# CDS - II 2017

# General Knowledge Question Paper

1.		the following tribal antly found in the  B. Gonds D. Todas	9.	Pearl is a hard object produced within the soft tissues of a mollusc. Which one of the following is the main constituent of pearl? A. Calcium carbonate
2.	Who among the forms is related to 'prima' A. August Losch	ollowing geographers	10.	<ul><li>B. Calcium oxide</li><li>C. Calcium nitrate</li><li>D. Calcium sulphate</li></ul>
3.	-	following islands is  B. Madagascar		environment such as a pond, an ocean, a forest, even an aquarium is known as
4.	C. New Guinea Arrange the follor of India from Nort 1. Dudhwa	D. Sumatra wing Tiger Reserves h to South: 2. Panna		<ul><li>A. biome</li><li>B. community</li><li>C. abiotic environment</li><li>D. ecosystem</li></ul>
	3. Pench Select the correct code given below.	4. Indravati tt answer using the	11.	•
5.	C. 1, 2, 3, 4 Which one of th given lustrous shir			regard is correct?  A. The kinetic energy of both the particles will be different.
6.		B. Sericin D. Nectin Deme is cause by the		<ul><li>B. The speed of the electron will be higher than that of the proton.</li><li>C. The speed of the proton will be higher than that of the electron.</li></ul>
0.	contamination of A. nitrite $(NO_2^-)$	B. sulphite $(SO_3^{2-})$ D. sulphate $(SO_4^{2-})$	12.	D. The speed of the electron and the proton will be equal.  Two wires are made having same
7.	Match List -I wit	th List-II and select ver using the code	12.	length $l$ and area of cross-section $A$ .  Wire 1 is made of copper and wire 2 is made of aluminium. It is given that
	List – I (Cell Organelle) A. Mitochondria	List – II ) (Function) 1. Photosynthesis		the electrical conductivity of copper is more than that of aluminium. In this context, which one of the following
	<ul><li>B. Chloroplast synthesis</li><li>C. Ribosomes</li></ul>	Protein     Intracellular     Digestion		statements is correct?  A. The resistance of wire 1 will be higher than that of wire 2.  B. The resistance of wire 2 will be
	B. Lysosomes Code:	4. ATP formation		higher than that of wire 1. C. The resistance of both the wires will
	A. A B C D 3 1 2 4 C. A B C D	B. A B C D 3 2 1 4 D. A B C D		be the same.  D. If same current is flown through both the wires, the power dissipated in
8.	of one $\alpha$ -chain had one $\beta$ -chain	4 2 1 3 olecule is composed ving 21 amino acids having 30 amino y functional insulin	13.	both the wires will be the same.
	genes occur in adu A. One C. Three			a deviation of A. 40° C. 90° D. 80°

- 14. Infrared, visible ultraviolet and radiations/ liaht have different properties. Which one of the following statements related these tο radiations/light is **not** correct?
  - A. The wavelength of infrared is more than that of ultraviolet radiation.
  - B. The wavelength of ultraviolet is smaller than that of visible light.
  - C. The photon energy of visible light is more than that of infrared light.
  - D. The photon energy of ultraviolet is lesser than that of visible light.
- After using for some time, transformers get heated up. This is due to the fact that
  - 1. current produces heat in the transformers
  - 2. hysteresis loss occurs in the transformers
  - 3. liquid used for cooling gets heated Select the correct answer using the code given below.
  - A. 1 only
- B. 2 and 3 only
  - C. 1 and 2 only
- D. 1, 2 and 3
- 16S. A person is standing on a frictionless horizontal ground. How can he move by a certain distance on this ground?
  - A. By sneezing
- B. By jumping
- C. By running
- D. By rolling
- 17. In the reaction between hydrogen sulphate ion and water

 $HSO_4^- + H_2O \rightarrow H_3O^+ + SO_4^{2-}$ 

the water acts as

- A. an acid
- B. a base
- C. a salt
- D. an inert medium
- 18. How many hydrogen atoms are contained in 1.50 g of glucose  $(C_6H_{12}O_6)$ ?
  - A.  $3.01 \times 10^{22}$
- B.  $1.20 \times 10^{23}$
- C.  $2.40 \times 10^{23}$
- D.  $6.02 \times 10^{22}$
- 19. The paste of a white material in water is used to maintain a fractured bone fixed in place. The white material used is called
  - A. bleaching powder
  - B. plaster of Paris
  - C. powder of zinc oxide
  - D. lime powder
- 20. Which one of types of glasses is used for making optical instruments?
  - A. Pyrex glass
- B. Soft glass
- C. Hard glass
- D. Flint glass

- Most ozone gas (about 90%) is located 21. in the atmospheric layer of
  - A. ionosphere
- B. troposphere
- C. stratosphere
- D. mesosphere
- 22. What are the main constituents of biogas?
  - A. Methane and sulphur dioxide
  - B. Methane and carbon dioxide
  - C. Methane, hydrogen and nitric oxide
  - D. Methane and nitric oxide
- 23. In which two Indian States of the four mentioned below, it is necessary to hold certain minimum educational qualifications to be eligible to contest Panchayat Elections?
  - 1. Punjab
- 2. Haryana
- 3. Karnataka
- 4. Rajasthan Select the correct answer using the
- code given below.
- A. 1 and 2
- B. 2 and 4
- C. 2 and 3
- D. 1 and 4
- Which of the following statements 24. about 'delegation' is/are correct?
  - 1. It is the abdication of responsibility.
  - 2. It means conferring of specified authority by a lower authority to a higher one.
  - 3. It is subject to supervision and review.
  - 4. It is a method of dividing authority in the organization.

Select the correct answer using the code given below.

- A. 3 only
- B. 2 and 4 only
- C. 3 and 4
- D. 1, 2 and 4
- Which of the following features were 25. borrowed by the Constitution of India from the British Constitution?
  - 1. Rule of Law
  - 2. Law-making Procedure
  - 3. Independence of Judiciary
  - 4. Parliamentary System

Select the correct answer using the code given below.

- A. 1 and 2 only
- B. 2, 3 and 4
- C. 1 and 4 only
- D. 1, 2 and 4
- Which of the following Schedules of 26. the Constitution of India has fixed the number of Members of the Rajya Sabha to be elected from each State?
  - A. Fifth Schedule B. Third Schedule

  - C. Sixth Schedule D. Fourth Schedule

- 27. Which one of the following statements about various horticulture crops of India for the year 2016-17 is **not** correct?
  - A. The area under horticulture crops has increased over previous year.
  - B. Fruit production during the current year is higher than the previous year.
  - C. Rate of increase in onion production is more than potato production in the current year in comparison to the previous year.
  - D. The major tomato-growing States are Madhya Pradesh, Karnataka, Odisha and Gujarat.
- 28. The phenomenon of 'demographic dividend' of a country relates to
  - A. a sharp decline in total population
  - B. an increase in working age population
  - C. a decline in infant mortality rate
  - D. an increase in sex ration
- 29. Arrange the following events in sequential order as they happened in India:
  - 1. Mahalanobis Model
  - 2. Plan Holiday
  - 3. Rolling Plan

A. 1, 2, 3

B. 3, 2, 1

C. 2, 3, 1

D. 1, 3, 2

- 30. The monetary policy in India uses which of the following tools?
  - 1. Bank rate
  - 2. Open market operations
  - 3. Public debt
  - 4. Public revenue

Select the correct answer using the code given below.

- A. 1 and 2 only B. 2 and 3 only
- C. 1 and 4 only D. 1, 2, 3 and 4
- 31. Devaluation of currency will be more beneficial if prices of
  - A. domestic goods remain constant
  - B. exports become cheaper to importers
  - C. imports remain constant
  - D. exports rise proportionately

**Directions:** The following **five (5)** items consist of two statements, Statement I and Statement II. Examine these two statements and select the correct answer using the code given below.

#### Code:

- A. Both the statements are individually true and Statement II is the correct explanation of Statement I
- B. Both the statements are individually true but Statement II is **not** the correct explanation of Statement
- C. Statement I is true but Statement II is false
- D. Statement I is false but Statement II is true
- 32. Statement I:

Skin cancer is generally caused by the ultraviolet radiation.

Statement II:

Stratosphere allows ultraviolet radiation to enter the earth from the sun.

33. Statement I:

The interior part of Maharashtra does not receive adequate rain in the summer season.

Statement II:

The interior part of Maharashtra lies in the rain shadow of the Western Ghats.

34. Statement I:

Global warming signifies the rise in global surface temperature.

Statement II:

The increase of concentration of greenhouse gases in the atmosphere causes the rise in global surface temperature.

35. Statement I:

The communists left the All India Trade Union Congress in 1931.

Statement II:

By 1928, the Communists were no longer working with the mainstream national movement.

36. Statement I:

The early Aryans, who were essentially pastoral, did not develop any political structure which could measure up to a State in either ancient or modern sense.

#### **Statement II:**

Kingship was the same as tribal chiefship; the term *Rajan* being used for tribal chief who was primarily a military leader and who ruled over his people and not over any specified area.

- 37. Which one of the following peasant struggles was an outcome of British opium policy?
  - A. Phulaguri Dhawa (1861)
  - B. Birsaite Ulgulan (1899-1900)
  - C. Pabna Revolt (1873)
  - D. Maratha Peasant Uprising (1875)
- 38. Which one of the following statements about the Sayyid brothers during the period of Later Mughals is **not** true?
  - A. They brought Jahandar Shah to power.
  - B. They wielded administrative power.
  - C. They followed a tolerant religious policy.
  - D. They reached an agreement with King Shahu.
- 39. Which of the following statements with regard to the heterodox sect between sixth and fourth century BC are correct?
  - 1. The Jain ideas were already being circulated in the seventh century BC by Parshva.
  - 2. Although Buddhism, and to a lesser extent Jainism, took account of the changes in material life and reacted against orthodoxy, neither of these sought to abolish the caste system.
  - 3. The first female disciple of Mahavira is said to have been a captures slave woman.
  - 4. Buddha held that nuns could attain spiritual liberation just like a monk and granted them an equal status in the mendicant order.

Select the correct answer using the code given below.

- A. 1, 2, 3 and 4
- B. 1, 2 and 3 only
- C. 1, 2 and 4 only
- D. 3 and 4 only

- 40. Which one of the following combinations of year and event concerning the French Revolution is correctly matched?
  - A. 1789: Napoleonic Code
  - B. 1791: Tennis Court Oath
  - C. 1792: National Convention
  - D. 1804: New Constitution of France
- 41. Who among the following is the author of the book, *The Social Contract*?
  - A. Voltaire
- B. Hobbes
- C. Locke
- D. Rousseau
- 42. Who among the following is the recipient of the Jnanpith Award, 2016?
  - A. Shankha Ghosh
  - B. Raghuveer Chaudhari
  - C. Pratibha Ray
  - D. Rehman Rahi
- 43. The Sustainable Development Goals (SDGs), which were adopted by the UNO in place of the Millennium Development Goals (MDGs), 2015, aim to achieve the 17 goals by the year
  - A. 2020
- B. 2030
- C. 2040
- D. 2050
- 44. Teejan Bai, a recipient of the M.S. Subbulakshmi Centenary Award, 2016, is an exponent in
  - A. Kannada classical vocal
  - B. Kajari dance
  - C. Bihu dance
  - D. Pandavani, a traditional performing art
- 45. Who among the following is the recipient of the Dadasaheb Phalke Award, 2016?
  - A. Nana Patekar
- B. Manoj Kumar
- C. Javed Akhtar
- D. K. Viswanath
- 46. The Nobel Prize in Physics for the year 2016 was given to
  - A. David J. Thouless
  - B. F. Duncan M. Haldane
  - C. J. Michael Kosterlitz
  - D. All of them
- 47. Which one of the following political parties was launched by Irom Sharmila in Manipur?
  - A. People's Resurgence and Justice Alliance
  - B. Manipur Resistance Alliance
  - C. Tribal Resistance Party
  - D. Revolutionary People's Party

48.	explored by Cass	following planets was sini Mission launched ended in September	52.	Match List-I with List-II and select the correct answer using the code given below the Lists:
	2017?			List - I List - II
	A. Sun	B. Neptune		(National Highway) (Route)
40	C. Saturn	D. Jupiter		A. NH-2 1. Delhi-Jaipur-
49.		List-II and select the		Ahmedabad-
	below the Lists:	sing the code given		Mumbai
	List - I	List - II		B. NH-4 2. Thane-Pune-
	(Strait)	(Countries)		Bengaluru-
	A. Bass Strait	1. UK and France		Chennai
	B. Davis Strait	<ol><li>Australia and</li></ol>		C. NH-7 3. Delhi-Agra-
	C. Davier Chinait	Tasmania		Allahabad- Kolkata
	C. Dover Strait D. Florida Strait	<ol> <li>USA and Cuba</li> <li>Canada and</li> </ol>		D. NH-8 4. Varanasi-
	D. Horida Strait	Greenland		Jabalpur
	Code:	G. GGaa		-Nagpur-
	A. A B C D	B. A B C D		Hyderabad-
	2 4 1 3	2 1 4 3		Bengaluru-
	C. A B C D 3 4 1 2	D. A B C D 3 1 4 2		Madurai-
50.	•	List-II and select the		Kanyakumari
		sing the code given		Code:
	below the Lists:			A. A B C D B. A B C D 3 4 2 1 1 2 4 3
	List – I	List – II		C. A B C D D. A B C D
	(Pass) A. Zoji La	(Place) 1. Himachal		1 4 2 3 3 2 4 1
	Pradesh	1. Hilliacilai	53.	One carbon credit is accepted as
	B. Shipki La	2. Uttrakhand		equivalent to
	C. Lipulekh	3. Jammu and		A. 100 kg of carbon
	D. Nathan La	Kashmir		B. 100 kg of carbon dioxide
	D. Nathu La Code:	4. Sikkim		C. 1000 kg of carbon
	A. A B C D	B. A B C D	54.	D. 1000 kg of carbon dioxide  An emulsion consists of
	4 2 1 3	4 1 2 3	54.	A. one liquid and one solid
	C. A B C D	D. A B C D		B. one liquid and one gas
F-4	3 1 2 4	3 2 1 4		C. two liquids
51.	Match List-I with List-II and select the correct answer using the code given below the Lists:			D. two solids
				Which of the following radioactive
	List – I	List - II		substances enters/enter the human
	(Concern)	(Product)		body through food chain and causes/cause many physiological
	A. TISCO	1. Chemicals		disorders?
	B. BALCO C. BPCL	<ol> <li>Iron &amp; Steel</li> <li>Electronics</li> </ol>	56.	A. Strontium-90 B. Iodine-131
	D. BEL	4. Aluminium		C. Cesium-137 D. All of the above
	Code:	-		'Xeriscaping' is a concept related to
	A. A B C D	B. A B C D		A. landscaping related to save water
	2 1 4 3	2 4 1 3		B. landscaping related to save soil
	C. A B C D 3 4 1 2	D. A B C D 3 1 4 2		C. weathering of rock surface D. All of the above
	- ·	· <del>-</del>		D. All Of the above

- 57. Joule-Thomson process is extremely useful and economical for attaining low temperature. The process can be categorized as
  - A. isobaric process
  - B. isoenthalpic process
  - C. adiabatic process
  - D. isochoric process
- 58. Ultrasonic waves are produced by making use of
  - A. ferromagnetic material
  - B. ferromagnetic material
  - C. piezoelectric material
  - D. pyroelectric material
- 59. A person throws an object on a horizontal frictionless plane surface. It is noticed that there are two forces acting on this object (i) gravitational pull and (ii) normal reaction of the surface. According to the third law of motion, the net resultant force is zero. Which one of the following can be said for the motion of the object?
  - A. The object will move with acceleration.
  - B. The object will move with deceleration.
  - C. The object will move with constant speed, but varying direction.
  - D. The object will move with constant velocity.
- 60. Consider the following statements:
  - 1. The chain reaction process is used in nuclear bombs to release a vast amount of energy, but in nuclear reactors, there is no chain reaction.
  - 2. In a nuclear reactor, the reaction is controlled, while in nuclear bombs, the reaction is uncontrolled.
  - 3. In a nuclear reactor, all operating reactors are 'critical', while there is no question of 'criticality' in case of a nuclear bomb.
  - 4. Nuclear reactors do not use moderators, while nuclear bombs use them.

Which of the above statements about operational principles of a nuclear reactor and a nuclear bomb is/are correct?

A. 1 and 3 B. 2 and 3 C. 4 only D. 1 and 4

- 61. The foul smell of urine of a healthy man having healthy food, when spilled on floor, is mainly due to the bacterial decomposition of
  - A. urea into sulphur dioxide
  - B. sugar into carbon dioxide
  - C. lipids into methane
  - D. urea into ammonia
- 62. Desalination of seawater is done by using reverse osmosis. The pressure applied to the solution is
  - A. larger than osmotic pressure
  - B. smaller than osmotic pressure
  - C. equal to osmotic pressure
  - D. equal to atmospheric pressure
- 63. Which one of the following polymers **does not** contain glucose units?
  - A. Glycogen B. Starch
  - C. Cellulose D. Rubber
- 64. Tincture of iodine is an antiseptic for fresh wounds. It is a dilute solution of elemental iodine, which **does not** contain
  - A. water B. acetone C. alcohol D. potassium
  - iodine
- 65. The Fundamental Rights guaranteed in the Constitution of India can be suspended only by
  - A. a proclamation of National Emergency
  - B. an Act passed by the Parliament
  - C. an amendment to the Constitution of India
  - D. the judicial decisions of the Supreme Court
- 66. Which of the following statements about the 73<sup>rd</sup> and 74<sup>th</sup> Constitution Amendment Act is/are correct?
  - 1. It makes it mandatory for all States to establish a three-tier system of Government.
  - 2. Representatives should be directly elected for five years.
  - 3. There should be mandatory reservation of one-third of all seats in all Panchayats at all levels for women. Select the correct answer using the code given below.
  - A. 1 and 2 only B. 2 and 3 only
  - C. 1, 2 and 3 D. 3 only

- 67. A Joint Sitting of the Parliament is resorted to, for resolving the deadlock between two Houses of the Parliament for passing which of the following Bills?
  - 1. Money Bill
  - 2. Constitutional Amendment Bill
  - 3. Ordinary Bill

- A. 1 only
- B. 2 and 3 only
- C. 3 only
- D. 1, 2 and 3
- 68. Which of the following statements is/are correct?
  - 1. The Directive Principles of State Policy are meant for promoting social and economic democracy in India.
  - 2. The Fundamental Rights enshrined in Par III of the Constitution of India are ordinarily subject to reasonable restrictions.
  - 3. Secularism is one of the basic features of Constitution of any country.

Select the correct answer using the code given below.

- A. 1 only
- B. 2 only
- C. 1 and 2 only D. 1, 2 and 3
- 69. The President of India is elected by an Electoral College comprising of elected members of which of the following?
  - 1. Both the Houses of the Parliament
  - 2. The Legislative Assemblies of States
  - 3. The Legislative Councils of States
  - 4. The Legislative Assemblies of NCT of Delhi and Puducherry

Select the correct answer using the code given below.

- A. 1 and 2 only B. 1, 2 and 3
- C. 1, 2 and 4 D. 3 and 4
- 70. Consider the following statements about the Scheduled Castes and the Scheduled Tribes under the provisions of the Constitution of India:
  - 1. State can make any special provision relating to their admission to the Government educational institutions.
  - 2. State can make any special provision relating to their admission to the private educational institutions aided by the State.

- 3. State can make any special provision relating to their admission to the private educational institutions not aided by the State.
- 4. State can make any special provision relating to their admission to the minority educational institutions as described in Article 30.

Which of the statements given above are correct?

- A. 1 and 2 only B. 3 and 4 only
- C. 1, 2 and 3 only D. 1, 2, 3 and 4
- 71. Article 21 of the Constitution of India includes
  - 1. Rights of transgenders
  - 2. Rights of craniopagus twins
  - 3. Rights of mentally retarded women to bear a child

Select the correct answer using the code given below.

- A. 1 only B. 1 and 2 only
- C. 2 and 3 only D. 1, 2 and 3
- 72. Who among the following was **not** a member of the Drafting Committee of the Constituent Assembly?
  - A. N.G. Ayyangar
  - B. K.M. Munshi
  - C. B.N. Rau
  - D. Muhammad Saadulah
- 73. Due to which of the following factors, the Industrial Revolution took place in England in the eighteenth century?
  - 1. The discovery of coal and iron deposits
  - 2. The discovery of steam power
  - 3. The introduction of railways
  - 4. The regular supply of raw materials Select the correct answer using the code given below.
  - A. 1 and 2 only B. 2, 3 and 4 only C. 1 and 3 only D. 1, 2, 3 and 4
- 74. Which of the following indicators have been used by the World Economic Forum to calculate Global Competitiveness Index for 2016-17?
  - 1. Efficiency enhancer subindex
  - 2. Innovation and sophistication factors subindex
  - 3. Life expectancy enhancer subindex Select the correct answer using the code given below.
  - A. 1 and 2 only B. 2 and 3 only
  - C. 1 and 3 only D. 1, 2 and 3

75.	In India, the base year of the new GDP series has been shifted from	79.	Match List –I with List-II and select the correct answer using the code
76.	2004-05 to A. 2007-08 B. 2008-09 C. 2010-11 D. 2011-12 Match List-I with List-II and select the correct answer using the code given		given below the Lists:  List - I  (Type of Land)  A. Urvara  1. Land watered by a river
	below the Lists:  List - I  (Type of Deficit) (Explanation)		B. Maru 2. Fertile land 2. Nadimatrika 3. Land watered by rain
	A. Fiscal Deficit 1. Total Expenditure-		D. Devamatrika 4. Desert land Code:
	Revenue Receipts & Non-debt		A. A B C D B. A B C D 2 1 4 3 3 4 1 2 C. A B C D D. A B C D
	Capital Receipts B. Revenue Deficit 2. Revenue	80.	3 1 4 2 2 4 1 3 Who was the editor of the journal
	Expenditure- Revenue		Indian Social Reformer that was started in 1890?
	Receipts C. Effective 3. Revenue Deficit- Revenue Deficit Grants for Creations of		A. K.T. Telang B. Veeresalingam C. N.G. Chandavarkar D. K.N. Natarajan
	Capital Assets D. Primary Deficit 4. Fiscal Deficit- Interest	81.	Match List-I with List-II and select the correct answer using the code given below the Lists:
	Payments		List - I List - II
	Code:		(Industrial Region) (Country)
	A. A B C D B. A B C D 1 2 3 4 1 3 2 4		A. Leipzig 1. USA B. Detroit 2. UK
	C. A B C D D. A B C D		C. Lorraine 3. France
	4 2 3 1 4 3 2 1		D. Cumberland 4. Germany
77.	Consider the following:		Code:
	1. Tughlagabad Fort		A. A B C D B. A B C D
	2. Bada Gumbad in Lodhi Garden		2 1 3 4 4 3 1 2
	3. Qutub Minar		C. A B C D D. A B C D
	4. Fatehpur Sikri		4 1 3 2 2 3 1 4
	Which one of the following is the	82.	Match List-I with List-II and select the
	correct chronological order of building		correct answer using the code given
	the above monuments?		below the Lists:
	A. 3, 1, 4, 2 B. 3, 1, 2, 4 C. 1, 3, 2, 4 D. 1, 3, 4, 2		List – I List – II (Mountain Range) (Location in Map)
78.	With regard to nature of Mughal State,		
, 0.	who among the following scholars		A. Satpura B. Vindhya
	argued that "the peculiar feature of		C. Aravalli
	the State in Mughal India was that it		D. Mahadeo
	served not merely as the protective		Code:
	anna af tha annalaitir a al-a-a- land		A A D C D

arm of the exploiting classes, but was

itself the principal instrument of

B. Satish Chandra

D. J.F. Richards

exploitation"?

A. Irfan Habib

C. Athar Ali

A. A B C D

4 2 1 3

C. A B C D

3 2 1 4

**R. A R C D** 

3 1 2 4

D. A B C D

4 1 2 3

- 83. Which of the following statements in respect to the Indian Peninsular Plateau are correct?
  - 1. The Deccan Plateau gradually rises from North to South.
  - 2. The Malwa Plateau dominates the Vindhyan scarps, forming the Eastern flank of the plateau.
  - 3. The Western Satpuras separate the Narmada and Tapi rivers.
  - 4. The Chota Nagpur Plateau is composed of Archaean granite and gneiss rocks.

- A. 1, 2, 3 and 4 B. 1, 3 and 4 only C. 2 and 4 only D. 1 and 3 only
- 84. Which one of the following criteria got the highest weight for determination of shares of States in the formula given by the 14<sup>th</sup> Finance Commission?

  A. Population

  B. Income distance
- 85. A Money Bill passed by the Lok Sabha can be held up by the Rajya Sabha for how many weeks?
  - A. Two B. Three

C. Area

- C. Four D. Five
- 86. Constitutional safeguards available to Civil Servants are ensured by
  - A. Article 310
- B. Article 311

D. Tax effort

- C. Article 312 D. Article 317
- 87. A writ issued to secure the release of a person found to be detained illegally is A. Mandamus B. Habeas corpus
  - C. Certiorari D. Prohibition
- 88. Which one of the following **cannot** be introduced first in the Rajya Sabha?
  - A. Constitutional Amendment
  - B. CAG Report
  - C. Annual Financial Statement
  - D. Bill to alter the boundaries of any State
- 89. The National Commission for Women was created by
  - A. an amendment in the Constitution of India
  - B. a decision of the Union Cabinet
  - C. an Act passed by the Parliament
  - D. an order of the President of India

- 90. Who among the following was the Chief Justice of India when Public Interest Litigation (PIL) was introduced in the Indian Judicial System?
  - A. M. Hidayatullah B. A.S. Anand
  - C. A.M. Ahmadi D. P.N. Bhagwati
- 91. Which twelfth century Sanskrit scholar was first responsible for the compilation of 'Nibandhas' or digests of epic and Puranic texts?
  - A. Harsha
- B. Govindachandra
- C. Lakshmidhara
- D. Kalidasa
- 92. Who among the following scholars argued that "capital created underdevelopment not because it exploited the underdeveloped world, but because it did not exploit it enough"?
  - A. Bill Warren
- B. Paul Baran
- C. Geoffrey Kay
- D. Lenin
- 93. Which river is praised in the fifth century Tamil epic, *Silappadikaram*?
  - A. Cauvery
  - B. Godavari
  - C. Saraswati
  - D. Ganges
- 94. Which one of the following statements about the Harappan Culture is not correct?
  - A. It witnessed the first cities in the subcontinent.
  - B. It marks the first use of script, written from right to lift.
  - C. It marks the earliest known use of iron as a medium for the art of sculpting.
  - D. It marks the earliest known use of stone as a medium for the art of sculpting.
- 95. Harshacharita has references to various presents sent by a ruler named Bhaskara to Harshavardhana. Bhaskara belonged to
  - A. Haryanka Dynasty of Magadha
  - B. Varman Dynasty of Assam
  - C. Nanda Dynasty of North India
  - D. None of the above

- 96. Which of the following lakes is/are situated in Ladakh?
  - 1. Tso Kar
- 2. Pangong Tso
- 3. Tsomao
- 4. Tso Moriri

- A. 1 only
- B. 2 and 3 only
- C. 1, 2 and 4
- D. 2 and 4 only
- 97. 'Tuvalu' has become a point of discussion recently. Why?
  - A. Potato plant that could grow in high altitude
  - B. Place in equatorial Africa, where snow is found
  - C. New innovative technology to meet global warming
  - D. A country under threat of submergence due to ice melting and sea level rise
- 98. Which of the following statements related to latitude are true?
  - 1. Rainfall, temperature and vegetation vary with latitude.
  - 2. The difference between the longest day and the shortest day increases with latitude.
  - 3. Indira Point is located approximately at 6°45′ N latitude.

Select the correct answer using the code given below.

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3
- 99. Match List-I with List-II and select the correct answer using the code given below and Lists:

List - I	List – II
(Lake)	(Type of Lake)

- A. Bhimtal
- 1. Lagoon
- B. Ashtamudi
- 2. Landslide
- C. Gohna
- 3. Tectonic
- D. Lonar
- 4. Crater

#### Code:

- A. A B C D B. A B C D
  - 3 1 2 4
- 3 2 1 4
- C. A B C D
- D. A B C D
- 4 2 1 3
- 4 1 2 3

- 100. Which of the following statements is/are correct?
  - 1. Himalayan rivers have their origin in the snow-covered areas, hence are dry in winter season.
  - 2. Rivers of the Peninsular Plateau have reached maturity.
  - 3. Himalayan rivers depict all the three stages of normal cycle of erosion.

Select the correct answer using the code given below.

- A. 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3
- 101. Match List-I with List-II and select the correct answer using the code given below the Lists:

List – I List – II (States of NE India) (Location in Map)

- A. Tripura
- B. Mizoram
- C. Nagaland
- D. Manipur
- Code:
- A. A B C D B. A B C D 2 1 4 3 2 4 1 3
- C. A B C D
- D. A B C D
- 3 1 4 2 3 4 1 2 102. Which one of the following statements regarding Uniform Civil Code as
  - Constitution of India is **not** correct?

    A. It is Fundamental Right of every Indian citizen.

provided under Article 44 of the

- B. The State shall endeavour to secure it for citizens throughout the territory of India.
- C. It is not enforceable by any Court.
- D. It is not enforceable by a Court yet the Constitution requires that as a principle it should be fundamental in the governance of our country.
- 103. Which of the following was/were founded by Raja Ram Mohan Roy?
  - 1. Atmiya Sabha 2. Brahmo Samaj
  - 3. Prarthana Samaj4. Arya Samaj Select the correct answer using
  - Select the correct answer using the code given below.
  - A. 1, 2 and 3
- B. 2 only
- C. 1 and 2 only
- D. 1, 3 and 4

104. Match List-I with List-II and select the correct answer using the code given below the Lists:

List - I List - II (Harappan Site) (Modern Name)

- A. Dholavira 1. Saurashtra
- 2. Hisar B. Rakhigarhi
- C. Bhirrana 3. Kadir Island
- D. Bhogavo 4. Haryana

Code:

- A. A B C D B. A B C D 1 4 2 3 1 2 4 3 D. A B C D C. A B C D 3 2 4 1 3 4 2 1
- 105. Which one of the following statements about the Gupta period in Indian History is **not** correct?
  - A. Sanskrit language and literature, after centuries of evolution, reached what has been described as a level of excellence through royal classical patronage.
  - B. The status of women was redefined. They were entitled to formal education there were and hence women teachers, philosophers and doctors. Early marriage was prohibited by law and they were given the right to property.
  - C. Decentralization of administrative authority was impacted by increased grants of land and villages with fiscal administrative immunities priests and temples.
  - D. Land grants paved the way for feudal developments and emergence of serfdom in India, resulting in the depression of the peasantry.
- 106. Which one of the following statements about the All India Services is correct? A. The All India Services may be created by an Act of the Parliament.
  - B. The endorsement of the Rajya Sabha is not essential for the creation of the All India Services.
  - C. The rules of recruitment to the All India Services are determined by the UPSC.
  - D. The conditions of service to the All India Services may be altered by the UPSC.

- 107. Which one of the following statements about emergency provisions under the Constitution of India is not correct?
  - A. The powers of the Union Executive extend to giving directions to the States concerning the exercise of their powers.
  - B. The Union Executive can issue a provision relating to reduction of salaries of employees of the State Governments.
  - C. Governors have no emergency power like the President of India.
  - D. If the Governor of a State is satisfied that a situation has arisen whereby the financial stability or credit of the Sate is threatened, he may declare financial emergency in the State.
- 108. The National Handloom Day is observed on
  - A. 7<sup>th</sup> June
    - B. 17th July
  - C. 7<sup>th</sup> August
- D. 17<sup>th</sup> September
- 109. Venus, the first environmental research satellite, was launched in August 2017 by which one of the following countries?
  - A. India
- B. Russia
- C. China
- D. Israel
- 110. Which one of the following was the theme of the World Environment Day, 2017?
  - A. Green Economy: Does it include you?
  - B. Connecting People to Nature
  - C. Think, Eat, Save
  - D. Many Species, One Planet, One **Future**
- 111. The all-women expedition of Indian Navy to circumnavigate the globe on the sailing vessel, INSV Tarini, is scheduled to have four stopovers. Which one of the following is not one of them?
  - A. Fremantle
  - B. Lyttelton
  - C. Port Stanley
  - D. Durban

- 112. Why was constitutional amendment needed for introducing GST?
  - A. States were not willing to agree with the Union for introduction of GST without amendment in the Constitution.
  - B. GST was to be implemented on concurrent base and Article 246 was inadequate for such a case.
  - C. The Empowered Committee of Finance Ministers had recommended for constitutional amendment.
  - D. The GST Council had recommended for constitutional amendment so that its power enhances.
- 113. Where is world's first Partition Museum inaugurated recently?
  - A. New Delhi
- B. Lahore
- C. Amritsar
- D. Islamabad
- 114. The Setu Bharatam Programme of the Government of India is a programme for
  - A. building bridges across major rivers for transport of goods
  - B. building bridges for safe and seamless travel on national highways
  - C. building roads to connect coastal areas
  - D. training of highway engineers at the entry level and service level
- 115. Which one of the following statements about the Global Environment Facility Grant Agreement signed by India in August 2017 with the World Bank for 'Ecosystems Service Improvement Project', is **not** correct?
  - A. The size of the project is bout USD 25 million?
  - B. The duration of the project is 15 years.
  - C. The project will entirely be financed by the World Bank out of is GEF Trust Fund.

- D. The Ministry of Environment, Forest and Climate Change will implement the project.
- 116. UBI, as an alternative for subsidies in poverty alleviation, stands for
  - A. Union Basic Income
  - B. Undefined Basic Income
  - C. Unconditional Basic Income
  - D. Universal Basic Income
- 117. Which one of the following authorities has recently launched the mobile apps 'My FASTag' and FASTag Partner'?
  - A. Telecom Regulatory Authority
  - B. National Highways Authority
  - C. Airports Economic Regulatory Authority
  - D. National Disaster Management Authority
- 118. 'Pragati' scholarship scheme of the Government of India is meant for
  - A. higher education of girls
  - B. technical education of girls
  - C. secondary education of girls
  - D. elementary education of girls
- 119. Which one of the following is **not** a feature of the Saansad Adarsh Gram Yojana (SAGY)?
  - A. It focuses on community participation.
  - B. It is to be guided by a Member of the Parliament
  - C. It aims at creating infrastructure for the village.
  - D. A Village Development Plan would be prepared for every identified Gram Panchayat.
- 120. Which one of the following is **not** included in the National Air Quality Index?
  - A. Sulphur
- B. Nitrogen dioxide
- C. Lead
- D. Methane

# **SOLUTIONS**

#### 1. Answer: D- Todas

The Blue Mountains also called Nigiris are spread across Tamil Nadu, Kerala and Karnataka. They are the part of larger Western Ghats mountains. The highest peak of Blue mountain id Doddabetta (2,637meters).

Toda tribe is an ancient and unusual tribe of Blue mountains. They belong to Dravidian ethnic group. They are basically involved in cattle-rearing and dairy work. The total population of Todas as per 2001 census is 1560.

# 2. ANSWER: B- Mark Jefferson.

A primate city incommensurably large city in the urban pecking order of a country or region. Geographer Mark Jefferson developed the ideology of the same in 1939. He defined it as the city that is twice as large as the next city and twice as significant. It has the amenities of international importance.

# 3. ANSWER: C-New Guinea

Borneo is Located in Southeast Asia. It is the largest island in Asia and third largest in the world. It is spread across 743,330 sq.km area.

Madagascar is located in Africa. It is spread across 587,041 sq.km are. It is widely known for its biodiversity.

New Guinea is located off the continent of Australia. It is the second largest island in the world. It is spread across 785,753 sq.km area.

Sumatra is located in southeast Asia. It is an Indonesian island. It is spread across 473,481 sq.km area.

# 4. ANSWER: C- 1,2,3,4

Dudhwa national park is located in Terai of Uttar Pradesh and is spread across 490.3 sq.km area. It is a part of Dudhwa Tiger reserve. It was established in 1977.

Panna national park is located in Panna and Chhatarpur districts of Madhya Pradesh. It is spread across 542.67 sq.km area. In 1994 it was declared twenty-second tiger reserve of India. It was established in 1981.

Pench national park is spread across Madhya Pradesh and Maharashtra. It covers an area of 292.85 sq.km. It was established in 1977. Pench tiger reserve is a part of it.

Indravati is located in Bijapur district of Chhattisgarh. It is spread across 1,258.37 sq.km area. It was established in 1975 and got the status of the tiger reserve in 1983.

#### 5. ANSWER: A-Fibrin

It is the protein that forms the filament of silkworm and gives unlike physical and chemical properties to silk. It is a glycoprotein. Its filament is made up of both crystalline and amorphous domains.

#### 6. ANSWER: C- nitrates

Excessive nitrates in drinking water can cause the blue baby syndrome. When it enters in an infant's body it gets converted into nitrite in its digestive system. It then reacts with the haemoglobin present in the blood with together forms methaemoglobin, which cannot carry oxygen, thus organs may deprive of oxygen. As a result, thinskinned areas like lips, earlobes develop a bluish colour. It may also cause respiratory and digestive problems in adults.

# 7. ANSWER: C- 4,1,2,3

Mitochondria is also known as "powerhouse of cell". It is found in the cell of every complex organism. It is found in cytoplasm. It generates the energy which is required by a cell to perform its activities. The energy is produced in the form of adenosine triphosphate (ATP).

Chloroplast is found in plants to perform the photosynthesis. It has high concentration of chlorophyll, a compound that gives green colour to plants and actively involved in photosynthesis. It is very essential for the survival of plant as it produce the energy for plant to carry out its functions.

Ribosomes is made up of ribosomal RNA molecules and proteins which together forms a factory for protein synthesis in cells. It is found in cytoplasm. It is present in both eukaryotic cell and prokaryotes cell

Lysosomes are also called "suicide bags". It is found in animal cells. It is bounded by only a single membrane. It is responsible for destroying the cell after it dies. It contains many enzymes which collectively called acid hydrolases.

#### 8. ANSWER: B-Two

Insulin is a protein composed of two chains, A chain (with 21 amino acids) and a B chain (with 30 amino acids) and sulphur atoms link them together.

#### 9. ANSWER: A-CALCIUM CARBONATE

A pearl is a hard substance which is formed by the concentric layer of Calcium carbonate. Pearl is found inside a living shelled mollusc. Calcium carbonate is the building block of shells. Concentration of Calcium carbonate can be higher in deep sea water than the surface water. It is higher in seawater than in fresh water. Corals are highly dependent on it for the formation of rigid outer shell.

#### 10. ANSWER: D- Ecosystem

An ecosystem is a community of plants and animals also includes abiotic components, interacting with each other in a given area. Organisms live together to benefit one another. In an ecosystem each component has its own role to play. An ecosystem can be taken as the foundation of biosphere. It has all the essentials that support the life of a particular type of niche

#### 11. ANSWER: B

The mass of electron is less in comparison to proton. If applied force is same the acceleration of electron will be higher than proton.

# 12. ANSWER: B

The resistance to the flow of electrons is called resistivity. Conductivity is just inverse of resistivity. Both are the property of conductor. The interesting relationship between them is, as the conductivity increase resistivity decrease.

#### 13. ANSWER: A-40

A ray that comes from a source of light to the surface of the object is called ray of incidence and the ray which get reflected after striking to the surface of the object is called ray of reflection. The ray of incidence and the ray of reflection make the same angle. We measure these angles with respect to the normal of surface.

#### 14. ANSWER: D

Photons energy is inversely proportional to wavelength. Wavelength of visible light is  $10^-5$  whereas wavelength of ultraviolet is  $10^-6$ . Thus, it clearly shows that photons energy of ultraviolet is greater than that of visible light.

#### 15. ANSWER: C

A transformer is a device that regulates the fluctuation of electricity, thus protecting the electrical equipment. Transformers get heated up because of numbers of reasons. Excess of heating may reduce the life of a transformer and also weakens the insulation.

# 16. ANSWER: A- Sneezing

When we sneeze, air expiates with force through our nose and mouth. According to third law of motion, there is an equal and opposite reaction for every action. So, a frictionless horizon which cannot grip us will make us move in opposite direction.

# 17. ANSWER: B- a base

Protons is often released by an acidic substance and it is accepted by a basic substance. Here Water acts like an amphoteric.

#### 18. ANSWER: D

12 atoms of hydrogen is present in per molecules of glucose. It has a molar mass of 180g/mol. Thus, the number of moles of hydrogen is 12\*1.50/180=0.10 mol. So, when we multiply the numbers of hydrogen atom by the Avogadro constant,  $6.02*10^2$ , we get  $6.02*10^2$  atoms.

#### 19. ANSWER: B- Plaster of Paris

Also called P.O.P is made by calcining gypsum. It gets hardens when moistened and allowed to dry slowly. It came in orthopaedics use in 1852. It does not produce allergies. It has widely become popular in orthopaedics as it sets quickly. It is a perfect solution to prevent pain caused due to fractures as it immobilises the movement.

#### 20. ANSWER: D- Flint glass

Flint glass is softer than any other glass; it is also called optical glass. Two major components used to make it is silicates and potassium. It is transparent and clear. It has high refractive index. It is widely used for making lenses and prism.

#### 21. ANSWER: C- Stratosphere

About 90% of ozone gas is present in the second atmospheric layer called Stratosphere. It is about 15-30 km above the Earth's surface. It plays a vital role by protecting us from the harmful effects of UV rays. Because of environmental pollution and excessive use of CFCs the ozone layer is in danger.

# **22. ANSWER: B- Methane and carbon dioxide** Biogas is an environmental friendly fuel; produced by anaerobic action of microorganism that feeds on animal and agricultural waste. It is a renewable source of energy. It is made up of methane (60-70%), carbon dioxide (25-50%), nitrogen (0-10%)

and hydrogen (0-1%).

23. ANSWER: B- 2 and 4

As per article 40 and 246(3), the constitution empowers the state to make laws for functioning of self-governing unit. Haryana and Rajasthan are two such states that has fixed a minimum educational qualification mandatory for those contesting the election.

# 24. ANSWER: C. 3 and 4 only

The act of distributing responsibilities or authority among the subordinates or co-workers. The member to whom the work is being given is called a delegate. The person who tends to delegate the work remain responsible for the final outcome.

#### 25. ANSWER: D - 1,2 and 4

Indian constitution is also called 'bag of borrowing' as many of its features are taken from the constitution of other countries. UK is one such country from where our constitution has borrowed the features like President to be the nominal head, parliamentary type of government, single citizenship, rule of law, cabinet of ministers, law-making procedures and speaker in Lok Sabha.

# 26. ANSWER: D- Forth Schedule

Fourth schedule [Article 4(1) and 80(2)] of Indian constitution allocates the seats of states and union territory in the Rajya Sabha (council of state). Members of Rajya Sabha are indirectly elected by the members of legislative assembly of state and union territory by mean of single transferable vote through proportional representation.

The country has produced 21.4 million tons in 2017-2018 while the country has harvested 22.4 million tons in 2016-2017.

The production of potatoes is estimated to be 49.3 million tons while 48.6 million tons in 2016-2017.

#### 28. ANSWER: B

Demographic dividend refers to the working age group people that a country has that can be the potential working force of the country. A favourable demographic dividend can take a country's economy to the path of success. India has a positive demographic dividend while country like Japan and UK has dominantly old population.

#### 29. ANSWER: A-1,2,3

Mahalanobis model was an integral part of India's second five-year plan (1956-1961). The zest of this model was to build up a domestic consumption goods sector and to modify the pattern of industrial development.

After the failure of third five-year plan because of Indo-Sino war, Indo-Pakistan war and a severe drought in 1965 the Government had to finally announce a plan holiday in 1966-1969.

The fifth five-year plan was rejected by the Janta party government and sixth five-year plan was introduced. It was further rejected by the Indian National Congress in 1980 and a new plan was again proposed by them. Now the rolling plan came to the rescue which had essence of all the three previous plans.

# 30. ANSWER: A- 1 and 2 only

Monetary policy is a process through which RBI controls the input and output of money in the economy, thus regulating the inflation.

Bank rate is the rate of interest on which the RBI provides loan or funds to the commercial banks. It is also called discount rate. The present bank rate is 6.25%

Bank needs to keep a certain percentage of bank deposits with the RBI in the form of reserves and balance. The present bank rate is 4%.

### 31. ANSWER: B

Devaluation is one of the monetary policy tools. It is often used to combat the trade imbalance. Devaluation is beneficial for the economy of a country as it makes the country more competitive in global market.

#### 32. ANSWER: B

One of the major cause of skin cancer is exposure to ultraviolet (UV) rays. Sun is the main source of UV rays. UV rays are responsible for damaging the skin cells which hampers the growth regulation of the skin cells.

Stratosphere protects the earth from the harmful effects of UV rays by absorbing it. But because of environmental misbalance and anti-ozone

compounds, the stratosphere has developed a hole in it which allows UV rays to reach the earth.

#### 33. ANSWER: A

A rain shadow area is an area which lies in the leeward side of mountain. The passage of rain-producing clouds is blocked by the mountains casting a shadow of dryness. State of Maharashtra comprises of four regions out of which 30% comes under rain shadow area. Interior of Maharashtra represent one of the rain shadow area as it is situated on the foot of Sahyadri.

#### 34. ANSWER: A

An increase in the average temperature of earth is called global warming. Since the commencement of industrialization in 18th century the temperature of earth has been significantly increased. Gases like methane, carbon dioxide, water vapour etc are the greenhouse gases which trap the heat from sun and don't let it go from earth, resulting increase in temperature.

#### 35. ANSWER: C

In 1928 communist party decided to fight on two fronts for Country's freedom. Gandhian philosophy was criticised by them. However, in 1934, because of the radical approach by communist the government put a ban on its functioning.

# 36. ANSWER: A

Aryans is a term used for Indo-Iranian people. They migrated into Indian subcontinent around 1500 BCE. The Aryan society was patriarchal. They were primarily nomadic people. Vedas were recognised as the most valued religious text by them.

# 37. ANSWER: A-Phulaguri Dhawa (1861)

Phulaguri Dhawa was the first organised peasant movement in Assam. The Britishers started levying taxes on the items of regular use like bamboo, opium, water, wood etc. It annoyed the local people and for the first time the British administration was shook. It took a violent turn when Britishers killed and hanged the peasants to took over the control.

### 38. ANSWER: A

After the death of Aurangzeb the Sayyid brothers became very influential. Jahandar Shah was the successor of Bahadur Shah 1, who succeeded him after his death in 1712. But Jahandar Shah was assassinated on the order of Sayyid brothers.

#### 39. ANSWER: C

Parshva also known as Parshvanatha was 23rd Tirthankara. His biography is uncertain and by some historians he may have lived in 8th or 7th century.

Buddha introduced the idea of placing the morality and equality as the principal value not the caste system and so did the Jainism but neither of them tried to abolish the caste system.

Monks and nuns both had equal rights. Both could attain Nirvana.

National convection was a more radical legislative body formed in 1792. It remained in power for three years. It had membership of 749 members from France and also from other countries. Only men 25 or above were allowed its membership.

#### 41. ANSWER: D

When the government gets its rights to exist and to govern from the people to be governed it is called "Social Contract". In his book he has explained various types of government. His concern always remains to make society as democratic as possible.

# 42. ANSWER: B

Jnanpith award is awarded annually to an author for the "outstanding contribution towards literature". It was instituted in 1961. It is awarded to Indian authors for writing in one of the language included in the Eight Schedule to the constitution of India. Shankha Ghosh was 52nd recipient of this award and was awarded for writing in Bengali.

#### 43. ANSWER: B

The sustainable development goals, also called global goals are a universal set of action to eradicate poverty, save the planet, and to ensure the peace and prosperity of all. It came into effect on January 2016 and would continue to achieve the set of goals until 2030.

# 44. ANSWER: D

Hailing from Chhattisgarh, Teejan Bai is a master of Pandavani, a traditional performing art form. Pandavani literally means stories of Pandavas. Instruments like ektara, Kartal and tambura is often used while performing the dance form. He has been honoured by the Padma Bhushan (2003) and Padma Shri (1987) award.

# 45. ANSWER: D

In the field of cinema, Dadashaheb Phalke award is one of the highest and most prestigious awards. It was instituted in 1969. A cash prize of Rs.1,000,000 is given to the winner with a Swarna Kamal. Kasinathuni Vishwanath was honoured by Dadasaheb Phalke award in 2016. He has directed 53 feature films in various genres. Also, he has bagged 5 national film awards.

#### 46. ANSWER: D

The Royal Swedish Academy of science annually awards The Noble Prize in Physics. David J. Thouless, F.Duncan M. Haldane and J. Michael Kosterlitz were awarded for "theoretical discoveries of topological phase and topological phases of matter".

#### **47. ANSWER: A**

Irom Chanu Sharmila belongs to Manipur. She is a civil right activist and political activist. She began her hunger strike against the AFSPA act in 2000 and continued it for 16 years. The main motive

behind the formation of People's Resurgence and justice alliance is to Gain power and to pressurize the central government to nullify the AFPSA from the state.

#### 48. ANSWER: C

Cassini a common name for Cassini-Huygens mission was a joint venture of NASA, the European space agency and Italian space agency. The motive behind was to study the Saturn and its system. It was active in space for nearly 20 years. It was the first space probe to enter its orbit.

#### 49. ANSWER: A

A strait is a narrow water body that connect two larger water bodies. It is also a water channel lying between two landmasses.

Australia and Tasmania are separated by a sea strait called Bass Strait. It is approximately 240 km wide and contains over 50 islands.

Davis Strait separates the Baffin Island of Canada from Greenland. It is about 950 km wide and never less than 300kms.

Dover Strait separates the UK and France. It is the narrowest part of the English Channel. 33.3 km is the maximum width.

Florida Strait separates USA and Cuba. It is 150km wide at the narrowest point.

#### 50. ANSWER: C

zoji la pass is located between National Highway 1 between Srinagar and Leh. It is a high mountain pass in the western section of Himalayan mountain range.

Shipki la is a high mountain pass on the India-China border located in Himachal Pradesh, at a height of 5,669m. The national highway 5 is passed through it.

Lipulekh pass is located in Uttrakhand at an elevation of 5,099m above the sea level. It is located on the India-China border.

Napthu la Napthula pass is located at an elevation of 4,310m. It connects the east Sikkim with China's Tibet autonomous region.

# 51. ANSWER: B

Tata iron and steel company (Tisco) is an iron and steel company established by Jamshetji Nusserwanji Tata in 1907. Its headquarter is located in Mumbai.

Bharat Aluminium Company Ltd. (BALCO) was established in 1965. Its headquarter is located in New Delhi.

Bharat Petroleum Corporation LTD.(BPCL). Its headquarter is located in Mumbai. It was established in 1928 with the name Burmah Shell Oil Storage and distribution company of India.

Bharat electronics limited (BEL) is a state-owned enterprise. Its headquarter is located in Bengaluru.

National highway 2 constitutes major part of grand trunk road. It is of 1,465 km in length. The highway connects Delhi, Faridabad, Mathura, Agra, Kanpur, Allahabad, Varanasi, Dhanbad and Kolkata.

National highway 4 is 330.7kms in length. After the renumbering of national highway, this highway is known as NH-48.

National highway-7 is 770 km in length. It passes through the Indian states of Punjab, Chandigarh, Haryana, Himachal and Uttarakhand.

National highway-8 is 2,807 km in length. It is one of the busiest highways as it connects two metropolitan cities Delhi and Mumbai.

#### 53. ANSWER: D

One tone (1,000 kg) of carbon dioxide is equal to one carbon credit. Carbon credit is a tradable certificate that permits to emit carbon dioxide or any other greenhouse gases equal to one carbon credit.

#### 54. ANSWER: C

Emulsion is a mixture of two or more immiscible liquids. Milk, mayonnaise, lemonade are few examples of emulsions.

#### 55. ANSWER: D

Strontium-90 is close to calcium and when it enters our body it gets fixed with bone mass. It emits only beta rays with a short range, which makes it harmful. It is often found in seafood that has shell bodies.

Iodine 131 if swallowed is absorbed into the bloodstream in the gastrointestinal tract. It is concentrated from the blood by the thyroid gland, where it begins destroying the gland's cells.

Cesium-137 when inhaled allows the radioactive material to disturb the soft tissue. Exposure of these tissues to beta particles and gamma radiations increases the risk of cancer.

#### 56. ANSWER: A

Xeriscaping has been developed for droughtaffected areas. It has become popular in modern architectural designs. Its major benefits are: water conservation, less maintenance and improve property value.

#### 57. ANSWER: C

In the adiabatic process no heat is gained or lost by the system. The heat is instead transferred in surrounding only as work. It is a key concept of thermodynamics.

# 58. ANSWER: C

In numbers of applications, ultrasonic waves are generated by a transducer that consists of a piezoelectric crystal which converts electrical current to sound waves.

#### 59. ANSWER: D

When an object is said to be moving with constant velocity the resultant force acting on the body is zero. To bring change in momentum an external force is required to change the momentum.

#### 60. ANSWER: B

Controlled chain reaction do not lead to the explosive effects whereas uncontrolled chain reaction lead to explosion. In the context of nuclear power, "critically" means that a reactor is operating safely.

#### 61. ANSWER: D

Urine has urea in it which is basically a waste product. Urea can be broken down into ammonia, which gives urine a foul smell. The more concentrated urine gets, the more foul smell it gives.

#### 62. ANSWER: A

Desalination is a process of removing dissolved salt from seawater. It then become fit for human consumption and irrigation. It has a great future as our world is going through water crisis. For desalination of seawater pressure ranges from 800-1000 psi.

#### 63. ANSWER: D

Rubber consists of polymers of the organic compound called isoprene. Turpentine and Naptha are two major solvents of rubber. Rubber is harvested in the form of latex-a white milky substance.

#### 64. ANSWER: B

Tincture of iodine is an antiseptic solution. It contains 2% iodine, 47% alcohol and 2.4% potassium iodine. It was in widely used as disinfectant before surgeries but now it has been replaced by organic form of iodine.

### 65. ANSWER: A

Fundamental rights are guaranteed to citizens of India by the constitution and it cannot be taken away except in the time of national emergency. During the proclamation of national emergency, all the basic freedom given to us by article 19 get suspended. During emergency President can suspend other fundamental rights also except article 20 and article 21.

# 66. ANSWER: C

It makes mandatory for all states to establish three-tier system of government. However, it doesn't apply to a state having a population not exceeding 20 lakhs.

Panchayat is elected directly for the term of five years. However, it can be dissolved before the completion of the term.

This act reserves the one-third seats for women.

Parliament of India consists of Lok Sabha, Rajya Sabha and President. Mutual agreement of both the houses is required to pass a bill. Therefore, the need of joint session arises to break the deadlock and to keep the balls rolling. It is preceded by the speaker of Lok Sabha after being called by the President.

## 68. ANSWER: D

Directive principles o state policy, contained in part 4 in the constitution are not enforceable by court but it gives certain guidelines to the government make it their duty to incorporate them in near future to make society more social, economic and morally justiciable. Fundamental right (article 14-35) are the basic rights given to every citizen of India irrespective of sex, colour, caste, creed and religion. To be particular a reasonable restriction has been imposed by the government on the exercise of right to freedom of speech and expression. Secularism was incorporated in the preamble of our constitution by the 42nd amendment, making it an integral part of our constitution.

#### 69. ANSWER: C

The method of presidential election is borrowed from Ireland. The president of India is elected by a electoral college consist of both the houses of parliament, elected members of legislative assemblies of states and union territory. Article 58 of Indian constitution sets the qualification and eligibility criteria for candidate contesting for the post of president.

# 70. ANSWER: C

Constitution reads as follow "Nothing in this article of sub-clause(g) of clause (1) of article 19 shall prevent the state from making any special provision, by law, for the advancement of any socially and educationally backward classes of citizens or for scheduled caste or scheduled tribe in so far as such special provision related to their admission to educational institutions including private educational institutions, whether aided or unaided by state, other than minority educational institutions referred to in clause (1) of article 30".

# 71. ANSWER: D

According to article 21 "everyone has the right to life, liberty and the security of person". Article 21 secures two most important rights i.e. right to life and right to personal liberty. It protects us from the state.

# 72. ANSWER: C

Drafting committee was set up by the constituent assembly on 29, August 1947 and was headed by B.R Ambedkar. The task given to it was to draft a new constitution for India. Its members were- N.G

Ayyangar, Krishnaswamy Ayyangar, Dr D.K munshi, Syed Mohammad Saadullah, B.L Mitter (replaced by N Madhava Rau) and D.P Khaitan (replaced by T T Krishanchari).

#### 73. ANSWER: D

Industrial revolution gained momentum in 18th century because of the favourable factors it had. Not only labour but supply an active of raw material, invention and discoveries, change in the method of transportation all together made a powerful impact on the economy of England.

# **74. ANSWER: A**

Global Competitiveness index is released by the World economic forum to indicate a country's rank in the scale of global competitiveness. The rank has been given to a country after assessing 12 indicators that directly or indirectly impacts the country's competitiveness.

# 75. ANSWER: D

India changes the base year for its GDP calculation Once in a five year. At present 2011-2012 is used as the base year for calculating the GDP. This change is made by the central statistics office under the minister of statistic and programme.

#### 76. ANSWER: A

Fiscal deficit is when the actual revenue generated fails to meet the expenditure.

Revenue deficit is basically the mismatch between revenue and the expenditure. Here the amount of revenue and expenditure do not correspond with each other.

The amount of capital receipts supposed to be used for actual consumption expenditure of the government is called Effective revenue deficit.

We get Primary deficit by deducting interest payment from fiscal deficit. It is a part of fiscal deficit.

#### **77. ANSWER: B**

Tughlaqabad fort is situated in Delhi. Ggiyas-ud-din Tughluq was the founder of it. Its work started in 1321.

Bada Gumbad in Lodhi Garden, Delhi. It was built in 1490 CE by the ruler of Delhi Sultanate.

Qutub Minar is situated in Delhi. It is a 73-meter-tall Minar built by Qutub-ud-din-aibak and Iitutmish in 1192.

Fatehpur Sikri is situated in Agra. It was founded as the capital city of Mughals in 1571.

#### 78. ANSWER: A

Irfan Habib in his book, 'The partition of memory', describes the binary relationship between extractive state and oppressed peasantry which was initiated by Delhi Sultanate but give a acceptance under Mughal ruler Akbar.

All are Sanskrit words. The terms were widely used during Vedic period

Urvaru means fertile land. The term was widely used during Vedic period.

Maru refers to a desert land.

Nadimaatraka is a land watered by river.

Devamatrika is a land watered by rain.

#### 80. ANSWER: D

K.N Natrajan founded the Indian Social Reformer in 1890 in Madras but later he moved the journal to Bombay, an epic centre of social and political review.

# 81. ANSWER: C

Leipzig is located in Germany. Since the time of Holy Rome Empire, it has been a trade city. It is spread in 114.81 sq.miles.

Detroit industrial region is located in the United States of America. It is spread in 142.87 sq.miles. It is also known as motor city.

Lorraine industrial area is located in France. It is spread in 9,092 sq.miles. It generates about 3.4% of France GDP.

Cumberland industrial area is located in UK. It is spread in 28.3 sq.miles.

#### 82. ANSWER: C

The Satpura range is located in central India. The Satpura range parallels the Vindhya range that lies north to the Satpura. The Satpura rises in eastern Gujarat and runs to the east of Chhatisgarh. The Mahadeo hills are located in northern section of Satpura in Madhya Pradesh. Aravalli hills starts from Delhi and runs from Haryana, Gujarat and ends in Gujarat.

#### 83. ANSWER: B

The Deccan plateau heights up to 100 meters in the north and reaches at the height of 1,000 meters in the south.

The Satpura Range is flanked by Narmada gardens in the north and Parallels Tapi gardens in south.

The Chota Nagpur plateau in eastern India spread in a larger area of Jharkhand and also in Odisha, Wear Bengal, Bihar and Chhattisgarh. It is composed of Archaean granite and gneiss rocks.

## 84. ANSWER: D

According to article 280 the finance commission is constituted for every five years. The fourteenth finance commission has come to the conclusion that tax devolution should be the primary route of transfer of resources to states.

#### 85. ANSWER: A

A money bill is generated in Lok Sabha only. Lok Sabha holds exclusive power in the matter of money bill. A money bill is related to imposition, remission and alteration of any tax. Rajya Sabha is bound to pass the money bill within 14 days else it is assumed to be passed.

#### 86. ANSWER: B

Article 311 protests the civil servants from arbitrary dismissal, removal and demotions. It safeguards the right of civil servants. Such protection is necessary in order to carry out the duty fearlessly and efficiently.

#### **87. ANSWER: B**

"you have the body" is the literate meaning of habeas corpus. It is issued by the court for the protection of an individual against unlawful detention.

#### 88. ANSWER: C

Every year as a part of the budget process under article 112 of the Indian constitution, it is presented to the parliament. Rajya Sabha may discuss the annual financial statement but cannot vote on the demand of grants.

#### 89. ANSWER: C

The national commission for women is established in 1992 by an act passed by the parliament. Its main objective is to review the constitutional and legal status of women.

# 90. ANSWER: D

Public interest litigation (PIL) was introduced in 1986. Justice P.N Bhagwati introduced it in Indian judicial system. It is in the larger interest of society as it is filled by the court itself or a private individual instead of aggrieved person.

#### 91. ANSWER: C

The completion of nibandhas is also called Kalpatru, which has a total 14 volumes with different themes like Puranas, Dharma literatureWorship, pilgrimage etc. Lakshmidhara was responsible for the completion of nibhandas.

#### 92. ANSWER: C

Geoffrey Kay in his book Development and Underdevelopment: A Marxist analysis, has tried to give a insight view of the impact of capitalism on our society.

# 93. ANSWER: A

In Tamil epic Silappadikaram, the distinctive features of sun, moon river Cauvery and the city of Poompuhar, begin to praise a deity. Silappadikaran is one of the five great epics of Tamil literature.

#### 94. ANSWER: C

Harappa civilization is one of the oldest civilizations known to mankind. It is also known as bronze civilization. The metals known to them were copper, gold, silver and bronze.

# 95. ANSWER: B

The Varman dynasty of Assam is the first historical dynasty of Karampura dynasty. Pragjyotishpura was its capital city. Bhaskaravarman 13th king of the dynasty, is known to historians for his alliance with Harshvardhana.

Ladakh is a cold desert. Lakes in Ladhak are known as Tso. Pangong Tso is the world's highest salt lake and it is located in Changtang plateau. Tso moriri is also located in Changtang plateau and it has been declared a wetland of international importance under Ramasar convection in 2002. Tso Kar is also called twin lake as a part of it is salty and other is fresh water. It is located in southern Ladakh.

#### 97. ANSWER: D

Tuvalu is one the world's lowest-lying countries. It is located in South Pacific. Due to melting ice sea level is rising and according to IPCC projection over the next century the water level would rose by 0.8m making Tuvalu inhabitable.

#### 98. ANSWER: D

Latitudes are imaginary horizontal lines on Earth running parallel to each other. Latitude of a place determines its climatic conditions. It affects the solar intensity, temperature, seasonal variations and much more. Equator divides the Earth in two equal halves.

#### **99. ANSWER: A**

Bhimtal lake is located in the state if Uttarakhand. It is a freshwater lake. The formation of lake is due to earth's tectonic activities.

Ashtamudi lake is located in the state of Kerala. It is a brackish water lake. It supports a wetland ecosystem and is included in the Ramasar convection of wetlands.

Gohna lake is located in the state of Uttarakhand. It was formed when a landslide dammed the river, thus forming a giant lake.

Lonar lake is located in the state if Maharashtra. It is a saline lake created by the meteor impact.

#### **100. ANSWER: C**

The peninsular rivers are much older than that of Himalayan Rivers. Peninsular rivers have reached to the mature stage. They make fluvial landforms. The normal cycle of erosion includes three stages namely youthful stage, mature stage and old stage.

# **101. ANSWER: D**

Tripura is a north-eastern state. Agartala is its capital. Biplab Kumar deb is the chief minister of Tripura.

Mizoram is a north-eastern state. Aizawl is its capital. Pu Laithanhawala is the chief minister of Mizoram.

Nagaland is a north-eastern state bordering Myanmar. Kohima is its capital. Neiphiu Rio is the chief minister of Nagaland.

Manipur is a north-eastern state. Imphal is its capital. N. Biren Heptulla is the chief minister of Manipur.

#### **102. ANSWER: A**

universal civil code is incorporated in the directive principles of state policy in article 444. According to it India strives to achieve them in its future policies and laws to make our society more social and justice. They are not enforceable by courts unlike fundamental rights.

# **103. ANSWER: C**

Raja Ram Mohan Roy laid the foundation of Atmiya Sabha in 1815 in Kolkata. The motto behind was to provide a platform for discussion on philosophical topics and promote free collective thinking to lead social reforms. Brahmo Samaj was founded by Raja Ram Mohan Roy in 1828 in Kolkata. It discarded the old orthodoxy prevailing in the Hindu society by abandoning the rituals, Vedas and had no faith in avatars.

# 104. ANSWER: C

Dholavira is located in Kadir bet Island, in the Kutch district of Gujarat. It is one of the most important Harappan sites and one of the five largest cities. Rakhigarhi is situated in the Hisar district of Haryana. It has its origin in pre-Indus valley civilization. Bhirrana is situated in Fatehabad district of Haryana. It is one of the ancient towns of Indus valley civilization. Bhogavo is one of the southernmost cities of Harappan civilization. It is located in the Peninsular region of Gujarat known as Saurashtra.

#### **105. ANSWER: B**

Gupta empire (240-590 CE) is also known as golden age of India. In Gupta empire the women were given a secondary status. She was confined within the restriction of male member of the family (father or husband). They did not have any right in parental property. Early marriage was a prominent aspect of the society also restricting them to gain education.

#### **106. ANSWER: A**

All India services is created by declaration by Rajya Sabha with two-thirds support of majority. Article 312 Provides for the creation of All India Services.

### **107. ANSWER: D**

The executive powers of state are vested with Governor. Unlike president of India, Governor has no such power to declare emergency in the state except under article 356 that empowers a Governor to report the President about the failure of government in his state, thus to take over the administration of that particular state.

#### **108. ANSWER: C**

7 August is being celebrated as the national handloom day. The idea behind is to honour the weavers of the country and to highlight the contribution of handloom to socioeconomic development of our country.

#### **109. ANSWER: D**

On 2nd August 2017 the Israel has launched its first environmental research satellite on Venus from European spaceport in Kourou. It is a joint venture of Israel space agency and French space agency.

World environment day is celebrated on 5th June every year. It is also called Eco day or WED. Over 143 countries all around the world participates in it. The main aim is to promote the awareness about our nature and to put efforts to protect it.

#### **111. ANSWER: D**

INS Tarini is an all-female led navy vogue. It is a 254-day journey and cover about 21600 miles.

#### **112. ANSWER: B**

Before amendment Centre did not have power to tax sale of goods, except in case of inter-state sale, state cannot levy tax on service. So, article 246 was amended to give provision to the GST bill.

# **113. ANSWER: C**

The first partition museum came to existence in Amritsar. The main aim is to showcase the stories, documents related to riots pre and post partition. The art and cultural heritage trust of UK with the collaboration of Punjab government has founded the museum.

# **114. ANSWER: B**

Prime minister Narendra Modi has launched Setu Bharatam on 4th March 2016. The idea behind it is to make all national highways free of railway crossing by 2019.

#### **115. ANSWER: B**

India has signed the Global Environment Facility Grant Agreement in August 2017 with a view to enhance forest ecosystem services and to improve the livelihood of forest dwellers. The project duration is 5 years.

#### **116. ANSWER: D**

UBI- universal basic income, ensures that every citizen has a right to a minimum income to meet their basic needs as a long-term solution to reduce poverty.

#### **117. ANSWER: B**

It facilitates the electronic collection of toll. It is a consumer application. One lane in every toll plaza will be a dedicated FASTag lane. It can be recharged electronically.

#### **118. ANSWER: B**

Pragati scholarship scheme is launched by Ministry of human source and development. It aimed to provide assistance for advancement for girls pursuing technical education. 4000 total scholarship per year will be given.

#### 119. ANSWER: B

Sansad Adarsh gram yojana is launched by PM Narendra Modi on 11 October 2014 to focus upon the development in a village. The Member of Parliament is to identify the Adarsh gram, facilitate the planning process, mobilise funds and monitor the scheme.

#### **120. ANSWER: D**

Ministry of environment has launched the air quality index with a view to make people aware about the quality of air they are inhaling. The quality of air is being judged from good to severe. Eight pollutants have been included in the list of pollutants namely-PM10, PM2.5, NO<sub>2</sub>, SO<sub>2</sub>, CO, O<sub>3</sub>, NH<sub>3</sub> And Pb.