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Booklet Serial No.

045593

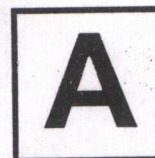
Test Booklet Series

**TEST BOOKLET - 2021**

**GENERAL STUDIES EXAMINATION - 2021**

**Paper - I**

**(91)**



**Time Allowed: Two Hours**

**Maximum Marks: 200**

### **INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES **NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write anything else on the Test Booklet.
4. This Test booklet contains **100** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Response sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Response Sheet provided. See directions in the Response Sheet.
6. All items carry equal marks.
7. Before you proceed to mark in the Response sheet the response to various items in the Test Booklet you have to fill in some particulars in the Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Response Sheet**. You are permitted to take away with you the Test Booklet and Candidate's Copy of the Response Sheet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers:**  
**THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE.**
  - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** of the marks assigned to that question will be deducted as penalty.
  - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
  - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no **penalty** for that question.

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91(A)/2021

**SEAL**





1. When did the Union Cabinet chaired by the Prime Minister approved the adoption of Jammu and Kashmir Panchayati Raj Act  
A) 21 October, 2019                      B) 21 August, 2020  
C) 5 August, 2020                      D) 21 October, 2020
  
2. According to the UNICEF First Child-focused Climate Risk Index- the Children's Climate Risk Index (CCRI), which of the following countries is at the lowest rank in South Asia.  
A) India                      B) Afghanistan  
C) Sri Lanka                      D) Pakistan
  
3. Under the bench of which of the following judges, the Supreme Court of India upheld Media's freedom to report Court hearings in the case of Election Commission of India Vs. MR Vijaya Bhaskar?  
A) Justices D.Y Chandrachud, K.M. Joseph  
B) Justices UU Lalit and Vineet Saran  
C) Justices AM Khanwilkar, Indu Malhotra  
D) Justices D.Y Chandrachud, M.R Shah
  
4. How many Indian students will be sponsored each year under the Quad fellowship to pursue masters and doctoral degrees at leading STEM graduate universities in the United States?  
A) 100                      B) 200  
C) 50                      D) 25
  
5. What is the theme of World Brain Day 2021?  
A) Stop Alzheimer's                      B) Stop Parkinson's  
C) Stop Multiple Sclerosis                      D) Stop Aphasia

6. What is the SACRED portal by the Government of India for?
- A) To legitimize religious workers' job status
  - B) To promote tourism based on religious activities
  - C) To provide jobs to senior citizens
  - D) To encourage students towards social work
7. Who has coined the term 'BRICS', an association of five emerging national economies?
- A) Ester Doflo
  - B) Amartya Sen
  - C) Jim O'Neil
  - D) Joseph E. Stiglitz
8. The Indian Metrological Department has a Regional Metrological Centre in which of the following places?
- i) Chennai and Guwahati
  - ii) Kolkata and Nagpur
  - iii) Ranchi and Indore
  - iv) Bengaluru and Lucknow
- A) (iii) and (iv) are correct
  - B) (ii) and (iv) are correct
  - C) (i) and (iii) are correct
  - D) (i) and (ii) are correct
9. Which one of the following does not come under the Jal Jeevan Mission (Urban)?
- A) Rejuvenation of water bodies as well as 20% of supply of reused water.
  - B) Creation of green spaces
  - C) 2.64 crore sewer connections in the 500 cities
  - D) Free water supply to all households.



10. 'Symala Gopinath Committee' relates to \_\_\_\_\_

- A) Nationalised Banks
- B) Nidhi Companies
- C) Small Finance Banks
- D) Cooperative Banks

11. Which country has passed the 'Holocaust property bill'?

- A) Denmark
- B) Germany
- C) Poland
- D) Slovenia

12. Megapode Sanctuary was in the news recently. Where is it located?

- A) Andaman & Nicobar islands
- B) Uttar Pradesh
- C) Uttarakhand
- D) Rajasthan

13. Who is the author for the book 'My Life in Full- Work, Family, and our Future'?

- A) Sudha Murty
- B) Indra Nooyi
- C) Kiran Mazumdar Shaw
- D) Parmeshwar Godrej

14. FIFA World Cup (men) 2022 will be held in:

- A) Qatar
- B) Japan
- C) Spain
- D) England

15. What is India's rank on the Global Hunger Index, 2020?

- A) 94<sup>th</sup> rank
- B) 49<sup>th</sup> rank
- C) 54<sup>th</sup> rank
- D) 98<sup>th</sup> rank

91(A)

(5)

[P.T.O.]

- 91(A)**

<https://www.freshersnow.com/previous-year-question-papers/>



22. The Muslim League was founded in 1906 at—

- A) Lahore
- B) Karachi
- C) Aligarh
- D) Dacca

23. Which of the following Chola Kings assumed the title “gangaikodan”

- A) Raja Raja Chola I
- B) Parantaka Chola II
- C) Rajendra Chola I
- D) Karikala Chola

24. The Vernacular Press Act of 1878, adopted by Lord Lytton was intended to—

- A) Promote newspapers in the vernacular
- B) Restrain vernacular newspapers
- C) Promote English newspapers
- D) Restrain English newspapers

25. Vetti refers to:

- A) Tax in the form of cash
- B) Tax in the form of jewellery
- C) Tax in the form of food grains
- D) Tax in the form of forced labour

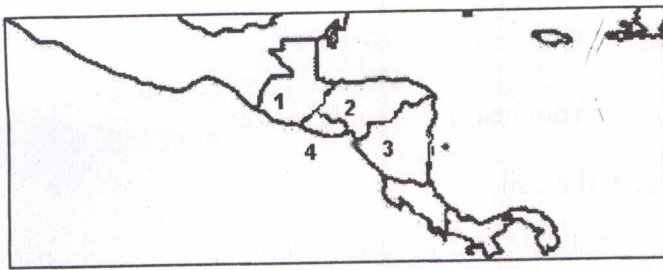
26. ‘A History of British India’ was written in 1817 by:

- A) G H Forbes
- B) Abul Kalam Azad
- C) James Mill
- D) Sucheta Mahajan





31. Consider the following diagram.



Match the central American countries with their capitals.

a) San Salvador

b) Guatemala City

c) Tegucigalpa

d) Managua

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

32. Consider the following sentences.

1. Rubber production begun in the region of Travancore and Malabar.
2. 8% of the world production of rubber is contributed by India.

Which of the above statement/Statements are NOT correct?

A) 1 only

B) 2 only

C) Both 1 and 2

D) Neither 1 nor 2

33. What is 'Biochar'?

- A) A form of pesticide
- B) A chemical based fertiliser
- C) A form of charcoal produced from heating organic matter
- D) A form of chemical found in the soil

34. Which of the following is true about Kashmir?

- 1) Vegetation and climate can broadly be categorized into sub-tropical, temperate and alpine zones.
- 2) More than 50% of the plant species used in British pharmacopoeia are reported to grow in Jammu and Kashmir.
- 3) The recorded forest area is 20240 Sq. kms.

Choose the correct option given below.

- A) Only 1
- B) Only 1 and 2
- C) Only 3
- D) Only 1 and 3

35. Which of the following about Baiga tribe is true?

- 1) Baiga means sorcerers .
- 2) Traditionally they lived semi-nomadic life and practiced slash and burn agriculture.
- 3) They have in depth knowledge of folk crop production.
- 4) Tattoo is an integral part of baiga tradition.

Choose the correct option given below.

- A) Only 1, 2 and 4
- B) Only 2, 3 and 4
- C) Only 1, 3 and 4
- D) Only 1, 2 and 3



36. Consider the following sentences.

1. India is the 2nd largest producer of the fruits and vegetables in the world.
2. Totally 12 % of the cropped area is oil seeds.

Which of the above statement/Statements are NOT correct?

- |                 |                    |
|-----------------|--------------------|
| A) 1 only       | B) 2 only          |
| C) Both 1 and 2 | D) Neither 1 nor 2 |

37. Which one of the following is the example of radial drainage pattern

- |              |                       |
|--------------|-----------------------|
| A) Siwaliks  | B) Vindhya mountains. |
| C) Gir hills | D) Aravalli mountains |

38. Which among the following state has the highest Percentage of canal irrigation used in India?

- |                    |                  |
|--------------------|------------------|
| A) Rajasthan       | B) Punjab        |
| C) Jammu & Kashmir | D) Uttar Pradesh |

39. Consider the following statements around wet lands.

1. Wet lands can be both aquatic and terrestrial at the same time depending on seasonal variability.
2. Wet lands are first Targets of human interference.
3. The boundaries of wet lands are defined as per their geographical location.

Which of the above statements are correct?

- |                 |                 |
|-----------------|-----------------|
| A) Only 1 and 3 | B) Only 1 and 2 |
| C) Only 3 and 2 | D) Only 2       |

40. Consider the following statement

- 1) When the earth, the moon and the sun are in a straight line, the sun enhances its gravitational pull of the moon, creating a condition of higher tides and lower low tides known as spring tides
- 2) when the sun and the moon are at right angle to the earth, the sun partially counteracts the pull of the moon, producing lower high tides and higher low tides typical of a neap tide.
- 3) A solar eclipse occurs when the sun passes between the earth and the moon.
- 4) Lunar eclipse occurs when the earth passes between the sun and the moon.

Which of the given statement above is/are correct

- A) 1 and 2
- B) 3 and 4
- C) 3 only
- D) 4 only

41. The UAE has sent a space probe mission to the Mars named

- A) 'Hope' or 'Al-Amal' in Arabic
- B) 'Faith' or 'Al-Amal' in Arabic
- C) 'Belief' or 'Al-Amal' in Arabic
- D) 'Prayer' or 'Al-Amal' in Arabic

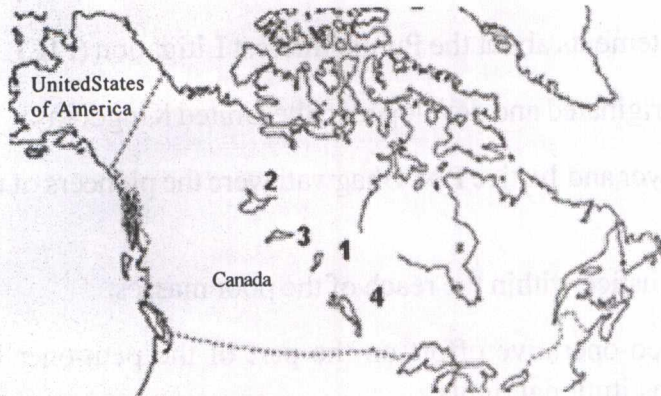
42. Dolomite deposits have been found in:

- A) Odisha, Bengal, Bihar, Maharashtra
- B) Odisha, Bengal, Bihar, Tamil Nadu
- C) Odisha, Bengal, Bihar, Jharkhand
- D) Odisha, Bengal, Bihar, Chattisgarh



43. How many centimetres has been added to the revised height of Mount Everest after its re-measurement?
- A) 86 centimetres                      B) 96 centimeters  
C) 75 centimeters                      D) 101 centimeters

44. Consider the following Diagram.



Match the following Lakes.

- a. Athabasca      b. Reindeer      c. Great slave      d. Winnipegosis

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

45. Optimal conditions for this crop to grow include cool to warm tropical climate, rich soils, and few pests or diseases. Temperature above moderate accelerates fruit ripening which ruins harvest quality. Which crop is being referred to?
- A) Almonds                      B) Tea  
C) Coffee                      D) Walnuts

46. Consider the following statements about the aims of the India Enterprise Architecture (IndEA).

- 1) Making all Government services digitally accessible in an integrated manner.
- 2) Enhance Efficiency Delivery Services by defining and enforcing service levels of a very high order
- 3) Maintaining the right balance between security of data and privacy of personal information.

Which of the following statement is correct

- A) Only 1                      B) 1, 2 and 3  
C) 2 and 3                      D) 1 and 2.

47. Who headed the States Committee (for negotiating with states) under the Constituent Assembly in the making of the Indian Constitution?

- A) Dr. Rajendra Prasad
- B) Sardar Patel
- C) Jawaharlal Nehru
- D) A V Thakkar

48. Consider the following statements about the Public Interest Litigation (PIL)

- 1) The concept of PIL originated and developed in the United Kingdom
- 2) Justice V.R Krishna Iyer and Justice P.N. Bhagwati were the pioneers of the PIL in India.
- 3) PIL intends to bring justice within the reach of the poor masses.
- 4) PIL is essentially a co-operative effort on the part of the petitioner to secure observance of the constitutional rights.
- 5) PIL is considered as absolutely necessary for maintaining the rule of law and meaningful realization of the fundamental rights.

Which of the statements given above is/are correct

- A) 1, 2, 3, 4 and 5
- B) 2, 3 and 4
- C) 2, 3, 4 and 5
- D) 1, 3, 4 and 5

49. Consider the following statements about the Scheduled Tribes And Other Traditional Forest Dwellers (Recognition Of Forest Rights) Act, 2006.

- 1) It does not recognize Individual rights like Rights of Self-cultivation.
- 2) It recognizes the Community Rights as Grazing and Fishing.
- 3) It ensures land tenure, livelihood and food security of the forest dwelling Scheduled Tribes and other traditional forest dwellers.
- 4) It protects the tribal population from eviction without rehabilitation and settlement.

Which of the statements given above is/are not correct

- A) 1 and 2
- B) 4 only
- C) 2 only
- D) 1 only



50. Read the following statements around article 243 H of the Indian constitution.

1. Authorise a Panchayat to levy, collect and appropriate such taxes, duties, tolls and fees in accordance with such procedure and subject to such limits.
2. Assign to a Panchayat such taxes, duties, tolls and fees levied and collected by the State Government for such purposes, and subject to such conditions and limits.
3. Provide for making such grants-in-aid to the Panchayat from the Consolidated Fund of the Centre.

Which of these statements is/are true?

- |                 |                 |
|-----------------|-----------------|
| A) Only 1 and 2 | B) Only 2 and 3 |
| C) Only 1 and 3 | D) Only 2       |

51. Who said "Rights are powers necessary for the fulfilment of man's vocation as a moral being."?

- |                |              |
|----------------|--------------|
| A) Beni Prasad | B) T H Green |
| C) Laski       | D) Hobbes    |

52. Which of the following statements are true about Governor of a State

1. The executive power of the state is vested in him
2. He must have attained 35 years of age
3. He holds office during the pleasure of the President
4. The grounds of his removal are laid down in the Constitution

select the correct answer using the codes given below

- |              |                     |
|--------------|---------------------|
| A) 1,2 and 4 | B) 1,2 and 3        |
| C) 1,3 and 4 | D) all of the above |



53. Match the List I with List II and select the correct answer using the code given below the lists.

Amendment of the Constitution of India

Subject

- |                               |  |
|-------------------------------|--|
| a) 52 <sup>nd</sup> Amendment | 1. Reduction of voting age from 21 years to 18 years |
| b) 73 <sup>rd</sup> Amendment | 2. Right to Education                                |
| c) 61 <sup>st</sup> Amendment | 3. Panchayati Raj                                    |
| d) 86 <sup>th</sup> Amendment | 4. Disqualification on grounds of defection          |

Code

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

54. Which of the following statements is not correct about the Pocket Veto of the President?

- A) The President can either give his/her assent to a money bill or withhold his assent to a money bill but cannot return it for reconsideration of the Parliament.
- B) The President neither ratifies or rejects nor returns the bill, but simply keeps the bill pending for an indefinite period.
- C) Power of the President not to take any action is Pocket Veto.
- D) In 1986 President Zail Singh exercised it with respect to the Indian Post Office (Amendment) Bill.

55. Ruth Manorama is an Indian woman activist. Mention her area of work

- |                             |                                    |
|-----------------------------|------------------------------------|
| A) Working for Dalit women  | B) Working for HIV infected women  |
| C) Working for tribal women | D) Working for urban working women |

56. Consider the following pairs with respect to legislation against untouchability

- |         |  |
|---------|--|
| a) 1923 | 1. Bombay Presidency- accelerate inclusion of untouchable children in educational institutions     |
| b) 1925 | 2. Madras Legislative Council- Bill introduced to throw open public roads and wells to all persons |
| c) 1936 | 3. Government of Travancore- Temple Entry Proclamation   |
| d) 1955 | 4. Untouchability Offences Act   |

Which of the pairs given below is/are correctly matched?

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

57. Match the following:

- |                  |   |
|------------------|---|
| a) Certiorari    | 1. Issued when a govt. official infringes rights of an individual by not doing legal duty                                 |
| b) Habeas Corpus | 2. A higher court orders the lower court to transfer a pending matter to a higher authority or court                      |
| c) Prohibition   | 3. Arrested person to be presented before district magistrate within 24hrs  |
| d) Mandamus      | 4. Higher court orders a lower court to transfer the case if the lower court seems to be overriding its jurisdiction area |

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

58. Which Indian President won unopposed?
- A) R. Venkataraman                      B) N Sanjeeva Reddy  
C) Giani Zail Singh                      D) V V Giri
59. The parliament exercises control over administration through the executive with
- A) General control over the policies and actions of the government through questions, discussions, motions and resolutions.  
B) Financial control through budget and audit.  
C) Detailed control over financial, administrative and legislative matters through committees.  
D) All the above
60. Naresh Chandra Committee, 2002 was appointed to:
- A) Examine age limit for competitive examinations  
B) Examine the reservation issues  
C) Examine corporate governance issues  
D) Examine the domestic violence issues
61. The Rangarajan panel submitted its report on poverty estimates in January 2014. Major changes were observed in estimation. What are those factors?
1. Minimum calorie requirement for urban and rural areas.
  2. Behavioural determination of non-food expenses.
  3. Food expenses to include food and protein
  4. Per capita expenditure from urban and rural area separately

Choose the correct answer

- A) 1, 2, & 3                      B) 3 & 4  
C) 2 & 4                      D) All the above

91(A)

(18)



62. Which of the following is related to environmental degradation?

1. Extraction in Carrying Capacity
2. Waste generated in Absorptive Capacity
3. Conservation of renewable and non -renewable resources
4. Opportunity cost of negative environment impact

Select the correct codes:

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

63. Read the following statements.

1. Balance of payments of a country is an aggregate record of domestic economic transactions of a country.
2. These transactions include exports and imports of goods, services and financial assets, along with transfer payments (like foreign aid).
3. The balance of payments is an important economic indicator for 'open' economies

Which of the given statements is/are true?

- |                 |                 |
|-----------------|-----------------|
| A) Only 1       | B) Only 1 and 2 |
| C) Only 1 and 3 | D) Only 2 and 3 |

91(A)

(19)

[P.T.O.]

64. Read the following statements around FDI in India.

1. During FY 2020-21 total FDI inflow of \$58.37 bn, 22% higher as compared to the first 8 months of 2019-20.
2. FDI inflows in India have consistently increased since FY 2014-15.
3. FDI equity inflow grew by 120% in the first three months of the FY 2021-22.

Which of the given statements is/are true.

- |                 |           |
|-----------------|-----------|
| A) Only 1       | B) Only 2 |
| C) Only 1 and 2 | D) Only 3 |

65. Stand up India:

1. Facilitates bank loans to SC or ST borrower.
2. It facilitates a loan amount of 10 lakh to 50 lakhs.
3. The loan is provided for setting up a greenfield enterprise.

Which of the above statements is/are true?

- |                 |                 |
|-----------------|-----------------|
| A) Only 1       | B) Only 2       |
| C) Only 1 and 2 | D) Only 1 and 3 |

66. Which of the following is not a step under Atma Nirbhar Bharat?

- A) Disallowing Global tender of up to 200 crores.
- B) Increase in borrowing limits of Private banks account from RBI.
- C) Elimination of regulatory assets
- D) One nation one card for migrant workers

67. Theil Index, Gini Index and Palma ratio measures

- A) Social inequality
- B) Income Inequality
- C) Regional Disparity
- D) Spread of Biodiversity

68. Which of the following is true in relation to ECOTAX?

- 1. Tax imposed on private parties to feel the social burden of their action.
- 2. Increased tax on petroleum
- 3. Are applied on business firms and commercial entities
- 4. Tax levied for creating positive externalities.

- A) 1&2
- B) 2&4
- C) 3 &4
- D) 1 & 3

69. Which of the following is not true about The Essential Commodities Act 1955?

- 1. The central government cannot add or remove commodities from the list mentioned in the act.
- 2. The central government can provide for regulating or prohibiting the production, supply and distribution thereof and trade and commerce therein.
- 3. The central government can order the produce of essential commodity to be brought in for inspection

Choose the correct option.

- A) Only 1
- B) Only 3
- C) Only 2 and 3
- D) Only 1 and 2



70. The key aspects of major sustainable development views can be matched as:

- |   |                    |
|---|--------------------|
| 1. Economic development conflict<br>with environmental protection                       | a) Liberal view    |
| 2. Economic growth catalyses<br>environmental growth                                    | b) Structural view |
| 3. Structural inequalities between countries<br>contribute to environmental degradation | c) Systemic view   |

A) 1-c, 2-a, 3-b

B) 1-a, 2-b, 3-c

C) 1-b, 2-c, 3-a

D) 1-a, 2-c, 3-b

71. The 2030 agenda for sustainable development provides a global blueprint and stimulates action in the following areas:

- A) People, planning, prosperity, peace and partnership
- B) People, peace, prosperity, planet and partnership
- C) Peace, people, prosperity, plants and partnership
- D) Peace, people, planning, planet and partnership

72. The Venture Capital Assistance scheme aims at providing assistance to agripreneurs in the form of:

- |                            |                                    |
|----------------------------|------------------------------------|
| A) Low rate interest loans | B) Subsidised tools and equipment. |
| C) Waiver of tax           | D) Interest free loans             |

73. Ecological foot print is a method of gauging the

- |                              |  |
|------------------------------|--|
| A) Biodiversity of a region  | B) Human dependence on natural resources |
| C) Volume of human migration | D) Amount of carbon dioxide emitted      |

74. A common problem of development models, is its heavy dependency on

- A) Energy
- B) Human resources
- C) Financial capital
- D) Political power

75. What is the major cause of coral bleaching?

- A) Pollution in oceans
- B) Warm water
- C) Chemicals in ocean
- D) Oil spills

76. In the freshwaters of river Ganga, a variety of dolphins named \_\_\_\_\_ are found.

- A) Dolma
- B) Susu
- C) Saka
- D) Doha

77. The non-native species successfully establishes in the introduced environment and causes the damage to the environment due to

- 1) Better adaptation to the new environment
- 2) All the niches are utilized by the native species
- 3) Absence of natural enemies in the introduced region
- 4) Low biotic potential

Choose the correct option.

- A) 1 and 2
- B) 1 and 3
- C) 1 and 4
- D) 2 and 4

78. Liana density in tropical latitude is

- 1) A negative relationship with mean annual precipitation
- 2) A negative relationship with the length of the dry season period
- 3) A positive relationship with mean annual precipitation
- 4) A positive relationship with the length of the dry season period

Choose the correct option.

- |            |            |
|------------|------------|
| A) 1 and 2 | B) 1 and 3 |
| C) 1 and 4 | D) 2 and 3 |

79. Considering the following pairs

Name of the species	Metal
1) <i>Thlaspi caerulescens</i>	— Zn
2) <i>Psychotria douarrei</i>	— Ni
3) <i>Eichhornia crassipes</i>	— Cr
4) <i>Astragalus preussi</i>	— Fe

Which of the above pairs are correctly matched based on hyperaccumulation potential of specific metal

- |                 |                 |
|-----------------|-----------------|
| A) 1 and 2 only | B) 1 and 3 only |
| C) 2 and 3 only | D) 2 and 4 only |

91(A)

(24)



80. Match the following pairs correctly

Scientist

Contributions

a) Charles Elton

i) Competition exclusion principle

b) Darwin

ii) n-dimensional hypervolume

c) Hutchinson

iii) Galapagos finches

d) Gause

iv) Biodiversity resistance hypothesis

A) a-i, b-ii, c-iii, d-iv

B) a-ii, b-iii, c-i, d-iv

C) a-iv, b-iii, c-ii, d-i

D) a-iv, b-ii, c-iii, d-i

81. The loss of genetic diversity in an isolated small population could be attributed to

1) Mutation

2) Inbreeding

3) Speciation

4) Genetic drift

A) 1 and 2

B) 2 and 3

C) 2 and 4

D) 1 and 4

82. The gradual change in the direction of the earth's axis is called

A) Wandering Polar

B) Continental drift

C) Precession

D) Euler's effect

83. Homeostasis means

- A) A tendency of an ecosystem to resist change and to remain in a state of equilibrium
- B) A property of an ecosystem to withstand all kinds of environmental changes
- C) A characteristic of an ecosystem to convert into changes of pollution
- D) An ecosystem never respond to environmental change

84. Match the following:

- |                  |   |
|------------------|---|
| 1. Autecology    | a) Study of life form and environment of past ages            |
| 2. Synecology    | b) Study of individual species in relation to its environment |
| 3. Palae ecology | c) Study of plant communities in relation to environment      |
| 4. Genecology    | d) Study of ecology in relation to genetics                   |

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

85. Western ghats of India is known as

- |                  |                  |
|------------------|------------------|
| A) Endemic Queen | B) Endemic Crown |
| C) Endemic Ghat  | D) Endemic Home  |

86. Find out the correct order of sequence of vertical structure of the atmosphere from lower to higher altitudes

- A) Troposphere, Stratosphere, Mesosphere and Thermosphere
- B) Stratosphere, Troposphere, Mesosphere and Thermosphere
- C) Stratosphere, Troposphere, Thermosphere and Mesosphere
- D) Troposphere, Stratosphere, Thermosphere and Mesosphere

87. Match List I correctly with List II and select your answer using codes given below :

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

- a) The Subsoil
- b) The Solid rock
- c) The topsoil
- d) The weathered parent rock

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

88. Which quantum phenomenon was Albert Einstein referring to in his expression "spooky action at a distance"?

- |                       |                          |
|-----------------------|--------------------------|
| A) Quantum tunnelling | B) Uncertainty Principle |
| C) Superposition      | D) Quantum entanglement  |

89. In what cases can the three equations of motion be applied?

- i. In one dimensional motion
- ii. In circular motion
- iii. Simple harmonic motion
- iv. When acceleration is constant

- |            |                    |
|------------|--------------------|
| A) only i  | B) i and ii        |
| C) only iv | D) ii, iii, and iv |

90. Among the following theories which one is discuss about metal-free electrons?

- |                    |                         |
|--------------------|-------------------------|
| A) Werner's theory | B) Sidwick's theory     |
| C) VB theory       | D) Drude-Lorentz theory |

91(A)

(27)

[P.T.O.]



91. What is a white dwarf?

- A) It is a stellar core which remains after the star has used up all of its nuclear fuel.
- B) It is the explosion of a star.
- C) They are highly compact, magnetized, rotating stars.
- D) It is an extremely luminous active galactic nucleus, powered by a supermassive black hole.

92. On which of the following planets does the sun rise in the West?

- A) Mercury
- B) Venus
- C) Jupiter
- D) Mars

93. What does eutrophication refer to?

- A) Natural aging of a lake by nutrient enrichment of its water
- B) Natural aging of lake by nutrient deficit of its water
- C) Natural expansion of a lake with time
- D) Natural increasing of the depth of a lake with time

94. By what factor is the electromagnetic force stronger than the gravitational force?

- A)  $10^2$
- B)  $10^{16}$
- C)  $10^{28}$
- D)  $10^{36}$

91(A)

(28)

95. Which one of the following is not true about the structure of DNA?

- A) DNA is a double stranded helix with sugar-phosphate as backbone.
- B) DNA is always a right handed helix.
- C) DNA strands run in opposite direction.
- D) DNA has both major and minor grooves.

96. German silver is an alloy of

- A) Copper and tin
- B) Zinc, silver and copper
- C) Copper and nickel
- D) Copper, zinc and nickel

97. The growth in response to touch stimulus is called as

- A) Gravitropism
- B) Phototropism
- C) Thigmotropism
- D) Chemotropism

98. What field of Science is the Bragg's law related to?

- A) Thermodynamics
- B) Solid State Physics
- C) Biotechnology
- D) Astrophysics

99. What is India's share of the global species diversity?

A) 2%

B) 4%

C) 6%

D) 8%

100. Plants that grow in water are called as Hydrophytes. What name is given to plants that grow in desert conditions?

A) Halophytes

B) Xerophytes

C) Mesophytes

D) Phaeophytes