreen Forest – Rosewood
  - (D) Savanna Forest – Pipal

34. On which of the following Indian Rivers the Maitoor Project has been constructed ?
- (A) Kaveri  
(B) Krishna  
(C) Yamuna  
(D) Narmada
35. The ideal temperature of ocean water for the growth of Corals is :
- (A) 10°C – 15°C  
(B) 15°C – 20°C  
(C) 20°C – 25°C  
(D) 25°C – 30°C
36. Tropical cyclones are not found between 10 degree north latitude and 10 degree south latitude due to :
- (A) High temperature  
(B) Low Salinity  
(C) Great Depth of Water  
(D) Minimum Coriolis Effect
37. Which of the Following is famous for the Cotton Textile Industry?
- (A) Lancashire  
(B) New Castle  
(C) Sheffield  
(D) Durham
38. Which of the following metals, the Zawar mines of Udaipur are famous for?
- (A) Iron ore  
(B) Mica  
(C) Zinc  
(D) Manganese
39. Which of the following Indian States is the greatest producer of wind energy?
- (A) Tamil Nadu  
(B) Maharashtra  
(C) Karnataka  
(D) Rajasthan
40. Which of the following Iron and Steel Plants does not function under the Steel Authority of India Limited?
- (A) Durgapur  
(B) Rourkela  
(C) Bhilai  
(D) Jamshedpur
41. The Pygmy tribe is associated with :
- (A) Sahara  
(B) Congo Basin  
(C) East Africa  
(D) Kalahari
42. Which of the following countries has the highest Anthracite Coal reserves?
- (A) Russia  
(B) U.S.A  
(C) China  
(D) U.K
43. Which of the following are matters on which the Parliament has power to modify provisions of the Constitution by the simple majority?
1. Alternation of names , boundaries and areas of States
  2. Appointment of Additional Judges
  3. Abolition of second chamber of State Legislature
  4. Administration of Scheduled Areas
- Select the correct answer using the codes given below:
- (A) 1,2 and 3  
(B) 1, 2 and 4  
(C) None of the options  
(D) 2 , 3 and 4
44. Who among the following was the Chairman of the Committee of the Constituent Assembly?
- (A) Dr. B.R.Ambedkar  
(B) Jawaharlal Nehru  
(C) Dr.Rajendra Prasad  
(D) Sardar Patel
45. The Indian Federation is based on the pattern of :
- (A) Switzerland  
(B) USA  
(C) Russia  
(D) Canada
46. Which of the following are included in the Directive Principles of State Policy in the Constitution of India?
1. Uniform Civil Code for the citizens

2. Separation of Judiciary from Executive
3. Protection of monuments of national importance
- Select the correct answer by using the codes given below :
- (A) 1 and 2  
(B) 2 and 3  
(C) 1 and 3  
(D) 1, 2 and 3
- 47. The philosophical postulates of the Constitution of India are based on :**
- (A) Nehru Report , 1928  
(B) Objective Resolution of Pandit Nehru, 1947  
(C) Mahatma Gandhi's article 'Independence in Young India' 1922  
(D) Indian National Congress' Resolution for Complete Independence, 1929
- 48. Who, among the following, was not a member of the State Reorganization Commission [SRC] appointed by Pandit Jawaharlal Nehru?**
- (A) Justice Fazl Ali  
(B) PottiSriramulu  
(C) K.M.Panikar  
(D) HaridayanathKunzru
- 49. Under Article 368, the Parliament has no power to repeal Fundamental Rights because these are :**
- (A) Enshrined in Part 3 of the Constitution  
(B) Human Rights  
(C) Transcendental Rights  
(D) Part of Basic Structure of the Constitution
- 50. Which of the following is not an element of 'Secular State' in India?**
- (A) Civil Equality  
(B) Taxation on religious property  
(C) Freedom of religion  
(D) No religious education by the state
- 51. Which of the following Act introduced bi-Cameral Legislature at the central level in India?**
- (A) Indian Council Act, 1909  
(B) The Government of India Act, 1919  
(C) The Government of India Act, 1935  
(D) The Indian Independence Act, 1947
- 52. Who said, "All communalism is harmful". The logic of minority communalism is separatism, and majority communalism is separatism, and majority communalism culminates?**
- (A) AsishNandy  
(B) Bipin Chandra  
(C) Zoya Hassan  
(D) Bhikhu Parekh
- 53. Article 371 of the Constitution of India provides for special provision with respect for special provision with respect to which of the following states[s]?**
- (A) Andhra Pradesh  
(B) Assam  
(C) Nagaland and Sikkim  
(D) Maharashtra and Gujarat
- 54. Which of the following is not a correct statement regarding unitary system?**
- (A) In a unitary system, there is one State and one Government  
(B) There is constitutional division of powers between the Central and the Local Governments  
(C) Local bodies derive their power and autonomy from the Central Government  
(D) Unitary system is particularly suited for a small country
- 55. 73rd Amendment does not apply to the states of :**
1. Nagaland  
2. Mizoram  
3. Jammu and Kashmir  
4. Meghalaya
- Select the correct answer using the codes given below :
- (A) 1 and 2  
(B) 1, 2 and 4  
(C) 1, 2, 3 and 4  
(D) 2 and 3
- 56. The Chairman and members of the UPSC hold office for the term of :**
- (A) Three years  
(B) Four years

- (C) Five years  
(D) Six years
- 57. Which one of the following is not a salient feature of the Constitution of India?**
- (A) Written Constitution and Supremacy of the Constitution  
(B) Quasi federal structure  
(C) Committed Judiciary  
(D) Distribution of Powers
- 58. Which of the following is not a cause of Inequality in India?**
- (A) Inequality in the ownership of assets  
(B) Laws of Inheritance  
(C) Corruption and Smuggling  
(D) Growth of Service Sector in India
- 59. Which of the following is not an objective of NitiAayog?**
- (A) Allocating financial resources to states  
(B) To foster cooperative federalism by evolving a shared vision of National Development Priorities  
(C) To develop mechanisms to formulate credible plans to the village level and aggregate these progressively at higher levels of government  
(D) To pay attention to the weaker sections of the society that may not have benefitted from economic progress.
- 60. Which statement depict the best definition of Sustainable Development?**
- (A) It means optimal utilization of natural resources  
(B) Sustainable use and natural resources without considering the need of the future generation  
(C) Present generation fulfils it's needs while considers the need of future generation as well  
(D) None of the above
- 61. Which of the following is not a cause of growing consumer goods market in India?**
- (A) Growth of middle class in India  
(B) Urbanisation  
(C) Liberalisation policy of Government  
(D) Growing Inequality in India
- 62. NAFED is a cooperative organization of the**
- (A) State Level  
(B) National Level  
(C) District Level  
(D) Panchayat Level
- 63. 'PradhanMantri Jan DhanYojana' is run by :**
- (A) Scheduled Commercial Banks  
(B) Department of Financial Services, Ministry of Finance  
(C) Ministry of Rural Development  
(D) Reserve Bank of India
- 64. What does it mean by Human Capital Formation?**
- (A) Development of Infrastructure for the Economy  
(B) Development of abilities and skills of people  
(C) Increase in the stock of machines equipment, buildings in the Economy  
(D) Growth of Bank deposits
- 65. The main argument to establish 'Special Economic Zones' in India is :**
- (A) To give a boost to export of manufactured goods  
(B) To promote export of agricultural goods  
(C) To give a boost to domestic demand for manufactured goods  
(D) None
- 66. JananiSurakhyaYojana is a :**
- (A) Hundred percent Centrally Sponsored Scheme  
(B) Hundred percent State Sponsored Scheme  
(C) Centre and State has 50 : 50 share  
(D) Fully sponsored by the private sector
- 67. Inclusive Growth in India can be achieved**
- (A) Through a Progressive tax  
(B) Through a Regressive tax  
(C) Through a Proportional tax  
(D) By completely scrapping all taxes

68. **Payment Banks are different from other Commercial Banks in the following ways:**
- (A) These Banks only accept deposits
  - (B) Only provide payments and remittances services
  - (C) Only distribute third-party financial products
  - (D) Accept deposit, provide payments and remittances services, distribute third-party financial products but not allowed to lend or issue cards
69. **Usual Principal Status Employment is measured in :**
- (A) Number of persons who did not find even an hour of work during the survey week
  - (B) Number of persons who remained unemployed for a major part of the year
  - (C) Number of persons who did not find work in a day or some days during the survey week
  - (D) None
70. **Tendulkar Committee was appointed on**
- (A) Poverty Estimation
  - (B) Industry Sector Reforms
  - (C) Bank Frauds
  - (D) Public Welfare
71. **Which of the following sectors has attracted the highest Foreign Direct Investment flows into India during the recent years?**
- (A) Chemicals other than fertilizers
  - (B) Services Sector
  - (C) Food Processing
  - (D) Telecommunication
72. **Three US Scientists have been awarded the Noble prize in Physics for their work on gravitational waves. Which of the following is not one of them?**
- (A) Rainer Weiss
  - (B) Kip Thorne
  - (C) Barry Barish
  - (D) Jay Hannigam
73. **Dark coloured soil with high water holding capacity is considered highly productive as it contains :**
- (A) High clay content
  - (B) Sand and Calcium
  - (C) Clay and humus
  - (D) Silt and earthworms
74. **The introduction of new life forms in a denuded habitat is initiated by the process of**
- (A) Ecesis
  - (B) Aggregation
  - (C) Migration
  - (D) Coactions
75. **Biological equilibrium is the balance between**
- (A) Producers and consumers
  - (B) Producers and nutrients
  - (C) Consumers and ecological factors
  - (D) Producers consumers and decomposers
76. **In a pond ecosystem, the BOD increases due to**
- (A) Photosynthetic activity of algae
  - (B) High density of aquatic macrophytes
  - (C) High density of fish
  - (D) Increase in the population of bacteria
77. **Ozone layer in the stratosphere is affected by the increase in the atmospheric concentration of :**
- (A) CO<sub>2</sub>
  - (B) NH<sub>3</sub>
  - (C) SO<sub>2</sub>
  - (D) CFC
78. **Considering the global warming potential of CO<sub>2</sub> as one, the global warming potential of CO<sub>2</sub> as one, the global warming potential CH<sub>4</sub> has been estimated to be approximate.**
- (A) 12
  - (B) 15
  - (C) 21
  - (D) 35
79. **The pollutants like phenol and mercury can be removed from water by :**
- (A) Sedimentation
  - (B) Electro-dialysis
  - (C) Filtration
  - (D) Biological oxidation

- 80. The pollutant generated in high quantity by the thermal power plants is**
- (A) SO<sub>2</sub>  
(B) CO  
(C) NH<sub>3</sub>  
(D) Fly ash
- 81. Which of the following cities is associated with organization of "Earth Summit"?**
- (A) New Delhi  
(B) Geneva  
(C) Rio-de-Jenario  
(D) Sydney
- 82. LNG stands for :**
- (A) Liquid Nitrogen Gas  
(B) Liquefied Nitrogen Gas  
(C) Liquid Neon Gas  
(D) Liquefied Natural Gas
- 83. Kyoto Protocol was signed by member countries at Kyoto [Japan] in :**
- (A) 1995  
(B) 1997  
(C) 1999  
(D) 2003
- 84. The first nuclear reactor in India was built in the year 1956 . Its name was**
- (A) Kamini  
(B) Rohini  
(C) Bhaskar  
(D) Apsara
- 85. What is a biogas plant?**
- (A) Digester  
(B) Aerobic digester  
(C) Anaerobic digester  
(D) Gassifier
- 86. What for OTEC stands?**
- (A) Odisha Thermal Energy Corporation  
(B) Ocean Temperature Energy Conversion  
(C) Ocean Thermal Energy Conversion  
(D) Organization of Thermal Energy Conversion
- 87. Bronze is an alloy of :**
- (A) Copper and Nickel  
(B) Copper and Iron  
(C) Copper and Tin  
(D) Copper and Aluminium
- 88. Which of the following is an ore of iron?**
- (A) Siderite  
(B) Malachite  
(C) Bauxite  
(D) Anglesite
- 89. Silviculture is the :**
- (A) Arts and Science of cultivating herbs  
(B) Art and Science of cultivating grasses  
(C) Art and Science of cultivating flowers  
(D) Art and Science of cultivating forest trees
- 90. Arid Forest Research Institute [AFRI] is situated at :**
- (A) Nagpur  
(B) Jodhpur  
(C) Kanpur  
(D) Fatehpur
- 91. It is thought that dozens of ships and planes have disappeared under mysterious circumstances in the area of bad luck and extra terrestrial activity. This area is known as**
- (A) Bermuda triangle  
(B) Cuba  
(C) Puerto Rico  
(D) Gulf of Mexico
- 92. Bleaching powder used in Fish pond is working as :**
- (A) Disinfectant  
(B) Sterelent  
(C) Snail Controller  
(D) Parasticide



- 93. What is a fishing gear**  
(A) Motorised boats  
(B) Wooden boats  
(C) Devices used to catch prawn and lobsters such as nets , traps, hooks and even hands  
(D) None
- 94. The approximate life time of a common electric bulb is 1,000 hrs whereas the approximate life time of a LED bulb is :**  
(A) 5,000 hrs  
(B) 10,000 hrs  
(C) 20,000 hrs  
(D) 50,000 hrs
- 95. The safe threshold limit of CO<sub>2</sub> concentration in the atmosphere in ppm is :**  
(A) 350  
(B) 600  
(C) 800  
(D) 1000
- 96. The detection of gravitational wave on 14th September , 2015 by the LIGO collaboration from the merger of two black holes , is the first direct detection of gravitational waves and the first observation of a binary black hole merger. This provides evidence for :**  
(A) Arrhenius theory of electrolytic dissociation  
(B) Einstein's general theory of relativity  
(C) Newton's law of gravity  
(D) Theory of black body radiation
- 97. What is a syngas?**  
(A) It s a gas mixture of CO, H<sub>2</sub>, CO<sub>2</sub> and N<sub>2</sub>  
(B) It is a gas mixture of CH<sub>4</sub>, O<sub>2</sub> and CO  
(C) It is a gas mixture of CH<sub>4</sub>, CO<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub> and O<sub>2</sub>  
(D) It is a gas mixture of H<sub>2</sub> and O<sub>2</sub>
- 98. Which Committee has been constituted by the Union Government to continuously monitor the solutions to air pollution?**  
(A) BhureLal Committee  
(B) SunitaNarain Committee  
(C) C. K. Mishra Committee  
(D) HarshaVardhan Committee
- 99. The two major functional components of any ecosystem are :**  
(A) Energy flow and producers  
(B) Nutrients cycling and energy flow  
(C) Energy flow and decomposer population  
(D) Consumers and energy flow
- 100. Extinct, critically endangered and vulnerable are the categories assigned to the species by :**  
(A) UNO  
(B) IUCN  
(C) FAO  
(D) UNEP

**GS-I OF OCS-2017 PRELIMINARY EXAM.  
ANSWER KEYS & CRYPTIC SOLUTIONS**

1. D

**Explanation:**

Miss World Title holders	Year
Diana Hayden-----	1997
Yukta Mookhay-----	1999
Priyanka Chopra-----	2000
Manushi Chillar-----	2017

2. B

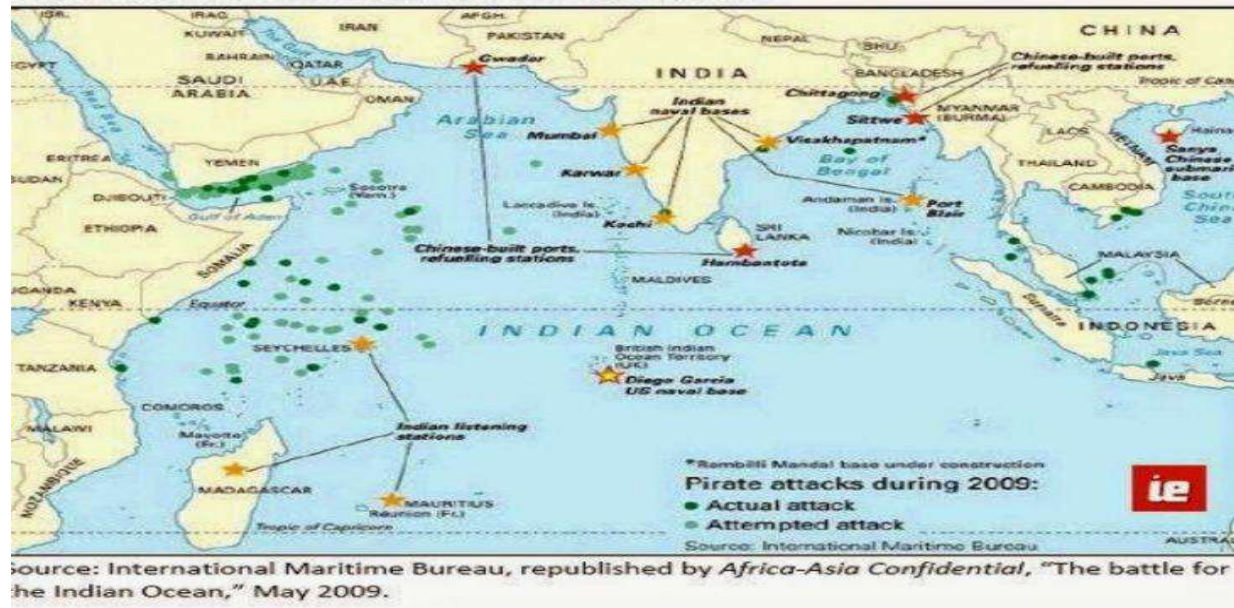
**Explanation:** India was on ranked at the 62nd place among emerging economies on an Inclusive Development Index, much below China's 26th position and Pakistan's 47th. The index takes into account the "living standards, environmental sustainability and protection of future generations from further indebtedness,".

\*\*In 2017 India ranked 60<sup>th</sup>.

3. D

**Explanation:**

**Map 1. Indian Ocean Regional Security Situation**



8. D

9. C

10. C

11. A

4. C

**Explanation:** Give up LPG subsidy is a campaign launched in March 2015 by the Indian government led by Narendra Modi. It is aimed at motivating LPG users who can afford to pay the market price for LPG to voluntarily surrender their LPG subsidy.

5. B

6. B

**Explanation:** The SAMADHAN doctrine has been enunciated by Home Minister. The elements of this strategy are S for Smart Leadership, A for Aggressive Strategy, M for Motivation and Training, A for Actionable Intelligence, D for Dashboard-based Key Result Areas and Key Performance Indicators, H for Harnessing Technology, A for Action Plan for Each Theatre and N for No access to Financing.

7. D

**Explanation:** On 12 August 2016, Assam became the first state to ratify the bill, when the Assam Legislative Assembly unanimously approved it.

12. B

**Explanation:** The One Hundred and Twenty Second Amendment Bill of the Constitution of India, officially known as The Constitution (One Hundred and First Amendment) Act, 2016, introduced a national Goods and Services Tax in India from 1 July 2017

13. C  
14. C  
15. B

**Explanation:** Indika (Greek: Ἰνδική; Latin: Indica) is an account of Mauryan India by Megasthenes. The original book is now lost, but its fragments have survived in later Greek and Latin works.

16. C

**Explanation:** Rajatarangini is a metrical legendary and historical chronicle of the north-western Indian subcontinent, particularly the kings of Kashmir. It was written in Sanskrit by Kashmiri historian Kalhana in the 12th century CE.

17. A

**Explanation:** Original home of Aryans The various scholars and their suggested original homes are as follows:

Max Muller	–	Central Asia
Swami Dayanand		
Saraswati	–	Tibet
Mayor	–	Pamir Plateau
Hurz Feld	–	Turkistan
J C Rod	–	Bactria
LokmanyaTilak	–	Arctic region

18. B  
19. C

**Explanation:** 2, 4 and 5 are located where as 1 and 3 are present in Puri district.

20. A  
21. C

**Explanation:** Abdul Ghaffar Khan, the foremost 20th-century leader of the Pashtuns (Pakhtuns, or Pathans; a Muslim ethnic group of Pakistan and Afghanistan), who became a follower of Mahatma Gandhi and was called the "Frontier Gandhi." He never became the president of INC.

22. D

**Explanation:** Swami Vivekananda had established the Vedanta centres in all of the given options but

in his during his last visit in 1899 he set up Vedanta society centres in San Francisco and Los Angeles

23. A  
24. C  
25. B

**Explanation:** Pabna Peasant Uprising (1873–76) was a resistance movement by the peasants ("Ryots") against the lords of the lands in Bengal ("zamindars") in the Yusufshahpargana (now the Sirajganj District, Bangladesh) in Pabna. It was led by Ishan Chandra Roy.

26. C

**Explanation:** SatyabadiBanaBidyalyaya is an Indian school in Sakhigopala, Odisha. Established in 1909 as an experiment in the field of education by Gopabandhu Das, the school started with 19 students. According to Das, schools had to become man-making industries and had to be instrumental in the harmonious development of a child's personality.

27. B

**Explanation :** The members of the Cabinet Mission were: Lord Penthick-Lawrence, Secretary of State for India, Sir Stafford Cripps, President of the Board of Trade, and A.V Alexander, First Lord of Admiralty.

28. B  
29. C

**Explanation:** Quartzite is a hard, non-foliated metamorphic rock which was originally pure quartz sandstone. Sandstone is converted into quartzite through heating and pressure usually related to tectonic compression within orogenic belts.

30. B

**Explanation:** Cities on or close to Tropic of cancer are Ahmedabad in Gujarat, Ujjain, Bhopal, Jabalpur, Shahdol in Madhya Pradesh, Ambikapur in Chhattisgarh, Ranchi in Jharkhand, Hooghly in West Bengal. Banswara on southern tip of Rajasthan is almost near to the Tropic of Cancer.

31. C

**Explanation:**

State	Area
Delhi-	1483 sqkm
Pondicherry-	489 sqkm
Andaman and Nicobar	8249 sqkm

Laknawadeep	32 sqkm
Daman and Diu	111 sqkm
Dadra nagar and Haveli	491sqkm
Chandigarh	114sqkm.

32. B

33. D

**Explanation:** A savanna or savannah is a mixed woodland grassland ecosystem characterised by the trees being sufficiently widely spaced so that the canopy does not close. The open canopy allows sufficient light to reach the ground to support an unbroken herbaceous layer consisting primarily of grasses

34. A

**Explanation:** There are several dams built on the Kaveri River. The most popular ones being the Krishna Raja Sagar Dam (KRS) in Mandya, Upper Anicut in Tamil Nadu, Amaravathi Dam, Mettur Dam and Kallani Dam in Tamil Nadu.

35. D

**Explanation:** Many grow optimally in water temperatures between 73° and 84° Fahrenheit (23°–29°Celsius), but some can tolerate temperatures as high as 104° Fahrenheit (40° Celsius) for short periods. Most reef-building corals also require very saline (salty) water ranging from 32 to 42 parts per thousand.

36. D

**Explanation:** The formation of a tropical cyclone requires a number of favourable environmental conditions and one of them is a suitable latitude. Almost all tropical cyclones form over regions more than 5 degrees of latitude away from the Equator and very few occur near the Equator. To explain why this happens, we need to first understand which forces in the atmosphere are critical to the formation of tropical cyclones. There are three such forces including the frictional force, pressure gradient force and Coriolis force due to the Earth's rotation.

37. A

**Explanation:** Lancashire emerged as a major commercial and industrial region during the Industrial Revolution. Liverpool and Manchester grew into its largest cities, with economies built around the docks and the cotton mills respectively. These cities dominated global trade

and the birth of modern industrial capitalism. The county contained several mill towns and the collieries of the Lancashire Coalfield. By the 1830s, approximately 85% of all cotton manufactured worldwide was processed in Lancashire

38. C

**Explanation:** Zawar is a settlement located in Udaipur district, Rajasthan, India, approximately 40 km from the lake city Udaipur. It stretches some 10 kilometers along the banks of the Gomati River.

39. A

**Explanation:** Tamil Nadu. The state of Tamil Nadu has the highest Installed wind capacity by any other state of India.

40. D

41. B

42. C

**Explanation:** Anthracite accounts for about 1% of global coal reserves, and is mined in only a few countries around the world. China accounts for the majority of global production; other producers are Russia, Ukraine, North Korea, South Africa, Vietnam, the UK, Australia, Canada and the US.

43. C

**Explanation:** Cases where the simple majority is used:

- ✓ To pass Ordinary/Money/Financial bills.
- ✓ To pass Non-Confidence Motion/Adjournment Motion/Censure Motion/Confidence Motion.
- ✓ For the removal of Vice President majority required in Lok Sabha is the simple majority – 67(B).
- ✓ To declare a financial emergency.
- ✓ To declare state emergency (President's rule).
- ✓ Election of Speaker/Deputy Speaker of Lok Sabha and State legislatures.
- ✓ Constitution Amendment Bill under Article 368 which needs to be ratified by states, require only simple majority at State Legislatures.

44. C

45. D

**Explanation:** Indian federation is based on Canadian pattern. It describes about the distribution of authorities across the whole country.

It also describes about the executive powers between the ruling authorities of the country. The Indian Constitution also describes about the federalism of the country.

46. D

47. B

48. B

**Explanation:** States Reorganisation Commission consisted of Fazal Ali, K. M. Panikkar and H. N. Kunzru. Some of its recommendations were implemented in the States Reorganisation Act of 1956.

49. D

50. B

51. B

**Explanation:** This Act made the central legislature bicameral. The lower house was the Legislative Assembly, with 145 members serving three year terms (the model for today's LokSabh(A); the upper house was the Council of States with 60 members serving five year terms(the model for today's RajyaSabh(A)

52. B

53. D

54. B

55. C

**Explanation:**The 73rd Amendment applies on union territories also, subject to exceptions specified by the President of India. But it does not apply to the states of Nagaland, Meghalaya, Mizoram and Jammu & Kashmir for their special status and tribal council situations already in existence.

56. D

57. D

58. D

**Explanation:**Growth of service sectors helps increase of employment opportunities which help in declining of inequality in recent times.

59. A

**Explanation:** The NITI Aayog will work towards the following objectives:

- To evolve a shared vision of national development priorities, sectors and strategies with the active involvement of States in the light of national objectives. The vision of the NITI Aayog will then

provide a framework 'national agenda' for the Prime Minister and the Chief Ministers to provide impetus to.

- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government.
- To ensure, on areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy.
- To pay special attention to the sections of our society that may be at risk of not benefitting adequately from economic progress.
- To design strategic and long term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid-course corrections.
- To provide advice and encourage partnerships between key stakeholders and national and international like-minded Think Tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
- To offer a platform for resolution of inter-sectoral and inter-departmental issues in order to accelerate the implementation of the development agenda.
- To maintain a state-of-the-art Resource Centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stakeholders.

- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery.
- To focus on technology upgradation and capacity building for implementation of programmes and initiatives.
- To undertake other activities as may be necessary in order to further the execution of the national development agenda, and the objectives mentioned above.

60. C

61. D

**Explanation:** Growing inequality will decrease growing consumer goods market in India.

62. B

**Explanation:** National Agricultural Cooperative Marketing Federation of India Ltd is an apex organization of marketing cooperatives for agricultural produce in India, under Ministry of Agriculture, Government of India.

63. B

64. B

65. A

66. A

**Explanation:** Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NHM). It is being implemented with the objective of reducing maternal and infant mortality by promoting institutional delivery among pregnant women. The scheme is under implementation in all states and Union Territories (UTs), with a special focus on Low Performing States (LPS).

67. C

**Explanation:** Proportional tax is the taxing mechanism in which the taxing authority charges the same rate of tax from each taxpayer, irrespective of income. This means that lower class, or middle class, or upper class people pay the same amount of tax.

68. D

**Explanation:** Regular banks, known as commercial banks, like State Bank of India, ICICI Bank etc. operate slightly differently from these payments banks. Some of the differences are: Deposit

amount: You can deposit up to Rs 1 lakh in a payments bank, whereas there is no such limit in a commercial bank.

69. B

**Explanation:** Usual Principal Status (PS) UPS approach relates to the activity status of a person during the 365 days preceding the date of survey. The activity status on which a person has spent relatively longer time (183 days or more) during the period is considered the usual principal activity status of the person.

70. A

71. B

72. D

**Explanation:** Now, 100 years later, three US scientists are sharing the Nobel Prize in Physics for detecting gravitational waves. The Nobel Committee has awarded this year's prize in physics to Rainer Weiss, Kip Thorne, and Barry Barish

73. C

**Explanation:** Dark coloured due to presence of humus in the soil.

74. C

**Explanation:** the large-scale movement of species from one environment to another is known as migration.

75. D

76. D

**Explanation:** BOD means biological oxygen demand in an ecosystem. BOD is an indicator of the organic pollutant increase in the ecosystem. Less BOD is an indicator of good water that is having enough dissolved oxygen for the survival of the organisms present in the pond ecosystem. BOD increase means the deficiency of dissolved oxygen in the pond ecosystem. It indicates the increase in bacteria decomposing organic wastes in the pond like sewage and organic wastes.

77. D

78. C

Global Warming Potential referenced to the updated decay response for the Bern carbon cycle model and future CO<sub>2</sub> atmospheric concentrations held constant at current levels.

Source: Climate Change 1995, The Science of Climate Change: Summary for Policymakers and

Species	Chemical	Lifetime	Global Warming Potential (Time Horizon)		
			20 years	100 years	500 years
Carbon dioxide	CO <sub>2</sub>	variable §	1	1	1
Methane *	CH <sub>4</sub>	12±3	56	21	6.5
Nitrous oxide	N <sub>2</sub> O	120	280	310	170
HFC-23	CHF <sub>3</sub>	264	9100	11700	9800
HFC-32	CH <sub>2</sub> F <sub>2</sub>	5.6	2100	650	200
HFC-41	CH <sub>3</sub> F	3.7	490	150	45
HFC-43-10mee	C <sub>5</sub> H <sub>2</sub> F <sub>10</sub>	17.1	3000	1300	400
HFC-125	C <sub>2</sub> H <sub>2</sub> F <sub>5</sub>	32.6	4600	2800	920
HFC-134	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	10.6	2900	1000	310
HFC-134a	CH <sub>2</sub> FCF <sub>3</sub>	14.6	3400	1300	420
HFC-152a	C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>	1.5	460	140	42
HFC-143	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	3.8	1000	300	94
HFC-143a	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	48.3	5000	3800	1400
HFC-227ea	C <sub>3</sub> HF <sub>7</sub>	36.5	4300	2900	950
HFC-236fa	C <sub>3</sub> H <sub>2</sub> F <sub>6</sub>	209	5100	6300	4700
HFC-245ca	C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>	6.6	1800	560	170
Sulphur hexafluoride	SF <sub>6</sub>	3200	16300	23900	34900
Perfluoromethane	CF <sub>4</sub>	50000	4400	6500	10000
Perfluoroethane	C <sub>2</sub> F <sub>6</sub>	10000	6200	9200	14000
Perfluoropropane	C <sub>3</sub> F <sub>8</sub>	2600	4800	7000	10100
Perfluorobutane	C <sub>4</sub> F <sub>10</sub>	2600	4800	7000	10100
Perfluorocyclobutane	c-C <sub>4</sub> F <sub>8</sub>	3200	6000	8700	12700
Perfluoropentane	C <sub>5</sub> F <sub>12</sub>	4100	5100	7500	11000
Perfluorohexane	C <sub>6</sub> F <sub>14</sub>	3200	5000	7400	10700

§ Derived from the Bern carbon cycle model.

\* The GWP for methane includes indirect effects of tropospheric ozone production and stratospheric water vapour production.

#### 79. D

**Explanation:** Biological oxidation is the combination of oxidation-reduction transformations of substances in living organisms. Oxidation-reduction reactions are those which take place with a change in the oxidation state of atoms through the redistribution of electrons between them.

#### 80. A

**Explanation:** Out of all the gases released from a thermal power plant, carbon dioxide is the main

one, and thermal power plants are one of the main contributors to the increased carbon dioxide levels throughout the world. Sulfur dioxide is another gas that is released from power plants.

#### 81. C

**Explanation:** The United Nations Conference on Environment and Development (UNCED), also known as the Rio de Janeiro Earth Summit, the Rio Summit, the Rio Conference, and the Earth Summit (Portuguese: ECO92), was a major United

Nations conference held in Rio de Janeiro from 3 to 14 June in 1992.

82. D                      83. B

84. D                      85. C

**Explanation:** Manure and dung are also fed into the biogas plant. In the fermenter, heated to approx. 38-40 °C, the substrate is decomposed by the micro organisms under exclusion of light and oxygen. The final product of this fermentation process is biogas with methane as the main ingredient.

86. C                      87. C

88. A                      89. D

**Explanation:** Silviculture is the practice of controlling the growth, composition, health, and quality of forests to meet diverse needs and values. The name comes from the Latin silvi- (forest) + culture (as in growing).

90. B                      91. A

92. A

**Explanation:** Bleaching powder or calcium hypochlorite is a effective fish toxicant. It is used in eradicating the unwanted fishes from the-fish pond. Dead fish start floating to the surface of the water. Applied @ 350 kg/ha, commercial bleaching powder (30% chlorine).

93. C

94: C

Light Source	Range of Typical Rated Life (hours)* (varies by specific lamp type)	Estimated Useful Life (L <sub>70</sub> )
Incandescent	750-2,000	
Halogen incandescent	3,000-4,000	
Compact fluorescent (CFL)	8,000-10,000	
Metal halide	7,500-20,000	
Linear fluorescent	20,000-30,000	
High-Power White LED		35,000-50,000**

\*Source: lamp manufacturer data.

\*\*Depending on drive current, operating temperature, etc. some manufacturers are claiming useful life (L<sub>70</sub>) values greater than 100,000 hours.

95. A

**Explanation:** carbon concentration in the atmosphere poses an irrevocable danger is up for debate. Many scientists pegged 450 ppm as a red line, while others have said 350 ppm—which the Earth passed years ago—is the safe upper limit

96. B

**Explanation:** Albert Einstein predicted the existence of gravitational waves in 1916 as part of the theory of general relativity. In Einstein's theory, space and time are aspects of a single measurable reality called space-time. Matter and energy are two expressions of a single material.

97. A

**Explanation:** Syngas is an abbreviation for synthesis gas, which is a mixture comprising of carbon monoxide, carbon dioxide and hydrogen. The syngas is produced by gasification of a carbon containing fuel to a gaseous product that has some heating value.

98. C

**Explanation:** The Union Environment ministry has constituted a 7-member committee to continuously monitor the short-term and long-term solutions to air pollution. It will be headed by C.K Mishra, the Secretary of Ministry of Environment, Forest and Climate Change (MoEF(C)).

99. B

**Explanation:** Four functional components of an ecosystem: 1) abiotic factors, 2) producers, 3) consumers, and 4) decomposers. The latter three are living components, what Odum (1959) termed the three "functional kingdoms of nature", so important and universal is their presence in ecosystems. The abiotic factors are sunlight, soil, water and oxygen.

100. B