

1. Penicillin inhibits synthesis of bacterial

- (a) cell wall
- (b) protein
- (c) RNA
- (d) DNA

2. Which of the following State capitals of North-East India is/are connected by Indian Railways?

- 1. Imphal
- 2. Agartala
- 3. Kohima
- 4. Aizawl

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 2 and 4
- (c) 1, 3 and 4
- (d) 2 only

3. Most antibiotics target bacterial parasites interfering with various factors of growth or metabolism such as

- 1. synthesis of cell wall
- 2. bacterial protein synthesis
- 3. synthesis of nuclear membrane
- 4. mitochondrial function

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 1 and 4
- (c) 2 and 3 only
- (d) 1 and 2 only

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

| List-I (Region) | List-II (State) |
|--------------------|--------------------|
| A. Baghelkhand | 1. West Bengal |
| B. Kuttanad | 2. Madhya Pradesh |
| C. Saurashtra | 3. Kerala |
| D. Rarhi | 4. Gujarat |

Code :

| | | | | |
|-----|---|---|---|---|
| (a) | A | B | C | D |
| | 2 | 3 | 4 | 1 |
| (b) | A | B | C | D |
| | 2 | 4 | 3 | 1 |
| (c) | A | B | C | D |
| | 1 | 3 | 4 | 2 |
| (d) | A | B | C | D |
| | 1 | 4 | 3 | 2 |

5. Which of the following statements with regard to Portland cement are correct?

- 1. Silica imparts strength to cement.
- 2. Alumina makes the cement quick setting.
- 3. Excess of lime increases the strength of cement.
- 4. Calcium sulphate decreases the initial setting time of cement.

Select the correct answer using the code given below.

- (a) 2 and 4 only
- (b) 1 and 3
- (c) 1, 2 and 4
- (d) 1 and 2 only

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

| List-I (City) | List-II (Earthquake zone) |
|------------------|------------------------------|
| A. Kolkata | 1. Zone V |
| B. Guwahati | 2. Zone IV |
| C. Delhi | 3. Zone III |
| D. Chennai | 4. Zone II |

Code :

- (a) A B C D
3 2 1 4
- (b) A B C D
3 1 2 4
- (c) A B C D
4 1 2 3
- (d) A B C D
4 2 1 3

7. Red phosphorus is used in the manufacture of safety matches. This is due to the fact that

- (a) it shows phosphorescence
- (b) at ordinary temperature, it is less reactive than other varieties of phosphorus
- (c) it cannot be converted to white phosphorus on heating
- (d) it does not react with halogen on heating

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

| List-I (Lake) | List-II (Type) |
|--------------------|-----------------------------|
| A. Ashtamudi Kayal | 1. Residual (sweet water) |
| B. Himayat Sagar | 2. Lagoon |
| C. Dal Lake | 3. Glacial |
| D. Tsomgo Lake | 4. Artificial (sweet water) |

Code :

- (a) A B C D
2 4 1 3
- (b) A B C D
2 1 4 3
- (c) A B C D
3 1 4 2
- (d) A B C D
3 4 1 2

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

| List-I (Exponent) | List-II (Law) |
|----------------------------|---|
| A. John Dalton | 1. Law of definite proportion by volume |
| B. Joseph Proust | 2. Law of multiple proportion |
| C. Antoine Lavoisier | 3. Law of definite proportion by weight |
| D. Joseph Louis Gay-Lussac | 4. Law of conservation of mass |

Code :

- (a) A B C D
2 3 4 1
- (b) A B C D
2 4 3 1
- (c) A B C D
1 4 3 2
- (d) A B C D
1 3 4 2

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

List-I
(Farming area)

- A. Doab
B. Char
C. Maidan
D. Terai

List-II
(State)

1. Assam
2. Karnataka
3. Punjab
4. Uttar Pradesh

Code :

- (a) A B C D
3 2 1 4
(b) A B C D
3 1 2 4
(c) A B C D
4 1 2 3
(d) A B C D
4 2 1 3

11. Which of the following is **not** gaseous air pollutant?
(a) Oxides of sulphur
(b) Oxides of nitrogen
(c) Hydrocarbon
(d) Smoke

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

List-I
(Steel mill)

- A. Kalinganagar
B. Vijayanagar
C. Salem
D. Durgapur

List-II
(State)

1. West Bengal
2. Tamil Nadu
3. Odisha
4. Karnataka

Code :

- (a) A B C D
1 4 2 3
(b) A B C D
1 2 4 3
(c) A B C D
3 4 2 1
(d) A B C D
3 2 4 1

13. Which one of the following statements is **not** correct?

- (a) Water starts boiling when its vapour pressure becomes equal to atmospheric pressure.
(b) Water is known as universal solvent.
(c) Permanent hardness of water is due to presence of $MgCl_2$, $CaCl_2$, $MgSO_4$ and $CaSO_4$.
(d) Density of ice is greater than that of water.

14. Which one of the following is the pattern of circulation around a low-pressure area in the northern hemisphere?

- (a) Counter-clockwise and away from the centre
(b) Clockwise and away from the centre
(c) Counter-clockwise and towards the centre
(d) Clockwise and towards the centre

15. Which one of the following is **not** true for diamond?

- (a) Each carbon atom is linked to four other carbon atoms
(b) Three-dimensional network structure of carbon atoms is formed
(c) It is used as an abrasive for sharpening hard tools
(d) It can be used as a lubricant

16. Which one of the following statements about the atmosphere is correct?

(a) The atmosphere has definite upper limits but gradually thins until it becomes imperceptible.

(b) The atmosphere has no definite upper limits but gradually thins until it becomes imperceptible.

(c) The atmosphere has definite upper limits but gradually thickens until it becomes imperceptible.

(d) The atmosphere has no definite upper limits but gradually thickens until it becomes imperceptible.

17. The atomic theory of matter was first proposed by

(a) John Dalton

(b) Rutherford

(c) J. J. Thomson

(d) Niels Bohr

18. Which one among the following statements about diastrophism is correct?

(a) The forces may be so slow and gradual that they pass unnoticed for a long period of time.

(b) The forces may be both slow and sudden that they pass for a short period of time.

(c) The forces may be sudden and so fast that they pass unnoticed for a long period of time.

(d) The forces may be slow but for a short period of time.

19. A body is falling freely under the action of gravity alone in vacuum. Which one of the following remains constant during the fall?

(a) Potential energy

(b) Kinetic energy

(c) Total linear momentum

(d) Total mechanical energy

20. X-rays are

(a) deflected by an electric field but not by a magnetic field

(b) deflected by a magnetic field but not by an electric field

(c) deflected by both a magnetic field and an electric field

(d) not deflected by an electric field or a magnetic field

21. Which one of the following minerals contains mostly silica?

(a) Mica

(b) Quartz

(c) Olivine

(d) Pyroxene

22. The focal length of the lens of a normal human eye is about

(a) 25 cm

(b) 1 m

(c) 2.5 mm

(d) 2.5 cm

23. Which one of the following statements is correct?

(a) Cold fronts move at slower rate than warm fronts and therefore cannot overtake the warm fronts.

(b) Cold fronts normally move faster than warm fronts and therefore frequently overtake the warm fronts.

(c) Cold fronts move at slower rate, and eventually they are overtaken by the warm fronts.

(d) Cold fronts move faster than warm fronts but they cannot overtake the warm fronts.

24. Which one of the following physical quantities is the same for molecules of all gases at a given temperature?

(a) Speed

(b) Mass

(c) Kinetic energy

(d) Momentum

25. Newton's laws of motion do not hold good for objects

(a) at rest

(b) moving slowly

(c) moving with high velocity

(d) moving with velocity comparable to velocity of light

26. Which of the following elements are found in highest and lowest quantities respectively in the crust of the earth?

(a) Oxygen and silicon

(b) Calcium and sodium

(c) Sodium and magnesium

(d) Oxygen and magnesium

27. Which one of the following statements is **not** correct?

(a) Weight of a body is different on different planets.

(b) Mass of a body on the earth, on the moon and in empty space is the same.

(c) Weightlessness of a body occurs when the gravitational forces acting on it are counter-balanced.

(d) Weight and mass of a body are equal at sea level on the surface of the earth.

28. A brick is thrown vertically from an aircraft flying two kilometres above the earth. The brick will fall with a

(a) constant speed

(b) constant velocity

(c) constant acceleration

(d) constant speed for some time then with constant acceleration as it nears the earth

29. This item consists of two statements, Statement I and Statement II.

Statement I :

The Kuroshio is a warm north-flowing ocean current on the west side of the North Pacific Ocean.

Statement II :

Presence of a number of volcanoes at the bottom of the Sea of Japan is responsible for the Kuroshio becoming warm.

Examine these two statements carefully and select the answer to the item 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 I
- (c) Statement I is true but Statement II is false
- (d) Statement I is false but Statement II is true

30. The outside rearview mirror of modern automobiles is marked with warning "objects in mirror are closer than they appear". Such mirrors are

- (a) plane mirrors
- (b) concave mirrors with very large focal lengths
- (c) concave mirrors with very small focal lengths
- (d) convex mirrors

31. A Bill is deemed to be a 'Money Bill' if it has any provisions dealing with

- 1. imposition, abolition, remission, alteration or regulation of any tax
- 2. appropriation of money from the Consolidated Fund of India
- 3. imposition of fines or other pecuniary penalties
- 4. payment of fee for licences or fee for service rendered

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1, 3 and 4
- (c) 1, 2 and 3
- (d) 2 only

32. Consider the following statements about Alauddin Khalji's market policy :

- 1. He placed markets under the control of a high officer called 'Shahna' for strictly controlling the shopkeepers and prices.
- 2. In order to ensure a regular supply of cheap food grains, he ordered the land revenue from Doab region to be paid directly to the State.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

33. Which one of the following is **not** a part of service sector in India?

- (a) Transport
- (b) Construction
- (c) Hotels and restaurants
- (d) Insurance

34. Which of the following is/are **not** central feature(s) of Article 343 of the Constitution of India?

- 1. Hindi in Devanagari Script shall be the national language of the Union.
- 2. The official language of the Union shall be Hindi in Devanagari Script.
- 3. English language shall continue to be used for official purposes within States.
- 4. If two or more States agree, Hindi language should be the official language of communication between the States.

Select the correct answer using the code given below.

- (a) 1, 3 and 4
- (b) 2 and 4 only
- (c) 2, 3 and 4
- (d) 2 only

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

| List-I (Term) | List II (Meaning) |
|------------------|--|
| A. Mihrab | 1. Stepped pulpit |
| B. Mimbar | 2. Direction towards the Kaba for prayer |
| C. Khutba | 3. Arch |
| D. Kibla | 4. Sermon |

Code :

- (a) A B C D
2 1 4 3
- (b) A B C D
2 4 1 3
- (c) A B C D
3 1 4 2
- (d) A B C D
3 4 1 2

36. Under flexible exchange rate system, the exchange rate is determined

- (a) predominantly by market mechanism
- (b) by the Central Bank
- (c) as a weighted index of a group of currencies
- (d) by the World Trade Organization

37. After the general elections, the Pro tem Speaker is

- (a) elected by the Lok Sabha
- (b) appointed by the President of India
- (c) appointed by the Chief Justice of the Supreme Court
- (d) the senior most member of the Lok Sabha

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

| <i>List-I</i> (Person) | <i>List-II</i> (Work) |
|---------------------------|--------------------------|
| A. Uddanda | 1. <i>Sudhanidhi</i> |
| B. Sayana | 2. <i>Malikamaruta</i> |
| C. Yadavaprakasa | 3. <i>Malatimadhava</i> |
| D. Bhavabhuti | 4. <i>Vajjayanti</i> |

Code :

- (a) A B C D
2 1 4 3
- (b) A B C D
3 4 1 2
- (c) A B C D
2 4 1 3
- (d) A B C D
3 1 4 2

39. Which one of the following is **not** correct in the context of industrial clusters development in India?

- (a) Industrial clusters play an important role for the MSME participants in their inclusiveness, technology absorption and efficiency improvement
- (b) Industrial clusters are visible in traditional handloom, handicrafts and modern SME
- (c) Industrial cluster programmes in India are administered by various ministries
- (d) Industrial clusters lead to promotion of monopoly in the market

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

| <i>List-I</i> (Leader) | <i>List-II</i> (Party) |
|----------------------------|-----------------------------|
| A. Shyama Prasad Mukherjee | 1. Communist Party of India |
| B. Minoo Masani | 2. Bharatiya Jana Sangh |
| C. S. A. Dange | 3. Swatantra Party |
| D. Ashok Mehta | 4. Praja Socialist Party |

Code :

- (a) A B C D
2 3 1 4
- (b) A B C D
4 1 3 2
- (c) A B C D
2 1 3 4
- (d) A B C D
4 3 1 2

41. The *Rihla* was written in

- (a) Arabic in the Fourteenth Century by Ibn Battuta
- (b) Persian in the Fifteenth Century by Abdur Razzaq
- (c) Persian in the Thirteenth Century by Ibn Battuta
- (d) Italian in the Thirteenth Century by Marco Polo

42. Contribution of the manufacturing sector to environmental degradation primarily occurs during

1. procurement and use of natural resources
2. industrial processes and activities
3. product use and disposal

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

43. Which of the following is/are **not** central tenet(s) of the Constitution of India?

1. Prohibits discrimination on grounds of religion
2. Gives official status to certain religions
3. Provides freedom to profess any religion
4. Ensures equality of all citizens within religious communities

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 3 and 4 only
- (c) 2, 3 and 4
- (d) 2 only

44. The 'Sur Sagar' is

- (a) a medieval treatise on music composed by Tansen
- (b) a poetic work of Surdas
- (c) memories of Bahadur Shah Zafar
- (d) None of the above

45. Private investment in Indian agriculture is mostly on labour-saving mechanization. This could be a response to

- (a) rising productivity of agricultural sector
- (b) rising inequality in agriculture
- (c) rising wages and tighter labour market
- (d) debt write-off by the Government

46. Which one of the following is **not** a recommendation of the Fourteenth Finance Commission?

- (a) Share of States in Central Divisible Pool is increased from 32 per cent to 42 per cent
- (b) Area under forest cover is an important variable in distribution of States' share among States
- (c) Fiscal discipline is dropped as a variable in distribution of States' share among States
- (d) Sector specific grant is recommended as in the previous Finance Commissions

47. Khan Shaheb Osman Ali Stadium is located at

- (a) Karachi
- (b) Dhaka
- (c) Fatullah
- (d) Chittagong

48. May 31 is celebrated as 'World No Tobacco Day' by the World Health Organization. Which one of the following was the theme of the 'World No Tobacco Day, 2015'?

- (a) Raise taxes on tobacco
- (b) Stop illicit trade of tobacco products
- (c) Ban tobacco advertising, promotion and sponsorship
- (d) Tobacco-free youth

49. Government of which one of the following States has (in May 2015) decided to withdraw the Armed Forces (Special Powers) Act from the State?

- (a) Tripura
- (b) Assam
- (c) Nagaland
- (d) Arunachal Pradesh

50. Which of the following statements with regard to New Development Bank BRICS, formerly referred to as the BRICS Development Bank, is/are correct?

1. The Headquarters of the Bank is situated at Moscow, Russia.
2. K. V. Kamath is the first President of the Bank.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

51. Weibo is a social media platform popularly used in

- (a) South Korea
- (b) China
- (c) Thailand
- (d) Japan

52. Who is the current Vice Chairperson of NITI Aayog?

- (a) Raghuram Rajan
- (b) Arvind Panagariya
- (c) Bibek Debroy
- (d) V. K. Saraswat

53. Which one of the following is *not* provided regular budgetary support by the Ministry of Defence?

- (a) Himalayan Mountaineering Institute, Darjeeling
- (b) Institute for Defence Studies and Analyses, New Delhi
- (c) Armed Forces Tribunal
- (d) United Service Institution of India, New Delhi

54. In April 2015, India and France agreed to conclude an inter-governmental agreement in respect of which one of the following platforms?

- (a) Rafale Medium Multirole Combat Aircraft
- (b) Scorpene Submarines
- (c) Infantry Mobility Vehicles
- (d) Precision Guided Munitions System

55. Which one of the following statements is **incorrect**?

- (a) India is the third largest importer of the defence equipment.
- (b) India meets more than 50 per cent of its requirement of the defence equipment through imports.
- (c) Defence budget for 2015-2016 accounts for less than 2 per cent of the GDP.
- (d) Certain financial powers are delegated to the Vice Chief of Army Staff for capital acquisitions.

✓ 56. 'Arihant' is the name of

- (a) an infantry combat vehicle
- (b) a ballistic missile
- (c) an attack helicopter
- ✓ (d) a nuclear powered submarine

57. Where was the 14th Asia Security Summit (Shangri-La Dialogue) held in May 2015?

- ✓ (a) Beijing
- (b) Bangkok
- ✓ (c) Jakarta
- (d) Singapore

58. Which one of the following is **not** correct about the Defence Research and Development Organization (DRDO)?

- (a) DRDO was formed in the year 1958
- (b) It is a network of 10 laboratories engaged in developing defence technologies
- (c) DRDO operates under the Ministry of Defence
- (d) Some of its major products include development missiles, armaments, light combat aircrafts, etc.

59. 'Red Flag' is the name of a joint exercise between India and which one of the following countries?

- ✓ (a) China
- (b) Saudi Arabia
- ✓ (c) USA
- (d) Japan

60. In November 2014, which one of India's neighbouring countries allowed a Chinese submarine to dock at one of its ports?

- (a) Bangladesh
- ✓ (b) Sri Lanka
- (c) Maldives
- ✓ (d) Pakistan

61. Which of the following statements about the formation of the Indian National Congress are true?

1. The Indian National Congress was formed at a national convention held in Calcutta in December 1885 under the Presidency of Motilal Nehru.
2. The Safety Valve Theory regarding the formation of the Indian National Congress emerged from a biography of A. O. Hume written by William Wedderburn.
3. An early decision was that the President would be from the same region where the session was to be held.
4. W. C. Banerjee was the first President of the Indian National Congress.

Select the correct answer using the code given below.

- (a) 1, 2 and 4
- (b) 2 and 3
- (c) 2 and 4 only
- (d) 1 and 3

62. Which of the following factors led to a decline in inflation rate in India during 2014-2015?

1. Persistent decline in crude oil prices
2. Softness in global prices of tradables such as edible oils and coal
3. Tight monetary policy pursued by the Reserve Bank of India

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

63. Freedom of conscience under the Constitution of India is subject to

1. public order, morality and health
2. a law providing for social welfare and reform
3. opening Hindu religious institutions of a public character to all Hindus
4. defamation or incitement to an offence

Select the correct answer using the code given below.

- (a) 1, 2, 3 and 4
- (b) 1, 2 and 3 only
- (c) 3 and 4 only
- (d) 1 and 2 only

64. Which of the following Fundamental Rights is/are available to non-citizens?

1. Equality before Law
2. Right against Discrimination
3. Equality of Opportunity
4. Protection of Life and Personal Liberty

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 4 only
- (c) 1, 2 and 4
- (d) 2 and 3

65. Which of the following statements about the formation of the Constituent Assembly is/are correct?

1. The members of the Constituent Assembly were chosen on the basis of the provincial elections of 1946.
2. The Constituent Assembly did not include representatives of the Princely States.
3. The discussions within the Constituent Assembly were not influenced by opinions expressed by the public.
4. In order to create a sense of collective participation, submissions were solicited from the public.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 and 3
- (c) 3 and 4
- (d) 1 and 4

66. Which of the following statements about Jyotirao Phule's Satyashodhak Samaj Movement in Maharashtra is/are true?

1. The Satyashodhak Samaj was set up in 1873.
2. Phule argued that Brahmins were the progeny of 'alien' Aryans.
3. Phule's focus on the Kunbi peasantry in the 1880s and 1890s led to a privileging of Maratha identity.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

67. Which of the following laws have been repealed by the Constitution of India?

1. The Government of India Act, 1935
2. The Indian Independence Act, 1947

3. The Abolition of Privy Council Jurisdiction Act, 1949

4. The Preventive Detention Act, 1950

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 4 only
- (c) 1 and 3
- (d) 1, 2 and 4

68. Which of the following statements about Maulvi Ahmadullah Shah, who played an important part in the Revolt of 1857, is/are correct?

1. He was popularly known as Danka Shah or the Maulvi with a drum.
2. He fought in the famous Battle of Chinhat.
3. He was killed by British troops under the command of Henry Lawrence.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 3
- (c) 2 and 3
- (d) 1 and 2

69. A writ of Habeas Corpus for the release of a person can be issued

1. where the arrest or detention has taken place in contravention of the procedure established by law
2. to secure the release of a person imprisoned on a criminal charge
3. where the arrest has taken place for contempt of Court or the Parliament

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 2 and 3 only
- (c) 1 only
- (d) 1 and 2 only

70. Who among the following is the author of the autobiography entitled *Aamar Katha* (1913)?

- (a) Satyajit Ray
- (b) Rassundari Devi
- (c) Ganesh Chandra Ghosh
- (d) Binodini Dasi

71. Which one of the following statements about the Companies Act, 2013 is **not** correct?

- (a) The Act regulates the corporate sector to make it accountable.
- (b) It provides for Corporate Social Responsibility.
- (c) It provides more opportunities for new entrepreneurs.
- (d) It enables wide application of Information Technology.

72. Which one of the following changes has **not** been made to the Citizenship Act of India by the Amendment in 2015?

- (a) The Overseas Citizens of India will now be called the Overseas Citizens of India Cardholders
- (b) The Non-Resident Indians are entitled to vote in elections in India
- (c) The Persons of Indian Origin have been placed at par with the Overseas Citizens of India
- (d) The Persons of Indian Origin are now entitled to lifelong visa to visit India

73. Name the French revolutionary who wrote *Declaration of the Rights of Woman and Female Citizen*.

- (a) Olympe de Gouges
- (b) Nancy Ruhling
- (c) Maximilien Robespierre
- (d) Mary Wollstonecraft

74. Which one of the following statements about Electoral Government in India is **not** correct?

- (a) The superintendence, direction and control of elections are vested in the Election Commission of India.
- (b) There is one general electoral roll for every territorial constituency.
- (c) The Parliament has the power to make laws relating to the delimitation of constituencies.
- (d) The Supreme Court of India has the authority to scrutinize the validity of a law relating to delimitation of constituencies.

75. The electronic voting machines are developed jointly with

1. Bharat Heavy Electricals Limited
2. Bharat Electronics Limited
3. Electronics Corporation of India Limited
4. Bharat Sanchar Nigam Limited

Select the correct answer using the code given below.

- (a) 1, 2 and 3
- (b) 2 and 3 only
- (c) 2 and 4
- (d) 3 and 4

76. Genetic screening is
- (a) analysis of DNA to check the presence of a particular gene in a person ✓
 - (b) analysis of gene in a population ✓
 - (c) pedigree analysis ✓
 - (d) screening of infertility in parents

77. Which of the following are the major factors responsible for the monsoon type of climate in India?
1. Location
 2. Thermal contrast
 3. Upper air circulation
 4. The Himalayan Mountains

Select the correct answer using the code given below.

- (a) 1 and 4 only
- (b) 1, 2, 3 and 4 ✓
- (c) 2, 3 and 4 only
- (d) 1, 2 and 3 only

78. Consider the following Indian States :
1. Chhattisgarh
 2. Telangana
 3. Andhra Pradesh
 4. Uttarakhand
 5. Tamil Nadu

Which among the States given above are the largest and smallest respectively (in terms of geographical area)?

- (a) 3 and 4
- (b) 3 and 2
- (c) 1 and 4 ✓
- (d) 2 and 5

79. Who among the following is considered as the father of genetic engineering?

- (a) Philip Drinkcr
- (b) Paul Berg
- (c) Thomas Addison
- (d) Alpheus S. Packard Jr.

80. Which of the following cause(s) variation in the genetic material of progeny?

1. Sexual reproduction
2. Asexual reproduction
3. Mutations
4. Epigenetic changes

Select the correct answer using the code given below.

- (a) 2 only
- (b) 1, 2 and 3
- (c) 1, 3 and 4 ✓
- (d) 1 and 3 only

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

| List-I (Plant) | List-II (Natural vegetation type) |
|-------------------|--------------------------------------|
| A. Ebony | 1. Moist deciduous |
| B. Shisham | 2. Himalayan moist |
| C. Walnut | 3. Alpine |
| D. Birch | 4. Tropical evergreen |

Code :

(a) A B C D
4 1 2 3

(b) A B C D
4 2 1 3

(c) A B C D
3 2 1 4

(d) A B C D
3 1 2 4

82. Cobalt is associated with

- (a) growth hormone
(b) vitamin B₁₂
(c) hemoglobin
(d) intestinal enzymes

83. Absorption of water in the human body can be found in

1. renal tubule in kidney
2. hepatic cells in liver
3. large intestine
4. pancreatic duct

Select the correct answer using the code given below.

(a) 1, 2 and 3

(b) 1 and 3 only

(c) 2 and 4

(d) 3 only

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

| List-I (Geological time scale) | List-II (Life-form) |
|-----------------------------------|------------------------|
| A. Pleistocene | 1. Mammals |
| B. Paleocene | 2. Human genus |
| C. Permian | 3. Invertebrates |
| D. Cambrian | 4. Frogs |

Code :

(a) A B C D
2 1 4 3

(b) A B C D
2 4 1 3

(c) A B C D
3 4 1 2

(d) A B C D
3 1 4 2

85. Measles is a disease caused by

- (a) bacteria
(b) virus
(c) protozoa
(d) worm

86. Neutrophils and lymphocytes originate from

- (a) kidney tubule
(b) spleen
(c) bone marrow
(d) lymph node

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

| List-I (Climate) | List-II (Characteristic) |
|----------------------|--|
| A. Mediterranean | 1. Temperature cycle is moderated by marine influence |
| B. Marine west coast | 2. Warm summers and cold winters with three months below freezing. Very large annual temperature range |
| C. Dry mid-latitude | 3. Strong temperature cycle with large annual range. Warm summers to hot and cold winters to very cold |
| D. Moist continental | 4. Temperature range is moderate with warm to hot summers and mild winters |

Code :

- (a) A B C D
2 1 3 4
- (b) A B C D
2 3 1 4
- (c) A B C D
4 3 1 2
- (d) A B C D
4 1 3 2

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

| List-I (Weathering type) | List-II (Landform/ Process) |
|-------------------------------|-----------------------------------|
| A. Chemical weathering | 1. Till |
| B. Mechanical weathering | 2. Oxidation |
| C. Glacial deposits | 3. Plant roots |
| D. Deposition by ground-water | 4. Stalactite |

Code :

- (a) A B C D
2 3 1 4
- (b) A B C D
2 1 3 4
- (c) A B C D
4 1 3 2
- (d) A B C D
4 3 1 2

89. The mandate of the scheme entitled 'Directly Observed Treatment, Short-Course (DOTS)' launched by WHO is to ensure that

- (a) doctors treat patients with medicine for a short duration
- (b) doctors do not start treatment without a trial
- (c) patients complete their course of drug
- (d) patients voluntarily take vaccines

90. If a ship has to go from Chennai to Kochi, it has to go around Sri Lanka rather than crossing through the Palk Strait. Why?

- (a) The Palk Strait has disputed islands and the Sri Lankan Navy does not allow the ships to cross through
- (b) It is too shallow for ships to cross
- (c) Shipping is prohibited through the Strait due to its religious significance connected with the epic *Ramayana*
- (d) The around Sri Lanka route is actually shorter than crossing through the Palk Strait

91. The Constitution of India guarantees freedom of thought and expression to all its citizens subject to

1. implementation of Directive Principles
2. Fundamental Duties
3. Right to Equality

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 only
- (d) 1, 2 and 3

92. In ancient India, the 'Vaudheyas' were

- (a) a sect of the Buddhism
- (b) a sect of the Jainism
- (c) a republican tribe
- (d) Vassals of the Cholas

93. Which one of the following is an example of a 'natural monopoly'?

- (a) Indian Airlines
- (b) Delhi Jal Board
- (c) Delhi Transport Corporation
- (d) Steel Authority of India

94. Which one of the following is **not** a component of the Realist Theory?

- (a) The State is the preeminent actor
- (b) State sovereignty is important for the affirmation of juridical authority over territory
- (c) The primary objective of all States is survival
- (d) Survival can be assured in cooperation with international organizations

95. The *Dashakumaracharita* or 'Tales of Ten Princes' was composed by

- (a) Bhatti
- (b) Banabhatta
- (c) Bhasa
- (d) Dandin

96. What is meant by price discrimination?

- (a) Increase in price of a commodity over time
- (b) A situation where the same product is sold to different consumers for different prices
- (c) Subsidization of a product by the Government to sell it at a lower price
- (d) General decrease in price of a commodity over time

97. Which one of the following does **not** form part of Immanuel Kant's theory of 'perpetual peace'?

- (a) Republican Constitutionalism
- (b) Federal contract among States to abolish war
- (c) World Government
- (d) Transformation of individual consciousness

98. Borobudur is the site of

- (a) a huge temple of Vishnu and Shiva in Java, built in the 12th Century AD
- (b) an enormous Stupa in Java, built in the 8th Century AD
- (c) a magnificent palace of a Chola King in Tamil Nadu
- (d) a Jain Monastery in Gujarat

99. What is meant by 'Public Good'?

- (a) A commodity produced by the Government
- (b) A commodity whose benefits are indivisibly spread among the entire community
- (c) A Government scheme that benefits the poor households
- (d) Any commodity that is very popular among general public

100. Which one of the following statements about the process of the Parliament to make new States is **not** correct?

- (a) The Parliament may by law form a new State and alter the boundaries or names of existing States.
- (b) A Bill to this effect cannot be introduced in the Parliament except on the recommendation of the President.
- (c) A Bill to this effect may be referred by the President to the Legislature of the affected State.
- (d) Such a law will fall under the purview of Article 368.

101. Which one of the following statements with regard to India's economy between 1814 to 1860 is **not** correct?

- (a) Between 1814 and 1850, four commodities dominated India's exports—raw silk, opium, cotton and indigo.
- (b) Between 1814 and 1860, five commodities dominated India's exports—raw silk, opium, cotton, indigo and jute.
- (c) Indigo and raw silk required processing techniques.
- (d) Indigo and raw silk were financed by foreign capital.

102. In view of the fact that kerosene is an inferior good in India, what is/are its implication(s)?

1. As households get richer, they consume less kerosene.
2. Over time there is a decline in quality of kerosene.
3. Government needs to stop subsidies on kerosene.

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

103. Which of the following statements with regard to citizenship provisions of the Constitution of India is/are correct?

1. No person shall be a citizen of India by virtue of Article 5, or be deemed to be a citizen of India by virtue of Article 6 or Article 8, if he/she has voluntarily acquired the citizenship of any foreign State.
2. The Parliament has power to make any provision with respect to the acquisition and termination of citizenship and all other matters relating to citizenship.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

104. The protection against arrest and detention under Article 22 of the Constitution of India is **not** available to

1. an enemy alien
2. a person detained under a preventive detention law
3. a foreigner
4. an overseas citizen of India

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 1, 3 and 4
- (c) 1, 2 and 3
- (d) 3 and 4 only

105. Which of the following statements about the Hastings Plan of 1772 is/are correct?

1. Each district was to have a civil and a criminal Court.
2. The Judges were helped by native assessors who were skilled in Hindu and Islamic laws.
3. The Sadar Diwani Adalat was mainly meant to settle mercantile cases exceeding ₹ 10,000 in value.
4. These Courts did not put into place any procedural improvements.

Select the correct answer using the code given below.

- (a) 1 and 2
- (b) 3 and 4
- (c) 2 and 4
- (d) 2 only

106. Which of the following facts are related to Burma (Myanmar)?

1. It shares its borders with India, China, Bangladesh and Vietnam.
2. It is ruled by a military government.
3. The National League for Democracy was not allowed to contest the elections held in the year 2010.
4. Myanmar is a member of ASEAN.

Select the correct answer using the code given below.

- (a) 1 and 3
- (b) 2, 3 and 4
- (c) 1, 2 and 4
- (d) 1 and 2 only

107. Who among the following was **not** a painter at Akbar's Court?

- (a) Daswanth
- (b) Abdus Samad
- (c) Kalyan Das
- (d) Basawan

108. Which one of the following is the major source of gross tax revenue (GTR) for the Government of India?

- (a) Income tax
- (b) Corporation tax
- (c) Customs duty
- (d) Service tax

✓ 109. Which of the following are members of BRICS?

- (a) Bhutan, Russia, India, China and Sri Lanka
- ✓ (b) Brazil, Russia, India, China and South Africa
- (c) Brazil, Russia, Indonesia, China and Singapore
- (d) Bangladesh, Republic of Korea, Indonesia, Canada and Sri Lanka

110. After the death of Shivaji, there was a fight for succession between

- (a) Shambhaji and the widow of Shivaji
- (b) Shambhaji and Bajirao
- (c) Rajaram and Shambhaji
- (d) None of them

✓ 111. Which one of the following is a non-renewable resource?

- (a) Solar energy
- ✓ (b) Coal
- (c) Water
- (d) Fisheries

112. The 'Panchsheel Agreement' for peaceful coexistence was signed between

- (a) India and Bhutan
- (b) India and Nepal
- (c) India and China
- (d) India and Pakistan

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

| List-I (Author) | List-II (Work) |
|--------------------|-----------------------------|
| A. Somadeva | 1. <i>Malavikagnimitra</i> |
| B. Kalidasa | 2. <i>Kathasaritsagara</i> |
| C. Bhasa | 3. <i>Chaurapanchasika</i> |
| D. Bilhana | 4. <i>Svapnavasavadatta</i> |

Code :

- (a) A B C D
2 1 4 3
- (b) A B C D
3 4 1 2
- (c) A B C D
2 4 1 3
- (d) A B C D
3 1 4 2

114. Which one of the following is **not** an example of externalities?

- (a) Pollution of air by a cement factory
- (b) Health hazard caused to the person due to smoking by himself/herself
- (c) Smoke coming out of neighbour's vehicle
- (d) Increase in land price of adjacent plots due to construction of a road by the Government

✓ 115. 'Rio + 20' is the short name for

- (a) Millennium Development Goals
- ✓ (b) United Nations Conference on Sustainable Development
- (c) Earth Summit
- (d) Post-2015 Development Agenda

116. Patanjali was

- (a) a philosopher of the 'Yogachāra' school
- (b) the author of a book on Ayurveda
- (c) a philosopher of the 'Madhyamika' school
- (d) the author of a commentary on Panini's Sanskrit grammar

117. Which of the following statements in the context of income-environment relationship is/are correct?

1. Pollution trends tend to follow an inverse-U shaped relationship across different stages of economic development.
2. In the beginning stage, pollution increases due to urbanization and industrialization.
3. In the later stage, pollution declines due to structural changes towards services sector.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 1 and 2 only
- (c) 1, 2 and 3
- (d) 2 and 3 only

118. Which one of the following is *not* a member of MERCOSUR (Southern Common Market)?

- (a) Argentina
- (b) Paraguay
- (c) Uruguay
- (d) Chile

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

List-I
(King)

List-II
(Region)

- | | |
|--------------------|----------------|
| A. Shashanka | 1. Assam |
| B. Kharavela | 2. Maharashtra |
| C. Simuka | 3. Orissa |
| D. Bhaskara Varman | 4. Bengal |

Code :

(a) A B C D
4 2 3 1

(b) A B C D
1 3 2 4

(c) A B C D
4 3 2 1

(d) A B C D
1 2 3 4

120. Which one of the following represents a progressive tax structure?

- (a) Tax rate is the same across all incomes
- (b) Tax rate increases as income increases
- (c) Tax rate decreases as income increases
- (d) Each household pays equal amount of tax