SOLVED
GENERAL AWARENESS PAPER
Civil Services Prelims Examination, 2004

1. With reference to Indian Public Finance, consider the following statements:
   1. Disbursements from Public Accounts of India are subject to the Vote of Parliament.
   2. The Indian Constitution provides for the establishment of a Consolidated Fund, a Public Account and a Contingency Fund for each State.
   3. Appropriations and disbursements under the Railway Budget are subject to the same form of parliamentary control as other appropriations and disbursements.

   Which of the statements given above are correct?
   (a) 1 and 2   (b) 2 and 3
   (c) 1 and 3   (d) 1, 2 and 3

2. Consider the following statements:
   1. Narasimha Saluva ended the Sangama dynasty and seized the throne for himself and started the Saluva dynasty.
   2. Vira Narasimha deposed the last Saluva ruler and seized the throne for himself.
   3. Vira Narasimha was succeeded by his younger brother, Krishnadeva Raya.
   4. Krishnadeva Raya was succeeded by his half-brother, Achyuta Raya.

   Which of the statements given above are correct?
   (a) 1, 2 and 3   (b) 2, 3 and 4
   (c) 1 and 4   (d) 1, 2, 3 and 4

3. Consider the following statements:
   Some of the main features of the Government of India Act, 1935 were the
   1. abolition of diarchy in the Governors' provinces
   2. power of the Governors to veto legislative action and to legislate on their own
   3. abolition of the principle of communal representation

   Which of the statements given above is/are correct?
   (a) 1 only   (b) 1 and 2
   (c) 2 and 3   (d) 1, 2 and 3

4. Consider the following statements:
   1. The First Session of the Indian National Congress was held in Calcutta.
   2. The Second Session of the Indian National Congress was held under the presidentship of Dadabhai Naoroji.
   3. Both Indian National Congress and Muslim League held their sessions at Lucknow in 1916 and concluded the Lucknow Pact.

   Which of the statements given above is/are correct?
   (a) 1 and 2   (b) 2 only
   (c) 2 and 3   (d) 3 only

5. Which one of the following statements is correct?
   (a) The Constituent Assembly of India was elected by the Provincial Assemblies in the year 1946.
   (b) Jawaharlal Nehru, M.A. Jinnah and Sardar Vallabhbhai Patel were members of the Constituent Assembly of India
   (c) The First Session of the Constituent Assembly of India was held in January, 1947
   (d) The Constitution of India was adopted on 26th January, 1950

6. The Archaeological Survey of India is an attached office of the Department/Ministry of:
   (a) Culture
   (b) Tourism
   (c) Science and Technology
   (d) Human Resource Development

7. Consider the following statements:
   1. The highest criminal court of the district is the Court of District and Sessions Judge.
   2. The District Judges are appointed by the Governor in consultation with the High Courts.
   3. A person to be eligible for appointment as a District Judge should be an advocate or a pleader of seven years' standing or more, or an officer in judicial service of the Union or the State.
   4. When the Sessions Judge awards death sentence, it must be confirmed by the High Court before it is carried out.

   Which of the statements given above are correct?
   (a) 1 and 2   (b) 2, 3 and 4
   (c) 3 and 4   (d) 1, 2, 3 and 4

8. Consider the following statements:
   1. The Speaker of Lok Sabha has the power to adjourn the House *sine die* but, on prorogation, it is only the President who can summon the House.
   2. Unless sooner dissolved or there is an extension of the term, there is an automatic dissolution of the Lok Sabha by efflux of time, at the end of the period of five years, even if no formal order of dissolution is issued by the President.

3. The Speaker of Lok Sabha continues in office even after the dissolution of the House and until 'immediately before the first meeting of the House'.

Which of the statements given above are correct?

(*a*) 1 and 2 (*b*) 2 and 3
(*c*) 1 and 3 (*d*) 1, 2 and 3

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

(*a*) Under the Targeted Public Distribution System, the families Below Poverty Line are provided 50 kg of food grains per month per family at subsidised price
(*b*) Under Annapurna Scheme, indigent senior citizens of 65 years of age or above eligible for National Old Age Pension but not getting pension can get 10 kg of food grains per person per month free of cost
(*c*) Ministry of Social Justice and Empowerment has scheme in which indigent people living in welfare institutions like orphanages are given 15 kg of food grains per person per month at BPL rates
(*d*) Ministry of Human Resource Development gives financial support to Mid-day Meal Scheme for the benefit of class I to V students in Government or Government-aided Schools

10. Consider the following statements:

1. Non-function of lachrymal gland is an important symptom of deficiency of Vitamin A.
2. Deficiency of Vitamin B_1 can lead to indigestion and heart enlargement.
3. Vitamin C deficiency can lead to pain in the muscles.
4. Deficiency of Vitamin D causes increased loss of Ca^{++} in urine.

Which of the statements given above are correct?

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

11. The hormone insulin is a:

(*a*) Glycolipid (*b*) Fatty acid
(*c*) Peptide (*d*) Sterol

12. Consider the following statements:

1. Toothless mammals such as pangolins are not found in India.
2. Gibbon is the only ape found in India.

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

13. In which organ of the human body are the lymphocyte cells formed?

(*a*) Liver (*b*) Long bone
(*c*) Pancreas (*d*) Spleen

14. In which one of the following Union Territories, do the people of the Onge tribe live?

(*a*) Andaman and Nicobar Islands
(*b*) Dadra and Nagar Haveli
(*c*) Daman and Diu
(*d*) Lakshadweep

15. Consider the following crops:

1. Cotton
2. Groundnut
3. Maize
4. Mustard

Which of the above are Kharif crops?

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

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

(*a*) In Lok Sabha, a no-confidence motion has to set out the grounds on which it is based
(*b*) In the case of a no-confidence motion in Lok Sabha, no conditions of admissibility have been laid down in the Rules
(*c*) A motion of no-confidence, once admitted, has to be taken up within ten days of the leave being granted
(*d*) Rajya Sabha is not empowered to entertain a motion of no-confidence

17. Which one of the following statements correctly describes the Fourth Schedule of the Constitution of India?

(*a*) It contains the scheme of the distribution of powers between the Union and the States
(*b*) It contains the languages listed in the Constitution
(*c*) It contains the provisions regarding the administration of tribal areas
(*d*) It allocates seats in the Council of States

18. Who was the last ruler of the Tughluq dynasty of the Delhi Sultanate?

(*a*) Firuz Shah Tughluq
(*b*) Ghiyas-ud-din Tughluq Shah II
(*c*) Nasir-ud-din Mahmud
(*d*) Nasrat Shah

19. The great Asian river Mekong does *not* run through:

(*a*) China (*b*) Malaysia
(*c*) Cambodia (*d*) Laos

20. Which one of the following was the largest IT software and services exporter in India during the year 2002-03?

(*a*) Birlasoft
(*b*) Infosys Technologies
(*c*) Tata Consultancy Services
(*d*) Wipro Technologies

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

(*a*) The largest Buddhist monastery in India is in Assam
(*b*) The language Konyak is spoken in Nagaland
(*c*) The largest river island in the world is in Assam
(*d*) Sikkim is the least-populated State of the Indian Union

22. Consider the following statements:

1. The Oil Pool Account of Government of India was dismantled with effect from 1.4.2002.
2. Subsidies on PDS kerosene and domestic LPG are borne by Consolidated Fund of India.
3. An expert committee headed by Dr R.A. Mashelkar to formulate a national auto fuel policy recommended that Bharat Stage-II Emission Norms should be applied throughout the country by April 1, 2004.

Which of the statements given above are correct?

(*a*) 1 and 2   (*b*) 2 and 3

(*c*) 1 and 3   (*d*) 1, 2 and 3

23. In the last one decade, which one among the following sectors has attracted the highest Foreign Direct Investment inflows into India?

(*a*) Chemicals other than fertilizers

(*b*) Services sector

(*c*) Food processing

(*d*) Telecommunication

24. Consider the following statements:

1. The Chinese pilgrim Fa-Hien attended the fourth Great Buddhist Council held by Kanishka.

2. The Chinese pilgrim Hiuen-Tsang met Harsha and found him to be antagonistic to Buddhism.

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

25. How did the dynasty of Nizam Shahis of Ahmadnagar come to an end?

(*a*) Ahmadnagar was annexed into Mughal empire and Husain Shah was consigned to life imprisonment

(*b*) Mughal troops destroyed Daulatabad fort and killed Nizam-ul Mulk of Ahmadnagar

(*c*) Fateh Khan usurped the throne from Nizam-ul Mulk

(*d*) Malik Ambar was defeated in a battle with Mughals in 1631 and the entire royal family was killed by the Mughal troops

26. With reference to ancient Jainism, which one of the following statements is correct?

(*a*) Jainism was spread in South India under the leadership of Sthalabahu

(*b*) The Jainas who remained under the leadership of Bhadrabahu were called Shvetambaras after the Council held at Pataliputra

(*c*) Jainism enjoyed the patronage of the Kalinga king Kharavela in the first century BC

(*d*) In the initial stage of Jainism, the Jainas worshipped images unlike Buddhists

27. Which one of the following four Vedas contains an account of magical charms and spells?

(*a*) Rig-veda   (*b*) Yajur-veda

(*c*) Atharva-veda   (*d*) Sama-veda

28. The Montagu-Chelmsford Report formed the basis of:

(*a*) the Indian Councils Act, 1909

(*b*) the Government of India Act, 1919

(*c*) the Government of India Act, 1935

(*d*) the Indian Independence Act, 1947

29. During the Indian Freedom Struggle, who among the following proposed that Swaraj should be defined as complete independence free from all foreign control?

(*a*) Mazharul Haque   (*b*) Maulana Hasrat Mohani

(*c*) Hakim Ajmal Khan   (*d*) Abul Kalam Azad

30. Which one of the following sequences indicates the correct chronological order?

(*a*) Shankaracharya — Ramanuja — Chaitanya

(*b*) Ramanuja — Shankaracharya — Chaitanya

(*c*) Ramanuja — Chaitanya — Shankaracharya

(*d*) Shankaracharya — Chaitanya — Ramanuja

31. Consider the following Princely States of the British rule in India:

1. Jhansi

2. Sambalpur

3. Satara

The correct chronological order in which they were annexed by the British is:

(*a*) 1-2-3   (*b*) 1-3-2

(*c*) 3-2-1   (*d*) 3-1-2

32. The name of the famous person of India who returned the Knighthood conferred on him by the British Government as a token of protest against the atrocities in Punjab in 1919 was:

(*a*) Tej Bahadur Sapru   (*b*) Ashutosh Mukherjee

(*c*) Rabindra Nath Tagore   (*d*) Syed Ahmad Khan

33. The resolution for removing the Vice-President of India can be moved in the:

(*a*) Lok Sabha alone

(*b*) either House of Parliament

(*c*) Joint Sitting of Parliament

(*d*) Rajya Sabha alone

34. With reference to the Constitution of India, which one of the following pairs is *not* correctly matched?

(*a*) Forests : Concurrent List

(*b*) Stock Exchanges : Concurrent List

(*c*) Post Office Savings Bank : Union List

(*d*) Public Health : State List

35. Consider the following tasks:

1. Superintendence, direction and conduct of free and fair elections.

2. Preparation of electoral rolls for all elections to the Parliament, State Legislatures and the Office of the President and the Vice-President.

3. Giving recognition to political parties and allotting election symbols to political parties and individuals contesting the election.

4. Proclamation of final verdict in the case of election disputes.

Which of the above are the functions of the Election Commission of I1ndia?

(*a*) 1, 2 and 3

(*b*) 2, 3 and 4

(*c*) 1 and 3

(*d*) 1, 2 and 4

36. Which of the following is *not* a recommendation of the task force on direct taxes under the chairmanship of Dr Vijay L. Kelkar in the year 2002?

(*a*) Abolition of Wealth Tax

(*b*) Increase in the exemption limit of personal income to Rs 1.20 lakh for widows

(*c*) Elimination of standard deduction

(*d*) Exemption from tax on dividends and capital gains from the listed equity

37. Match List-I (*Books*) with List-II (*Authors*) and select the correct answer using the codes given below the Lists:

List-I (*Books*)	List-II (*Authors*)
A. *My Presidential Years*	1. S. Radhakrishnan
B. *The Hindu View of Life*	2. V.V. Giri
C. *Voice of Conscience*	3. N. Sanjiva Reddy
D. *Without Fear or Favour*	4. R. Venkataraman

Codes:

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

38. Consider the following statements:
1. Adam Osborne produced the first portable computer
2. Ian Wilmut created the first cloned sheep.
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

39. What was the reason for 5 lakh people of Hong Kong to make a demonstration around the middle of 2003?
(*a*) They were demanding tax relief
(*b*) They were against the Hong Kong Government's plan to impose an internal security law
(*c*) They were the members of Falun Gong group who were demanding religious freedom
(*d*) They were demanding more direct elections in Hong Kong

40. Consider the following statements:
1. National Thermal Power Corporation has diversified into hydropower sector.
2. Power Grid Corporation of India has diversified into telecom sector.
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

41. The Ramon Magsaysay Award winner Shanta Sinha is known as:
(*a*) a campaigner for urban sanitation
(*b*) an anti-child labour activist
(*c*) an organizer of rain-water harvesting schemes
(*d*) an activist for the welfare of poor rural women

42. Consider the following statements:
1. Damodar Valley Corporation is the first multipurpose river valley project of independent India.
2. Damodar Valley Corporation includes thermal and gas power stations.
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

43. Match List-I (*Persons*) with List-II (*Positions*) and select the correct answer using the codes given below the Lists:

List-I (*Persons*)	List-II (*Positions*)
A. B.P. Mishra	1. Executive Director, IMF
B. Suresh Kalamadi	2. Chairman, Steel Authority of India Ltd
C. Praful Patel	3. Presidnet, Indian Olympic Association
D. V.S. Jain	4. Vice-President South Asian Region, World Bank

Codes:

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

44. Who among the following is well known as an exponent of flute?
(*a*) Debu Choudhuri (*b*) Madhup Mudgal
(*c*) Ronu Mazumdar (*d*) Shafaat Ahmad

45. Consider the following statements:
Among the Indian States
1. Andhra Pradesh has the longest coastline.
2. Gujarat has the highest number of airports.
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

46. Tarun Bharat Sangh, an organization based in a village near Alwar (Rajasthan), has become famous because of:
(*a*) cultivation of genetically modified cotton
(*b*) rehabilitation of women victims of AIDS
(*c*) livelihood projects for destitute rural women
(*d*) rain-water harvesting

47. Consider the following statements:
1. The National Housing Bank, the apex institution of housing finance in India, was set up as a wholly-owned subsidiary of the Reserve Bank of India.
2. The Small Industries Development Bank of India was established as a wholly-owned subsidiary of the Industrial Development Bank of India.
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

48. Param Padma, which was in the news recently, is:
(*a*) a new Civilian Award instituted by the Government of India
(*b*) the name of a supercomputer developed by India
(*c*) the name given to a proposed network of canals linking northern and southern rivers of India
(*d*) a software programme to facilitate e-governance in Madhya Pradesh

49. Consider the following statements:
1. Hema Malini is the Chairperson of the Children's Film Society, India.
2. Yash Chopra is the Chairman of the Central Board of Film Certification of India.

3. Dilip Kumar, Raj Kapoor and Dev Anand have all been recipients of Dada Saheb Phalke Award.

Which of the statements given above is/are correct?

(a) 1 and 3   (b) 2 and 3

(c) 2 only   (d) 3 only

50. Famous Golf player Vijay Singh is from which one of the following countries?

(a) Fiji   (b) Mauritius

(c) Malaysia   (d) Kenya

51. Latvia does *not* share its borders with which one of the following countries?

(a) Russia   (b) Estonia

(c) Lithuania   (d) Poland

52. Consider the following statements:

1. The highest deciding body for planning in India is the Planning Commission of India.
2. The Secretary of the Planning Commission of India is also the Secretary of National Development Council.
3. The Constitution includes economic and social planning in the Concurrent List in the Seventh Schedule of the Constitution of India.

Which of the statements given above is/are correct?

(a) 1 and 2   (b) 2 and 3

(c) 2 only   (d) 3 only

53. Match List-I (*Minerals*) with List-II (*Location*) and select the correct answer using the codes given below the Lists:

List-I (*Minerals*)	List-II (*Location*)
A. Coal	1. Giridih
B. Copper	2. Jayamkondam
C. Manganese	3. Alwar
D. Lignite	4. Dharwar

Codes:

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

54. Which among the following National Highway routes is the longest?

(a) Agra-Mumbai   (b) Chennai-Thane

(c) Kolkata-Hajira   (d) Pune-Machilipatnam

55. Which of the following institutes have been recognized as the Institutes of National Importance (by an Act of Parliament)?

1. Dakshina Bharat Hindi Prachar Sabha, Chennai
2. National Institute of Pharmaceutical Education and Research, Mohali.
3. Sree ChitraTirunal Institute for Medical Services and Technology, Thiruvananthapuram.
4. Lakshmibai National Institute of Physical Education, Gwalior.

Select the correct answer using the codes given below:

Codes:

(a) 1, 2 and 3   (b) 3 and 4

(c) 1, 2 and 4   (d) 1, 2, 3 and 4

56. Consider the following statements:

1. Baking soda is used in fire extinguishers.
2. Quicklime is used in the manufacture of glass.
3. Gypsum is used in the manufacture of Plaster of Paris.

Which of the statements given above is/are correct?

(a) 1 and 2   (b) 2 and 3

(c) 1 only   (d) 1, 2 and 3

57. With reference to Indian Parliament, which one of the following is *not* correct?

(a) The Appropriation Bill must be passed by both the Houses of Parliament before it can be enacted into law
(b) No money shall be withdrawn from the Consolidated Fund of India except under the appropriation made by the Appropriation Act
(c) Finance Bill is required for proposing new taxes but no another Bill/Act is required for making changes in the rates of taxes which are already under operation
(d) No Money Bill can be introduced except on the recommendation of the President

58. Match List-I (*Sea*) with List-II (*Country*) and select the correct answer using the codes given below the Lists:

List-I (*Sea*)	List-II (*Country*)
A. Black Sea	1. Bulgaria
B. Red Sea	2. China
C. Yellow Sea	3. Eritrea
D. Caspian Sea	4. Kazakhstan

Codes:

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

59. Which one of the following Articles of the Constitution of India says that the executive power of every State shall be so exercised as not to impede or prejudice the exercise of the executive power of the Union?

(a) Article 257
(b) Article 258
(c) Article 355
(d) Article 356

60. Which of the following pairs are correctly matched?

List-I (*Period*)	List-II (*Wars*)
1. AD 1767-69	: First Anglo-Maratha War
2. AD 1790-92	: Third Mysore War
3. AD 1824-26	: First Anglo-Burmese War
4. AD 1845-46	: Second Sikh War

Select the correct answer using the codes given below:

Codes:

(a) 2 and 4   (b) 3 and 4

(c) 1 and 2   (d) 2 and 3

61. Consider the following:

1. Mahadeo Hills
2. Sahyadri Parvat
3. Satpura Range

What is the correct sequence of the above from the north to the south?

(*a*) 1-2-3   (*b*) 2-1-3   (*c*) 1-3-2   (*d*) 2-3-1

62. Lake Sambhar is nearest to which one of the following cities of Rajasthan?

(*a*) Bharatpur
(*b*) Jaipur
(*c*) Jodhpur
(*d*) Udaipur

63. Match List-I (*Articles of the Constitution of India*) with List-II (*Provision*) and select the correct answer using the codes given below the Lists:

List-I (*Articles of the Constitution of India*)	List-II (*Provision*)
A. Article 14	1. The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them
B. Article 15	2. The State shall not deny to any person equality before the law or the equal protection of laws within the territory of India.
C. Article 16	3. 'Untouchability' is abolished and its practice in any form is forbidden
D. Article 17	4. There shall be equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State

Codes:

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

64. Which one of the following statements is correct?

(*a*) Cirrus clouds are composed of ice crystals
(*b*) Cirrus clouds exhibit a flat base and have the appearance of rising domes
(*c*) Cumulus clouds are white and thin, and form delicate patches and give a fibrous and feathery appearance
(*d*) Cumulus clouds are classified as high clouds

65. Match List-I (*National Park/Sanctuary*) with List-II (*State*) and select the correct answer using the codes given below the Lists:

List-I (*National Park Sanctuary*)	List-II (*State*)
A. Kanger Ghati National Park	1. Chhattisgarh
B. Nagerhole National Park	2. Haryana
C. Kugti Wildlife Sanctuary	3. Himachal Pradesh
D. Sultanpur Bird Sanctuary	4. Karnataka

Codes:

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

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

(*a*) Gulfs with narrow fronts and wider rears experience high tides
(*b*) Tidal currents take place when a gulf is connected with the open sea by a narrow channel
(*c*) Tidal bore occurs when a tide enters the narrow and shallow estuary of a river
(*d*) The tidal nature of the mouth of the river Hooghly is of crucial importance to Kolkata as port

67. Consider the following statements:

1. The Islamic Calendar is twelve days shorter than the Gregorian Calendar.
2. The Islamic Calendar began in AD 632.
3. The Gregorian Calendar is a solar calendar.

Which of the statements given above is/are correct?

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

Directions:

The following **8 (eight)** items consist of two statements; one labelled as the 'Assertion (A)' and the other as 'Reason (R)'. You are to examine these two statements carefully and select the answers to these items using the codes given below:

Codes:

(*a*) Both A and R are individually true and R is the correct explanation of A
(*b*) Both A and R are individually true but R is **not** the correct explanation of A
(*c*) A is true but R is false
(*d*) A is false but R is true

68. *Assertion* (A):
    Bangalore receives much higher average annual rainfall than that of Mangalore.
    Reason (R):
    Bangalore has the benefit of receiving rainfall both from south-west and north-east monsoons.

69. *Assertion* (A):
    The Central Rural Sanitation Programme was launched in 1986 to improve the quality of life of rural people in India.

Reason (R):
Rural sanitation is a subject in the Concurrent List in the Constitution of India.

70. *Assertion* (A):
West-flowing rivers of Peninsular India have no deltas.
Reason (R):
These rivers do not carry any alluvial sediments.

71. *Assertion* (A):
The thickness of the atmosphere is maximum over the Equator.
Reason (R):
High insolation and strong convection currents occur over the Equator.

72. *Assertion* (A):
In our houses, the current in AC electricity line changes direction 60 times per second.
Reason (R):
The frequency of alternating voltage supplied is 60 hertz.

73. *Assertion* (A):
Fatty acids should be a part of the balanced human diet.
Reason (R):
The cells of the human body cannot synthesize any fatty acids.

74. *Assertion* (A):
India does not export natural rubber.
Reason (R):
About 97% of India's demand for natural rubber is met from domestic production.

75. *Assertion* (A):
For the first time, India had no trade deficit in the year 2002-03.
Reason (R):
For the first time, India's exports crossed worth $ 50 billion in the year 2002-03.

76. Consider the following statements:
 1. The loans disbursed to farmers under Kisan Credit Card Scheme are covered under *Rashtriya Krishi Beema Yojna* of Life Insurance Corporation of India.
 2. The Kisan Credit Card holders are provided personal accident insurance of Rs 50,000 for accidental death and Rs 25,000 for permanent disability.
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

77. Consider the following statements:
 1. Regarding the procurement of food grains, Government of India follows a procurement target rather than an open-ended procurement policy.
 2. Government of India announces minimum support prices only for cereals.
 3. For distribution under Targeted Public Distribution System (TPDS), wheat and rice are issued by the Government of India at uniform Central issue prices to the States/Union Territories.

Which of the statements given above is/are correct?
(*a*) 1 and 2   (*b*) 2 only   (*c*) 1 and 3   (*d*) 3 only

78. Consider the following statements:
India continues to be dependent on imports to meet the requirement of oilseeds in the country because:
 1. farmers prefer to grow food grains with highly remunerative support prices.
 2. most of the cultivation of oilseed crops continues to be dependent on rainfall.
 3. oils from the seeds of tree origin and rice bran have remained unexploited.
 4. it is far cheaper to import oilseeds than to cultivate the oilseed crops.
Which of the statements given above are correct?
(*a*) 1 and 2   (*b*) 1, 2 and 3
(*c*) 3 and 4   (*d*) 1, 2, 3 and 4

79. World's longest ruling head of government is from:
(*a*) Switzerland   (*b*) Cuba
(*c*) Zimbabwe   (*d*) New Zealand

80. Liberia was in the international news in the recent times for:
(*a*) harbouring terrorists associated with religious fundamentalism
(*b*) supplying raw uranium to North Korea
(*c*) its long-running civil war killing or displacing thousands of people
(*d*) cultivation of drug-yielding crops and smuggling of drugs

81. Consider the following statements:
 1. P.V. Narasimha Rao's government established diplomatic relations between India and Israel.
 2. Ariel Sharon is the second Prime Minister of Israel to have visited India.
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

82. The reason for Chechnya to be in the news recently is:
(*a*) discovery of huge reserves of oil
(*b*) separatist rebellious activities by the local people
(*c*) continuous conflict between the government troops and the narcotic mafia resulting in a great loss of human life
(*d*) intense cold wave killing hundreds of people

83. The Prime Minister of which one of the following countries was assassinated in the year 2003?
(*a*) Czech Republic   (*b*) Romania
(*c*) Serbia   (*d*) Slovenia

84. Consider the following companies:
 1. Voltas
 2. Titan Industries
 3. Rallis India
 4. Indian Hotels
Which of the above companies are in the Tata Group of Industries?
(*a*) 1 and 2   (*b*) 2, 3 and 4
(*c*) 1, 3 and 4   (*d*) 1, 2, 3 and 4

85. In which one of the following countries, did an ethnic violence between the communities of Hema and Lendu result in the death of hundreds of people?

(*a*) Democratic Republic of Congo

(*b*) Indonesia   (*c*) Nigeria   (*d*) Zambia

86. More than 40 Heads of States/Governments were invited by Vladimir Putin in May, 2003 to:

(*a*) discuss the issues related to the rehabilitation of Iraq

(*b*) celebrate the tricentenary of the city of St Petersburg

(*c*) convene a meeting of European and CIS countries to discuss the issue of missile shield for European and CIS countries

(*d*) develop the strategies for containing global terrorism

87. Consider the following geological phenomena:

1. Development of a fault
2. Movement along a fault
3. Impact produced by a volcanic eruption
4. Folding of rocks

Which of the above cause earthquakes?

(*a*) 1, 2 and 3   (*b*) 2 and 4

(*c*) 1, 3 and 4   (*d*) 1, 2, 3 and 4

88. Which Article of the Constitution of India says, 'No child below the age of fourteen years shall be employed to work in any factory or mine or engaged in any other hazardous employment'?

(*a*) Article 24   (*b*) Article 45

(*c*) Article 330   (*d*) Article 368

89. According to the National Human Rights Commission Act, 1993, who amongst the following can be its Chairman?

(*a*) Any serving Judge of the Supreme Court

(*b*) Any serving Judge of the High Court

(*c*) Only a retired Chief Justice of India

(*d*) Only a retired Chief Justice of High Court

90. Which one of the following pairs is *not* correctly matched?

(*a*) Pitt's India Act   : Warren Hastings

(*b*) Doctrine of Lapse   : Dalhousie

(*c*) Vernacular Press Act   : Curzon

(*d*) Ilbert Bill   : Ripon

91. Match List-I (*Institute*) with List-II (*Located At*) and select the correct answer using the codes given below the Lists:

List-I (*Institute*)	List-II (*Located At*)
A. Indian Institute of Geomagnetism	1. Coimbatore
B. International Advanced Research Centre for Powder Metallurgy and New Materials	2. Mumbai
C. Salim Ali Centre for Ornithology and Natural History	3. Jabalpur
D. Tropical Forestry Research Institute	4. Hyderabad

Codes:

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

92. Consider the following statements:

1. Indira Gandhi Centre for Atomic Research uses fast reactor technology.
2. Atomic Minerals Directorate for Research and Exploration is engaged in heavy water production.
3. Indian Rare Earths Limited is engaged in the manufacture of Zircon for India's Nuclear Programme beside other rare earth products.

Which of the statements given above are correct?

(*a*) 1, 2 and 3   (*b*) 1 and 2

(*c*) 1 and 3   (*d*) 2 and 3

93. Which of the following pairs is *not* correctly matched?

(*a*) Reinhold Messner   : Computer Technology

(*b*) Harlow Shapley   : Astronomy

(*c*) Gregor Mendel   : Hereditary Theory

(*d*) Godfrey Hounsfield   : CT Scan

94. Consider the following international languages:

1. Arabic
2. French
3. Spanish

The correct sequence of the languages given above in the decreasing order of the number of their speakers is:

(*a*) 3-1-2   (*b*) 1-3-2

(*c*) 3-2-1   (*d*) 1-2-3

95. Who among the following was *never* the Lok Sabha Speaker?

(*a*) K.V.K. Sundaram   (*b*) G.S. Dhillon

(*c*) Baliram Bhagat   (*d*) Hukum Singh

96. Two cars X and Y start from two places A and B respectively which are 700 km apart at 9 a.m. Both the cars run at an average speed of 60 km/hr. Car X stops at 10 a.m. and again starts at 11 a.m. while the other car Y continues to run without stopping. When do the two cars cross each other?

(*a*) 2 : 40 p.m.   (*b*) 3 : 20 p.m.

(*c*) 4 : 10 p.m.   (*d*) 4 : 20 p.m.

97. In a question of a test paper, there are five items each under List-A and List-B. The examinees are required to match each item under List-A with its corresponding correct item under List-B. Further, it is given that:

(*i*) no examinee has given the correct answer

(*ii*) answers of no two examinees are identical

What is the maximum number of examinees who took this test?

(*a*) 24   (*b*) 26   (*c*) 119   (*d*) 129

The details given below relate to the FOUR items that follow:

Amit wishes to buy a magazine. Four magazines—one each on politics, sports, science and films are available to choose from. They are edited by Feroz, Gurbaksh, Swami and Ila (*not necessarily in that order*) and published by Aryan,

Bharat, Charan and Dev Publishers (*not necessarily in that order*). Further, it is given that

(*i*) Dev Publishers have published the magazine edited by Feroz

(*ii*) the magazine on politics is published by Aryan Publishers

(*iii*) the magazine on films is edited by Swami and is ***not*** published by Charan Publishers

(*iv*) the magazine on science is edited by Ila

For the following four items, select the correct answer:

98. The magazine on science is published by:
(*a*) Aryan Publishers   (*b*) Bharat Publishers
(*c*) Charan Publishers   (*d*) Dev Publishers

99. The magazine on sports is:
(*a*) edited by Feroz
(*b*) edited by Gurbaksh
(*c*) published by Bharat Publishers
(*d*) published by Charan Publishers

100. The magazine on films is:
(*a*) published by Dev Publishers
(*b*) published by Bharat Publishers
(*c*) edited by Gurbaksh
(*d*) published by Charan Publishers

101. The magazine on politics is:
(*a*) edited by Ila
(*b*) edited by Gurbaksh
(*c*) published by Dev Publishers
(*d*) published by Charan Publishers

102. Match List-I (*Distinguished Ladies*) with List-II (*Area of Work*) and select the correct answer using the codes given below the Lists:

List-I (*Distinguished Ladies*)	List-II (*Area of Work*)
A. Jhumpa Lahiri	1. Science and environment
B. Sunita Narain	2. Novel-writing
C. Naina Lal Kidwai	3. Film industry
D. Ravina Raj Kohli	4. Banking
	5. Television media

Codes:

	A	B	C	D
(*a*)	4	5	3	1
(*b*)	2	1	4	5
(*c*)	4	1	3	5
(*d*)	2	5	4	1

103. Which one of the following does ***not*** border Panama?
(*a*) Costa Rica   (*b*) Pacific Ocean
(*c*) Colombia   (*d*) Venezuela

104. A and B start from the same point and in the same direction at 7 a.m. to walk around a rectangular field 400 m × 300 m. A and B walk at the rate of 3 km/hr and 2.5 km/hr respectively. How many times shall they cross each other if they continue to walk till 12 : 30 p.m.?
(*a*) Not even once   (*b*) Once
(*c*) Twice   (*d*) Thrice

105. Match List-I (*Beaches in India*) with List-II (*States*) and select the correct answer using the codes given below the Lists:

List-I (*Beaches in India*)	List-II (*States*)
A. Gopnath Beach	1. Andhra Pradesh
B. Lawsons Bay Beach	2. Kerala
C. Devbagh Beach	3. Gujarat
D. Sinquerim Beach	4. Goa
	5. Karnataka

Codes:

	A	B	C	D
(*a*)	5	4	2	1
(*b*)	3	1	5	4
(*c*)	5	1	2	4
(*d*)	3	4	5	1

106. A car is running on a road at a uniform speed of 60 km/hr. The net resultant force on the car is:
(*a*) driving force in the direction of car's motion
(*b*) resistance force opposite to the direction of car's motion
(*c*) an inclined force
(*d*) equal to zero

107. Match List-I (*Biosphere Reserves*) with List-II (*States*) and select the correct answer using the codes given below the Lists:

List-I (*Biosphere Reserves*)	List-II (*States*)
A. Similipal	1. Sikkim
B. Dehong Deband	2. Uttaranchal
C. Nokrek	3. Arunachal Pradesh
D. Kanchenjunga	4. Orissa
	5. Meghalaya

Codes:

	A	B	C	D
(*a*)	1	3	5	4
(*b*)	4	5	2	1
(*c*)	1	5	2	4
(*d*)	4	3	5	1

108. The research work of Paul Lauterbur and Peter Mansfield, the Nobel Prize winners for Medicine in 2003, relates to:
(*a*) the control of AIDS
(*b*) magnetic resonance imaging
(*c*) respiratory diseases
(*d*) genetic engineering

109. In 2003, Alison Richard took over as the first-ever woman Vice-Chancellor of:
(*a*) Oxford University   (*b*) Cambridge University
(*c*) Harvard University   (*d*) Purdue University

110. Nine different letters are to be dropped in three different letter boxes. In how many different ways can this be done?
(*a*) 27   (*b*) 3^9 (*c*) 9^3 (*d*) $3^9 - 3$

111. George W. Bush, the President of America, comes from which of the following American States?
(*a*) California   (*b*) Texas
(*c*) Virginia   (*d*) Indiana

112. Which of the following pairs is correctly matched?

Department	Ministry of the Government of India
1. Department of Women and Child Development	: Ministry of Health and Family Welfare
2. Department of Official Language	: Ministry of Human Resource Development
3. Department of Drinking Water Supply	: Ministry of Water Resources

Select the correct answer using the codes given below:

Codes:
(*a*) 1   (*b*) 2   (*c*) 3   (*d*) None

113. Match List-I (*Agency*) with List-II (*Headquarters*) and select the correct answer using the codes given below the Lists:

List-I (Agency)	List-II (Headquarters)
A. United Nations Development Programme (UNDP)	1. Nairobi
B. United Nations Environment Programme (UNEP)	2. Vienna
C. United Nations Industrial Development Organization (UNIDO)	3. Berne
D. Universal Postal Union (UPU)	4. New York

Codes:

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

114. Which of the following authors won the Booker Prize twice?
(*a*) Margaret Atwood   (*b*) J.M. Coetzee
(*c*) Graham Swift   (*d*) Ian McEwan

115. In the well-known Lawn Tennis doubles team, Max Mirnyi—the partner of Mahesh Bhupati, comes from which of the following countries?
(*a*) Italy   (*b*) Sweden   (*c*) Belarus   (*d*) Croatia

116. Which of the following cricketers holds the record for the highest score in a Cricket Test Match innings by an Indian?
(*a*) Sunil Gavaskar   (*b*) Vinoo Mankad
(*c*) Sachin Tendulkar   (*d*) Virendar Sehwag

117. INS *Trishul* acquired by the Indian Navy in 2003 has been built by:
(*a*) Israel   (*b*) USA   (*c*) Russia   (*d*) France

118. INSAT-3E, India's communication satellite, was launched in 2003 from:
(*a*) French Guiana   (*b*) Seychelles
(*c*) Mauritius   (*d*) Mauritania

119. Match List-I (*Person*) with List-II (*Position*) and select the correct answer using the codes given below the Lists:

List-I (Person)	List-II (Position)
A. Anil Kakodar	1. Chief of the Integrated Defence Staff
B. Raman Puri	2. Chairman, 17th Law Commission
C. M. Jagannatha Rao	3. Chairman, ISRO
D. G. Madhavan Nair	4. Chairman, Atomic Energy Commission

Codes:

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

120. Consider the following statements about Sikh *Gurus:*
1. Banda Bahadur was appointed as the military leader of the Sikhs by Guru Tegh Bahadur.
2. Guru Arjan Dev became the Sikh *Guru* after Guru Ram Das.
3. Guru Arjan Dev gave to Sikhs their own script— *Gurumukhi.*

Which one of the statements given above is/are correct?
(*a*) 1 only   (*b*) 2 and 3   (*c*) 1 and 3   (*d*) 1 and 2

121. Consider the following Viceroys of India during the British rule:
1. Lord Curzon
2. Lord Chelmsford
3. Lord Hardinge
4. Lord Irwin

Which one of the following is the correct chronological order of their tenure?
(*a*) 1-3-2-4   (*b*) 2-4-1-3
(*c*) 1-4-2-3   (*d*) 2-3-1-4

122. Consider the following events during India's freedom struggle:
1. Chauri-Chaura Outrage
2. Minto-Morley Reforms
3. Dandi March
4. Montagu-Chelmsford Reforms

Which one of the following is the correct chronological order of the events given above?
(*a*) 1-3-2-4   (*b*) 2-4-1-3
(*c*) 1-4-2-3   (*d*) 2-3-1-4

123. Consider the following events:
1. Fourth general elections in India
2. Formation of Haryana State
3. Mysore named as Karnataka State
4. Meghalaya and Tripura become full States

Which one of the following is the correct chronological order of the above?
(*a*) 2-1-4-3   (*b*) 4-3-2-1
(*c*) 2-3-4-1   (*d*) 4-1-2-3

124. Match List-I (*Fuel Gases*) with List-II (*Major Constituents*) and select the correct answer using the codes given below the Lists:

List-I	List-II
(*Fuel Gases*)	(*Major Constituents*)
A. CNG	1. Carbon monoxide, Hydrogen
B. Coal gas	2. Butane, Propane
C. LPG	3. Methane, Ethane
D. Water gas	4. Hydrogen, Methane, Carbon monoxide

Codes:

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

125. A spherical body moves with a uniform angular velocity ω around a circular path of radius *r*. Which one of the following statements is correct?

(*a*) The body has no acceleration

(*b*) The body has a radial acceleration $\omega^2 r$ directed towards the centre of the path

(*c*) The body has a radial acceleration $\frac{2}{5}\omega^2 r$ directed away from the centre of the path

(*d*) The body has an acceleration $\omega^2 r$ tangential to its path

126. Which one of the following statements is correct? 'Deccan Odyssey' is

(*a*) a book on Chatrapati Shivaji

(*b*) a warship recently acquired by the Indian Navy

(*c*) a recently started air service between Mumbai and Colombo

(*d*) a luxury train which travels through Maharashtra and includes Goa in its journey

127. Standard 18-carat gold sold in the market contains

(*a*) 82 parts gold and 18 parts other metals

(*b*) 18 parts gold and 82 parts other metals

(*c*) 18 parts gold and 6 parts other metals

(*d*) 9 parts gold and 15 parts other metals

128. A weightless rubber balloon is filled with 200 cc of water. Its weight in water is equal to:

(*a*) $\frac{9.8}{5}$N (*b*) $\frac{9.8}{10}$N (*c*) $\frac{9.8}{2}$N (*d*) zero

129. Salts of which of the following elements provide colours to fireworks?

(*a*) Zinc and sulphur (*b*) Potassium and mercury

(*c*) Strontium and barium (*d*) Chromium and nickel

130. Consider the following statements:

1. Reserve Bank of India was nationalized on 26 January, 1950.

2. The borrowing programme of the Government of India is handled by the Department of Expenditure, Ministry of Finance.

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

131. Which one of the following is the correct decreasing sequence in terms of the value (in rupees) of the minerals produced in India in the year 2002-03?

(*a*) Metallic minerals – Fuel minerals – Non-metallic minerals

(*b*) Fuel minerals – Metallic minerals – Non-metallic minerals

(*c*) Metallic minerals – Non-metallic minerals – Fuel minerals

(*d*) Fuel minerals – Non-metallic minerals – Metallic minerals

132. Which one of the following cities (*they were in the news in recent times*) is **not** correctly matched with its country?

(*a*) Salamanca : Spain

(*b*) Cannes : Italy

(*c*) Cancun : Mexico

(*d*) Bruges : Belgium

133. Consider the following statements:

As per 2001 Census

1. the two States with the lowest sex ratio are Haryana and Punjab.

2. the two States with the lowest population per sq km of area are Meghalaya and Mizoram.

3. Kerala has both the highest literacy rate and sex ratio.

Which of the statements given above is/are correct?

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

134. Consider the following statements:

1. In the Third Battle of Panipat, Ahmed Shah Abdali defeated Ibrahim Lodi.

2. Tipu Sultan was killed in the Third Anglo-Mysore War.

3. Mir Jafar entered in a conspiracy with the English for the defeat of Nawab Siraj-ud-daulah in the Battle of Plassey.

Which of the statements given above is/are correct?

(*a*) 1, 2 and 3 (*b*) 3 only (*c*) 2 and 3 (*d*) None

135. Amongst the following Indian States which one has the minimum total forest cover?

(*a*) Sikkim (*b*) Goa (*c*) Haryana (*d*) Kerala

136. How many three-digit even numbers are there such that 9 comes as a succeeding digit in any number only when 7 is the preceding digit and 7 is the preceding digit only when 9 is the succeeding digit?

(*a*) 120 (*b*) 210 (*c*) 365 (*d*) 405

137. Match List-I (*Sports-person*) with List-II (*Sport/Game*) and select the correct answer using the codes given below the Lists:

List-I	List-II
(*Sports-person*)	(*Sport/Game*)
A. Shikha Tandon	1. Badminton
B. Ignace Tirkey	2. Swimming
C. Pankaj Advani	3. Lawn Tennis
D. Rohan Bopanna	4. Snooker
	5. Hockey

Codes:

	A	B	C	D
(a)	3	5	4	2
(b)	2	4	1	3
(c)	3	4	1	2
(d)	2	5	4	3

138. The record for the highest score in an innings in Test Cricket is now being held by Brian Lara. Immediately prior to him, the three record holders were:
 (a) Don Bradman, Sunil Gavaskar and Colin Cowdrey
 (b) Len Hutton, Peter May and Vivian Richards
 (c) Hayden, Lara, Sobers
 (d) Bob Cowper, Bill Lawry and Brian Lara

139. In how many different ways can six players be arranged in a line such that two of them, Ajit and Mukherjee, are *never* together?
 (a) 120   (b) 240   (c) 360   (d) 480

140. Match List-I (*State/Province/Overseas Territory*) with List-II (*Country*) and select the correct answer using the codes given below the Lists:

List-I (State/Province/ Overseas Territory)	List-II (Country)
A. British Colombia	1. USA
B. Bavaria	2. UK
C. Gibraltar	3. Canada
D. Rhode Island	4. Germany
	5. Denmark

Codes:

	A	B	C	D
(a)	1	2	5	3
(b)	3	4	2	1
(c)	1	4	2	3
(d)	3	2	5	1

141. Consider the following statements:
 1. Femur is the longest bone in the human body.
 2. Cholera is a disease caused by bacteria.
 3. 'Athlete's foot' is a disease caused by virus.
Which of the statements given above are correct?
 (a) 1 and 2   (b) 2 and 3
 (c) 1 and 3   (d) 1, 2 and 3

142. 50 men or 80 women can finish a job in 50 days. A contractor deploys 40 men and 48 women for this work, but after every duration of 10 days, 5 men and 8 women are removed till the work is completed. The work is completed in:
 (a) 45 days   (b) 50 days   (c) 54 days   (d) 62 days

143. Which one of the following pairs is *not* correctly matched?

Unit of Indian Railway	Location
(a) Railway Staff College	: Vadodra
(b) Central Organization for Railway Electrification	: Varanasi
(c) Wheel and Axle Plant	: Bangalore
(d) Rail-coach Factory	: Kapurthala

144. Consider the following statements:
 1. Smart Card is a plastic card with an embedded microchip.
 2. Digital technology is primarily used with new physical communication medium such as satellite and fibre optics transmission.
 3. A digital library is a collection of documents in an organized electronic form available on the Internet only.
Which of the statements given above is/are correct?
 (a) 3 only   (b) 1 and 2
 (c) 2 and 3   (d) 1, 2 and 3

145. Match List-I (*New Names of the Countries*) with List-II (*Old Names of the Countries*) and select the correct answer using the codes given below the Lists:

List-I (New Names of the Countries)	List-II (Old Names of the Countries)
A. Benin	1. Nyasaland
B. Belize	2. Basutoland
C. Botswana	3. Bechuanaland
D. Malawi	4. British Honduras
	5. Dahomey

Codes:

	A	B	C	D
(a)	3	1	2	4
(b)	5	4	3	1
(c)	3	4	2	1
(d)	5	1	3	4

146. Which one of the following is the correct sequence in the descending order of precedence in the warrant of precedence?
 (a) Attorney General of India—Judges of the Supreme Court—Members of Parliament—Deputy Chairman of Rajya Sabha
 (b) Judges of the Supreme Court—Deputy Chairman of Rajya Sabha—Attorney General of India—Members of Parliament
 (c) Attorney General of India—Deputy Chairman of Rajya Sabha—Judges of the Supreme Court—Members of Parliament
 (d) Judges of the Supreme Court—Attorney General of India—Deputy Chairman of Rajya Sabha—Members of Parliament

147. Three students are picked at random from a school having a total of 1000 students. The probability that these three students will have identical date and month of their birth is:
 (a) $\frac{3}{1000}$ (b) $\frac{3}{365}$ (c) $\frac{1}{(365)^2}$ (d) $\frac{1}{(365)^3}$

148. Consider the following statements:
 1. Montenegro and Serbia agreed to a new structure for the Yugoslav Federation
 2. Croatia remained under the Hungarian Administration until the end of First World War.
 3. Claims to Macedonia Territory have long been a

source of contention between Belgium and Greece.

4. In 1991, Slovenia declared independence from Czechoslovakia.

Which of the statements given above are correct?

(*a*) 1 and 2   (*b*) 1, 2 and 3

(*c*) 2, 3 and 4   (*d*) 1, 3 and 4

149. Shirin Ebadi, who won the Nobel Peace Prize in 2003, is from:

(*a*) Iraq   (*b*) Nigeria   (*c*) Iran   (*d*) Libya

150. A person stands at the middle point of a wooden ladder which starts slipping between a vertical wall and the floor of a room, while continuing to remain in a vertical plane. The path traced by a person standing at the middle point of the slipping ladder is:

(*a*) a straight line   (*b*) an elliptical path

(*c*) a circular path   (*d*) a parabolic path

ANSWERS AND EXPLANATIONS

1. (*c*)   2. (*d*)   3. (*b*)   4. (*c*)   5. (*a*)

6. (*a*)   7. (*d*)   8. (*a*)   9. (*a*)   10. (*a*)

11. (*c*)   12. (*b*)   13. (*b*)   14. (*a*)   15. (*b*)

16. (*a*)   17. (*d*)   18. (*c*)   19. (*b*)   20. (*c*)

21. (*a*) [Largest monastery in India is Tawang Monastery in Arunachal Pradesh]

22. (*b*)

23. (*d*) [FDI flows in Telecom were 19.9% of total FDI flow of last one decade. Energy sector attracted highest percentage of 27.4%.]

24. (*d*)   25. (*a*)   26. (*b*)   27. (*c*)   28. (*b*)

29. (*b*)   30. (*d*)

31. (*c*) [Satara 1848, Sambalpur 1849 and Jhansi 1854.]

32. (*c*)

33. (*d*) [A Vice President may be removed by a resolution of the Council of States (*Rajya Sabha*), passed by a majority of all the then members of the Council and agreed to by the House of People (*Lok Sabha*)]

34. (*b*)   35. (*a*)   36. (*a*)   37. (*d*)   38. (*c*)

39. (*d*)   40. (*c*)   41. (*b*)   42. (*c*)   43. (*b*)

44. (*c*)   45. (*c*)   46. (*d*)   47. (*b*)   48. (*b*)

49. (*d*)   50. (*a*)   51. (*d*)   52. (*d*)   53. (*a*)

54. (*c*) [Agra-Mumbai is 1161 km; Chennai-Thane is 1235 km; Kolkata-Hajira is 1949 km; and Pune-Machilipatnam is 841 km.]

55. (*a*)   56. (*d*)   57. (*a*)   58. (*c*)   59. (*a*)

60. (*d*)   61. (*c*)   62. (*b*)   63. (*c*)   64. (*a*)

65. (*b*)   66. (*b*)   67. (*d*)   68. (*a*)   69. (*c*)

70. (*c*)   71. (*d*)   72. (*a*)   73. (*a*)   74. (*d*)

75. (*d*)   76. (*a*)   77. (*c*)   78. (*a*)   79. (*b*)

80. (c)   81. (a)   82. (b)   83. (c)   84. (d)
85. (a)   86. (b)   87. (d)   88. (a)   89. (c)
90. (c)   91. (c)   92. (c)
93. (a) [He was associated with mountaineering.]
94. (c)   95. (a)   96. (b)
97. (c) Since no 2 answers are same, Ist Q. can be matched
    in 5 ways, then after it is matched, 2nd Q. can be
    matched in only 4 ways and so on.
    i.e. 5 × 4 × 3 × 2 × 1 = 120 ways.
    Also, since no answer is correct, we have
    120 – 1 = 119 ways.
    (Remember, only 1 answer is the correct one).
98. (c)   99. (a)   100. (b)   101. (b)   102. (b)
103. (d)   104. (a)   105. (b)
106. (d) Since speed is uniform (*i.e.* not changing), there is
    no acceleration (a = 0)
    Resultant Force (F) = mass (m) × acceleration (*a*)
    ∴ F = m × 0 = 0
107. (d)   108. (b)   109. (b)
110. (b) Ist letter can be dropped in 3 ways
    (one in each letter box).
    Similarly 2nd letter in 3 ways and so on...
    ∴ Total number of ways = 3^9
111. (b)   112. (d)   113. (b)   114. (b)   115. (c)
116. (d)   117. (c)   118. (a)   119. (b)   120. (b)
121. (a)   122. (b)   123. (a)   124. (b)
125. (b) Angular velocity, $\omega = \dfrac{d\theta}{dt}$

        (rate of change of angle with time)
    Since ω = constant (same) → no change in ω

    ∴ Angular acceleration, $\alpha = \dfrac{d\omega}{dt}=0$

    However, radial or centripetal acceleration exists.

    Its value is: $a = \dfrac{v^2}{r}=\omega^2 r$

126. (d)   127. (c)
128. (d) Density of water = 1 g/cc
    ∴ 200 cc = 200 g = 0.2 kg
    Actual Weight = mg = (0.2 × 9.8) N = 1.96 N
    Weight of fluid (water) displaced = 1.96 N (same)
    ∴ Apparent weight in water
            = Actual wt. – wt. of water displaced
            = 1.96 N – 1.96 N = Zero
129. (c)   130. (d)   131. (b)   132. (b)   133. (d)
134. (b)   135. (c)
136. (d) Since the number has to be even, the digits place
    can be occupied only by 5 digits (2, 4, 6, 8, 0) in $^5P_1$
    i.e. 5 ways
    The other 2 places are fixed by 7 and 9 only (and
    there is no other option for us)
    i.e. only in 1 way   ∴ Total no. of ways = 5 × 1 = 5
137. (d)   138. (c)
139. (d) Total no. of ways without any restriction = $^6P_6 = \angle 6$
    When A and M are together, we have 4 + 1 = 5

different things (people), which can be arranged in
∠5 ways
Also, A and M can be arranged in ∠2 ways among
themselves
Thus, no. of ways when A and M are together
            = ∠5×∠2

∴ No. of ways when they are not together
        = ∠6 – ∠5∠2 = 720 – 240 = 480 ways

*Remember : ∠n=1×2×3×........n

140. (b)   141. (a)
142. (b) *** This is a tricky one and can be too long.**
    Just remember the ratio of work done by men (M)
    and women (W)

50 M = 80 W	and 50m = 80w
∴ 40 M = ?	5m = ?
$? = \dfrac{40\times80}{50}=64W$ ...(1)	$? = \dfrac{50\times80}{5}=8W$ ...(2)

    Initially we have 40 M + 48 W
        = 64 W + 48 W = 112W   (from equaiton 1)
    Removal of 5M + 8W
        = 8W + 8W = 16W   (from equation 2)
    Now, with this basic information, you have to
    remove 5M + 8W (*i.e.* 16W) every 10 days and use
    the $\dfrac{MDH}{W}$ formula.

    (M = men, D= days, H = hours, W = work done)
    Thus, you get the following series:
    $$\frac{112\times10}{80\times50}+\frac{(112-16)\times10}{80\times50}$$
    $$+\frac{(112-16-16)\times10}{80\times50}+........=1\,\text{work}$$
    $$\left[\frac{7}{25}+\frac{6}{25}+\frac{5}{25}+\frac{4}{25}+\frac{3}{25}\right]=1$$

    ∴ For the above 5
    10-days-intervals, total days = 10 × 5 = 50
143. (c)   144. (b)   145. (b)   146. (b)
147. (d) Probability that Ist student has a particular birthday
        $= \dfrac{1}{365}$ (year has 365 days!)

    Similarly, p = $\dfrac{1}{365}$ for other 2 also, since birthday

    is the same.
    By multiplication theorem of probability, we have:
    Required p = $\dfrac{1}{365}\times\dfrac{1}{365}\times\dfrac{1}{365}=\dfrac{1}{365^3}$

148. (a)   149. (c)
150. (c) The situation is like this:

 ⟹ CIRCLE