

APPOLO STUDY CENTRE
GROUP I EXAM
08.11.2015

1. Which of the following were among the main exports of Indus valley people.
Select the correct answer from the codes given below:

- I. Wheat
- II. Barley
- III. Cotton
- IV. Gold

a. I, II and III b. II and III c. I and II d. III and IV

2. Match List I with List II correctly and select answer :

List I		List II	
A. Santhal's Rebellion		1. 1923	
B. Maplah Rebellion		2. 1929	
C. Vizag Revolution		3. 1921	
D. Bardoli Satyagraha		4. 1855	

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

3. Which one of the following is the smallest ratio?

7 : 13, 17 : 25, 7 : 15, 15 : 23

a. 7 : 13 b. 17 : 25 **c. 7 : 15** d. 15 : 23

4. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. If this ratio is to be 1 : 2 then what is the quantity of water to be further added?

a. 20 l b. 30 l c. 50 l **d. 60 l**

5. Two numbers are in the ratio 3 : 5. If 9 be subtracted from each, then they are in the ratio 12 : 23. Find the second number

a. 52 b. 53 c. 54 **d. 55**

6. Sum of squares of three positive numbers is 608 and they are in the ration 2 : 3. Then find the numbers

a. 6, 9, 15 **b. 8, 12, 20** c. 10, 15, 25 d. 14, 21, 35

7. If 30% of A = 0.25 of B = $\frac{1}{5}$ of C, then find the ratio A : B : C
a. 15 : 12 : 10 b. 12 : 15 : 10 c. **10 : 12 : 15** d. 10 : 15 : 12
8. What is the third proportional to 0.34 and 0.50?
a. **0.74** b. 0.75 c. 0.76 d. 0.77
9. Which Indian city has been declared as the cleanest city in the 'Swachh Bharat' ranking 2015?
a. Kochi b. Thiruvananthapuram
c. Bengaluru d. **Mysuru**
10. Who is the chairman of the 20th law commission of India?
a. **Justice. Ajit Prakash Shah** b. Justice. Srikrishna
c. Justice. Katju d. Justice. K. Balakrishnan
11. Recently Union Government has decided to develop a spiritual capital of the country. Which among the following is the city?
a. Ujjain b. Varanasi c. Nasik d. **Bodhgaya**
12. India's largest telecom operator is
a. TATA b. **Bharati Airtel** c. Reliance d. Aircel
13. Consider the following two statements consisting of Assertion (A) and Reason (R) and select your answer using the codes given below.
Assertion (A): The administrative reforms commission recommended Lokpal and Lokayukta.
Reasoning (R): These are for the Redressal of Citizens grievances.
a. **Both A and R are correct and R is the correct explanation of A**
b. Both A and R are correct but R is not the correct explanation of A.
c. A is True but R is false
d. A is false but R is correct
14. Which one of the following is not correctly matched?
a. Article 153 – Office of the Governor
b. Article 156 – Term of the Governor
c. Article 154 – Executive authority of Governor
d. **Article 155 – Removal of Governor**
15. If the time taken by a cup of tea to cool from 85°C to 75°C is 1 minute, then the time taken by it to cool from 65°C to 55°C is
a. 50 seconds b. exactly 1 minute
c. **more than 1 minute** d. 30 seconds

16. The rest mass of a photon is
- a. zero
 - b. exactly 1 minute
 - c. dependent on its wavelength
 - d. dependent on its velocity
17. Which of the following sets have different dimensions?
- a. Pressure, Young's modulus, Stress
 - b. Emf, potential difference, Electric potential
 - c. Heat, Work done, Energy
 - d. Dipole moment, Electric flux, Electric field
18. In which Indian state the women, except Brahmin and Bania community, terminate their marriage relationship through the custom called "Chudi Pahanana".
- a. Andhra Pradesh
 - b. Chattisgarh
 - c. Jharghand
 - d. Uttaranchal
19. Which of the following statements about Mother Teresa is/are True?
- I. She founded a new congregation named Missionaries of Charity
 - II. She did not accept the citizens of India
 - III. She was awarded the Nobel peace prize
 - IV. In 1929 A.D. she came to Madras as a Missionary.
- a. I and III correct
 - b. II and IV correct
 - c. I and IV correct
 - d. I, III and IV correct
20. The Dravidian Mahajana Sabha was founded by
- a. Pundit Iyothee Thoss
 - b. C.S. Srinivasa Raghava Iyengar
 - c. P. Theagaraya Chetty
 - d. C. Natesa Mudaliar
21. Read the following statements:
1. Either A and B are of the same age or A is the older than B
 2. Either C and D are of the same age or D is older than C
 3. B is older than C
- Which one of the conclusions can be drawn from the above statements?
- a. A is older than C
 - b. D is older than C
 - c. A is older than B
 - d. B and D are of the same age
22. The minute hand of a circular clock is 14 cm long and that of hour hand is 7 cm. Find how far does the tip of the minute and hour hand move in 30 minutes?
- a. 88 cm, 3.66 cm
 - b. 22 cm, 0.915 cm

c. 44 cm, 1.83 cm

d. 1.83 cm, 88cm

23. A heap of paddy is in the form of a right circular cone whose diameter is 4.8 m and height 1.8 m. If the heap is to be covered exactly by a canvas to protect it from rain, find the area of the canvas required.

a. 22.6 m²

b. 27.2 m²

c. 13.6 m²

d. 11.3 m²

24. If $a^x = b$, $b^y = c$, $c^z = a$, then what is the value of xyz ?

a. 3

b. 4

c. 9

d. 1

25. World 'Car Free Day' is observed on

a. September 12

b. September 22

c. October 22

d. October 18

26. Which court ruled that 'Eu-us data Transfer Pact' is invalid?

a. American Court, New York

b. British Court, London

c. European Court, Luxembourg

d. International Court, New York

27. The Leader of the Congress party in the Lok Sabha as on September 2015

a. Mallikarjuna Karge

b. Sonia Gandhi

c. Ghulam Nabi Azad

d. Rahul Gandhi

28. Which is/are correct relating to the Tribunals?

1. Part XV of the Indian constitution deals with the Tribunals.

2. Article 323 A deals with Administrative tribunals and Article 323 B deals with the tribunals for other matters.

a. 1 only

b. 2 only

c. Both 1 and 2

d. Neither 1 nor 2

29. Expand FAT

a. First Allocation Type

b. File Allocation Type

c. First Allocation Table

d. File Allocation Table

30. Which of the following is used to store large amounts of data?

a. Primary memory

b. Auxiliary storage

c. Cache memory

d. Random access memory

31. Give the value of Terabyte.

a. 2¹⁰

b. 2²⁰

c. 2³⁰

d. 2⁴⁰

32. 'Bluetooth' technology is
- Satellite communication
 - Wired communication between devices
 - Wireless communication between devices**
 - Communication between landline to mobile phone
33. Identify the statement, which is not the cause for the failure of Quit India Movement
- British Government arrested key leaders in anticipation to the movement
 - Nehru and Rajaji disbelieved in Direct Action
 - Hindu Mahasabha and Muslim League supported the movement
 - British Government suppressed the movement
- (A) alone
 - (A) and (B) alone
 - (C) alone**
 - (A), (B) and (D) alone
34. For the Daniel cell $E^\circ = 1.10$ V. The value of equilibrium constant (K) for the reaction (at 298 K) is
- $$\text{Zn}_{(s)} + \text{Cu}_{(aq)}^{2+} \rightarrow \text{Zn}_{(aq)}^{2+} + \text{Cu}_{(s)}$$
- 4.36×10^{39}
 - 2.79×10^{41}
 - 6.53×10^{35}
 - 1.55×10^{37}**
35. Agricultural unemployment may be classified into
- Seasonal unemployment
 - Disguised unemployment
 - Chronic unemployment
- Which is the correct answer?
- I and II only**
 - II and III only
 - I and III only
 - I, II and III
36. Fill up the blanks:
National population policy adopted in 2000 with a view to encourage _____ and aim at stabilizing the population by _____.
- Two child norm, 2020
 - One child norm, 2030
 - Two children norm, 2046 (stabilization by 2045)**
 - One child norm, 2050
37. 'Pay Zapp' a mobile application to make digital payments was started by which Bank?
- SBI
 - ICICI
 - HDFC**
 - HSBC
38. In the Australian Federal elections 2015 for the Prime Minister of Australia, who emerged as winner?
- Tony Abbot
 - Kevin Rudd

c. Malcolm Turnbull

d. Julia Gillard

39. Which of the following are major features of the constitutions of Lokpal and Lokayukta as recommended by the Administrative Reforms commission?

1. They should be demonstrably independent and impartial
2. They should compare with the highest judicial functionary in the country.
3. They should be directly accountable to parliament
4. Their appointments should as far as possible be non-political

a. 1 and 4

b. 1, 2 and 4

c. 1, 2, 3 and 4

d. None of the above (or) 1, 2 and 3

40. Consider the following about scientific dating of the pre-historic period :
Choose the correct code.

I. The technique of radio-carbon dating is based on measuring the loss of carbon in organic materials over a period of time.

II. Another dating method is known as dendro - chronology.

III. Palaeo Botany is the analysis of prehistoric plants.

IV. Palaeography is the study of ancient writing

V. a. I, II and III only

b. I, II, III and IV

c. II and III only

d. III and IV only

41. Which among the following correctly matched?

a. Kol - Madhya Pradesh

b. Chhutia - Nilgiris (Tamil Nadu)

c. Kotas - Little Andaman

d. Jarawas - Assam

42. Find the percentage increase in the area of a triangle if its each side is doubled.

a. 100 %

b. 200 %

c. 300 %

d. 400 %

43. The sequence follow a regular pattern. Find the correct letter for question mark, to complete the sequence.

C E I K O Q

a. R

b. S

c. T

d. U

44. Find Least Common Multiple of $\frac{4}{5}$, $\frac{3}{10}$ and $\frac{7}{15}$.

- a. $\frac{84}{5}$ (84/5) b. $\frac{5}{84}$ c. $\frac{2}{15}$ d. $\frac{12}{15}$

45. Three numbers are in the ratio 1 : 2 : 3. The highest common factor is 12. Find the numbers

- a. 12, 24, 36 b. 24, 48, 72 c. 12, 24, 48 d. 48, 60, 72

46. If the two numbers are in the ratio of 2 : 3 and the product of their highest common factor and least common multiple is 150, then find the sum of the numbers.

- a. 5 b. 10 c. 20 d. 25

47. Arrange the following sectors in India descending order according to the commercial energy consumption

1. Household sector
2. Agriculture
3. Industries
4. Transport

- a. 4, 3, 1, 2 b. 3, 4, 1, 2 c. 3, 4, 2, 1 d. 4, 1, 3, 2

48. "Indradhanush" introduced by the Central Government in August 2015 aims at :

- a. Establishing a separate ombudsman for private sector banks
- b. Reviving or revamping public sector banks
- c. Reviving non-banking financial institutions
- d. Introducing new banks in rural India

49. Match the list :

- | | |
|----------------------|--|
| A. Fourth Schedule | 1. Division of Powers |
| B. Seventh Schedule | 2. Seats allotted in the council of states |
| C. Eleventh Schedule | 3. Languages |
| D. Eighth Schedule | 4. 73 rd |

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

50. The Purines present in nucleic acids are:

- I. Adenine and Cytosine
- II. Guanine and Thymine
- III. Adenine and Guanine

IV. Cystosine and Uracil

a. IV

b. III

c. II

d. I

51. Find out the correct matches:

- | | | |
|---------------|---|-----------------------|
| I. Enzymes | - | Biological catalysts |
| II. DNA | - | Nucleic acid |
| III. Insulin | - | Hormone |
| IV. Vitamin E | - | Water soluble vitamin |
- a. II only b. I only c. I, II and IV d. I, II and III

52. Match List I with list II of the following with suitable options:

- | List I | | List II | |
|--------------|--|--------------|--|
| A. Kural | | 1. Rishabham | |
| B. Thutham | | 2. Shadjam | |
| C. Kaikailai | | 3. Madhyamam | |
| D. Vuzhai | | 4. Gandharam | |
- | | | | | |
|----|---|---|---|---|
| | A | B | C | D |
| a. | 2 | 1 | 4 | 3 |
| b. | 1 | 2 | 3 | 4 |
| c. | 1 | 3 | 2 | 4 |
| d. | 4 | 2 | 3 | 1 |

53. Match the List I with List II of the following with suitable options:

- | List I | | List II | |
|---------------|--|---------------------------|--|
| A. Brahmanas | | 1. Forest Texts | |
| B. Sama veda | | 2. Guide Book for Priests | |
| C. Aranyakas | | 3. Ritual Texts | |
| D. Yajur Veda | | 4. Book of Chants | |
- | | | | | |
|----|---|---|---|---|
| | A | B | C | D |
| a. | 4 | 3 | 1 | 2 |
| b. | 3 | 4 | 1 | 2 |
| c. | 3 | 1 | 4 | 2 |
| d. | 1 | 2 | 3 | 4 |

54. The length, breadth and height of a hall are 8m, 10m, 4m respectively and the hall has one door of area $3\text{m} \times 1.5\text{m}$. Find the cost of painting the walls at the rate of Rs.200 per square metre.

- a. Rs. 28,800 b. Rs. 59,900 c. Rs. 27,900 d. Rs. 60,800

55. If the capacity of a cylindrical tank is 1848 m and the diameter of its base of its base is 14m, then find the depth of the tank?

- a. 12m b. 14m c. 15m d. 18m

56. The length of a chain used as the boundary of a semicircular park is 72m. What is the area of the park?

- a. 77m b. 91m c. 126m d. 308m

57. Find the least number which when divided by 5, 6, 7 and 8 leaving a remainder 3, but when divided by 9 leaves no remainder.

- a. 1677 b. 1683 c. 2523 d. 3363

58. Sunhak Peace Prize was won by

- a. Ms. Zhanna Nemtsova b. Zaina Erhain
c. Dr. Modadugu Vijay Gupta d. Mr. Zia Haider Rahman

59. Which gas has been recently discovered in planet Mars?

- a. Hydrogen Sulphide b. Ammonia
c. Methane d. Ethane

60. Which Indian Temple was awarded 'Award of Excellence' for conservation by UNESCO in the year 2015, in Bangkok?

- a. Guruvayoor Temple, Guruvayoor
b. Vadakkunnathan Temple, Thrissur
c. Padmanabhaswamy Temple, Trivandrum
d. Tirumala Temple, Tirupati

61. Match List I with List II

	Laws	Years
A.	The Banking Companies Ordinance	1.1966
B.	Special Bearers Bonds Ordinance	2.1980
C.	Unlawful activities Prevention Ordinance	3.1984
D.	Terrorist affected areas ordinance	4. 1981

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

62. Identify the statement which is wrong:

- a. The modern method of writing with comma, semicolon, and full stop are the contributions of the missionaries.

- b. Robert De Nobili and Caldwell enriched Tamil language
- c. The missionaries introduced Printing press
- d. The missionaries spread the Gospel only through English language

63. Consider the following Reason and Assertion and choose the correct answer from the code given below:

Reason (R) : the diet of the early Tamils was not very different from that of modern times. Ghee played a conspicuous part in the diet of all, it fetched a high price.

Assertion (A) : Ghee was used freely both by vegetarian and non vegetarian Avur Mulankilar and Purattinai Nannaganar spoken of the use of ghee.

- a. (R) and (A) are correct, (A) is the correct explanation of (R)
- b. (R) and (A) are correct but (A) is not the correct assertion of (R)
- c. (R) is true but (A) is Wrong
- d. (R) is wrong but (A) is true

64. If a colour blind woman marries a normal visioned man, they will produce

- a. Normal visioned sons and daughters
- b. Colour blind sons and normal visioned daughters
- c. Normal sons and colour blind daughters
- d. colour blind sons and daughter.

65. Cretinism, myxoedema and goitre are related to the disorders of the

- a. Parathyroid gland
- b. Thyroid gland
- c. Adrenal gland
- d. Pituitary gland

66. Which one of the following is NOT correctly matched?

- | | | |
|------------------------|---|-------------------|
| a. Anopheles Stephensi | - | Leshmaniasis |
| b. Glossina Palpalis | - | Sleeping sickness |
| c. Culex Pipiens | - | filariasis |
| d. Aedes Aegypti | - | Dengue fever |

67. An example of commonly used herbicide is

- a. P, P' - dichlorodiphenyl trichloro ethane
- b. 2, 4 - dichloro phenoxy acetic acid
- c. Benzene hexa choride
- d. Naphthalene

68. Match the following

- | | | |
|-------------|--------------|-------------|
| I | II | III |
| 1. Thiamine | A. Cheilosis | i. Pellagra |

- | | | | | |
|------------------------|-----------------|-----------------------|------------------|-----------------|
| 2. Niacin | B. Polyneuritis | ii. Glossitis | | |
| 3. Riboflavin | C. Nicotinamide | iii. Beri beri | | |
| 4. Biotin | D. Antipernic | iv. Hyperesthesia | | |
| 5. Cyanocobalamin | E. Coenzyme R | v. Pernicious anaemia | | |
| a. 1 - a - v | 2. b - iii | 3. c - i | 4. d - ii | 5. e - iv |
| b. 1. - b - iii | 2. c - I | 3. a - ii | 4. e - iv | 5. d - v |
| c. 1. - d - ii | 2. a - v | 3. b - iv | 4. c - iii | 5. e - i |
| d. 1 - c - iv | 2. e - ii | 3. d - v | 4. a - I | 5. b - iii |

69. The Union Urban Development Ministry has selected 978 town/cities from all over the country to graduate into smart cities in five years. Select the town/cities not included in the list from the following

- | | |
|-----------------------|-------------|
| a. Coimbatore | b. Dindugul |
| c. Chidambaram | d. Erode |

70. The country that has become the first defaulter, among developed nations, on debt of International Monetary Fund (IMF) on 30th June 2015

- | | | | |
|----------|----------|------------------|------------|
| a. China | b. Italy | c. Greece | d. Germany |
|----------|----------|------------------|------------|

71. Consider the following statements :

The Comptroller and Auditor General of India is responsible for the audit of the accounts of

1. The Union Govt
2. State Govts
3. The governments of Union territories
4. The Urban and rural local bodies

- | | | | |
|----------------------|---------------|---------------|---------------|
| a. 1, 2 and 3 | b. 2, 3 and 4 | c. 1, 3 and 4 | d. 1, 2 and 4 |
|----------------------|---------------|---------------|---------------|

72. What is the peculiar nature of the Indian Federation?

- a. Equal distribution of powers between the centre and state
- b. Strong centre**
- c. Strong states
- d. Strong Local bodies

73. The place of India which does not have tropical evergreen forest is

- a. Eastern part of Western Ghats**
- b. Western part of Western Ghats
- c. Andhaman and Nicobar Islands
- d. Eastern part of subtropical Himalayas

74. Consider the following statement and choose the correct answer from the given options.

I. Shompens is a tribal inhabitant of Nicobar Island.

II. As per 2011 census, their population is 229.

a. I only true

b. II only true

c. I and II are true

d. I and II are false

75. Choose the correct sequence of the following using the codes given below :

I. Qutbuddin Aibak, Iltutmish, Raziya, Balban

II. Jahangir, Humayun, Akbar, Shahjahan

III. Balaji Viswanath, Balaji Baji Rao, Baji Rao I, Shivaji

a. I and II only

b. II and III only

c. I only

d. III only

76. Simplify : $\frac{0.728 \times 0.728 - 0.272 \times 0.272}{0.456}$

a. 0.456

b. 1

c. 0.728

d. 0.272

77. If $\frac{x}{y} = \frac{3}{5}$, then $\frac{5x+2y}{5x-2y}$ is equal to

a. 3

b. 5

c. $\frac{2}{5}$

d. $\frac{2}{5}$

78. A person's present age is two-fifth of the age of his mother. After 8 years, he will be one half of the age of his mother. How old is the mother at present?

a. 42

b. 40

c. 45

d. 48

79. Find the value of $\frac{1.2 \times 1.2 \times 1.2 - 0.2 \times 0.2 \times 0.2}{1.2 \times 1.2 + 1.2 \times 0.2 + 0.2 \times 0.2}$

a. 1.2

b. 1

c. 0.2

d. 1.4

80. A bicycle marked at Rs. 1,500 is sold for Rs. 1,350. What is the percentage of discount?

a. 12

b. 15

c. 11

d. 10

81. The MGNREGS differs from other poverty alleviation measures in the following respects

I. It focuses on income generation to the targeted poor.

II. It is built around the notions of citizenship and entitlement.

III. It facilitates disclosure by means of regular and social audit.

IV. It operates as per the directions of the State/Central Governments

- a. I and II **b. II and III** c. I and IV d. II and IV

82. Justice D.P. Wadhwa committee was appointed by the Supreme Court to examine

- a. Insurance schemes
b. The level of black money in the country
c. The functioning of rural development programmes
d. The Public Distribution System

83. The Nutrient Based Subsidy (NBS) policy for fertilizers was implemented in India in

- a. 1966 b. 1977 c. 1991 **d. 2010**

84. The Administrative Reforms Commission of India was set up on 5 Jan. 1966 under the Chairmanship of

- a. K. Hanumanthaiya b. H.C. Mathur
c. G.S. Pathak **d. Moraji R. Desai**

85. "The Supreme Court in the Indian union has more powers than any other Supreme Court in any part of the world" – Who said so?

- a. S.M. Sikri **b. Sir Alladi Krishnaswamy Ayyar**
c. M. C. Setalwad d. Justice Kania

86. Which of the following statements about 'Glycolysis' is/are True?

- I. Glycolysis is also known as Pentose phosphate pathway
II. The substrate of Glycolysis is Glucose
III. The final product of Glycolysis is Glycogen
IV. Glycolysis is also known as Glyoxylate cycle
a. I and III **b. II only** c. III and IV d. IV and II

87. Arrange the following common units of classification in ascending order :

- I. Family
II. Order
III. Species
IV. Genus
a. II, I, III, IV, V b. V, IV, III, II, I
c. III, V, IV, II, I **d. IV, III, V, I, II**

88. Identify the correct order of events of Muhammad-bin-Tughluq.

a. Transfer of capital, conquest of Nagarkot, Reform of Token currency, Taxation of the Doab

b. Reform of Token currency, transfer of capital, Taxation of the Doab, conquest of Nagarkot

c. Taxation of the Doab, transfer of capital, reform of Token currency, conquest of Nagarkot

d. Conquest of Nagarkot, Reform of Token currency, Taxation of the Doab, transfer of the capital

89. Consider the following relating to Babur.

I. The Autobiography of Babur is 'Babur Namah'

II. It was originally written in Persian

a. Only I is true

b. Only II is true

c. Both I and II are true

d. Both I and II are false

90. A can do a work in 10 days and B can do the same work in 15 days. They earn Rs. 1,500 together. How will they share this amount?

a. Rs. 850 and Rs. 650

b. Rs. 900 and Rs. 600

c. Rs. 950 and Rs. 550

d. Rs. 1,000 and Rs. 500

91. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same work in 2 days, then what is the time taken by 15 men and 20 boys to complete the same type of work?

a. 4 days

b. 5 days

c. 6 days

d. 7 days

92. A plot of land is in the form of a quadrilateral where one of its diagonals is 100 m long. If two vertices on either side of this diagonal are 50 m away from the diagonal. Find the area of the plot of land

a. 5000 m²

b. 1000 m²

c. 10000 m²

d. 500 m²

93. If "NOIDA" is written as 39658, how will "INDIA" be written?

a. 36568

b. 63568

c. 63569

d. 65368

94. Identify the correct statement from the following

a. Tiruchirapalli has been declared as the second cleanest city by Swachh Bharat in 2015

b. Tiruchirapalli has been declared as the special cleanest by UNESCO in 2015

c. Goa has been declared as the second cleanest city by Swachh Bharat in 2015

d. Mysuru has been declared as the first cleanest city by United Nations Organization in 2015

95. Nobel Prize for medicine in 2015 was awarded to

- I. Tu Youyou
- II. Satoshi Omura
- III. William Campbell
- IV. Arun Bahl

a. I only b. I, II and IV c. II and III only **d. I, II and III**

96. Which country has come forward to help clean India's River Ganga?

a. Iran **b. Israel** c. Ireland d. Italy

97. Which of the following are matters on which a constitutional amendment is possible only with the ratification of the legislatures of not less than One-Half of the states?

- 1. Election of the president
- 2. Representation of state in Parliament
- 3. Any of the lists in the 7th Schedule
- 4. Abolition of the legislative council of a state

Choose the correct answer from the codes given below :

Codes

a. 1, 2 and 3 b. 1, 2 and 4 c. 1, 3 and 4 d. 2, 3 and 4

98. The Secession of a state from the Indian union has been barred by the

a. 16th Amendment b. 22nd Amendment
c. 29th Amendment d. 35th Amendment

99. Choose the correct answer :

The itai-itai disease of Japan was caused due to

- I. Arsenic pollution
- II. Cyanide pollution
- III. Cadmium pollution
- IV. Lead pollution

a. I and II b. II and III **c. III only** d. IV only

100. Match the following

- | | |
|-----------------|--|
| A. Sericulture | 1. Farming of aquatic organisms |
| B. Horticulture | 2. Culture of honey bees |
| C. Aquaculture | 3. Rearing of silk worms |
| D. Apiculture | 4. Cultivation and maintaining gardens |

A B C D

- | | | | | |
|----|---|---|---|---|
| a. | 3 | 4 | 1 | 2 |
| b. | 2 | 3 | 4 | 1 |
| c. | 1 | 2 | 3 | 4 |
| d. | 4 | 3 | 2 | 1 |

101. Pick out the wrong statement.

- Veerappa, the Zamindar of Koppal rose against the Nizam of Hyderabad in 1819
- Gadkaris were classes who garrisoned Maratha forts
- Chakra Bisoi was the khonds leader
- Sindhu and Kanhu were the leaders of the Kols**

102. Match the following :

- | | |
|----------------------------------|---------|
| A. Simon Commission | 1. 1928 |
| B. Nehru Report | 2. 1932 |
| C. Second Round Table Conference | 3. 1927 |
| D. Communal Award | 4. 1931 |

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

103. Match the following :

- | | |
|--------------|---|
| A. Na and K | - i. Obtained by electrolysis of fused salt |
| B. Cu and Ag | - ii. Occur only in native state |
| C. Au and Pt | - iii. Occur both native and combined state |
| D. Na and Ca | - iv. Reducing agent in metallurgy |
| E. Al and Mg | - v. Occur only in combined state |

- | | | | | |
|------------------|-----------------|----------------|---------------|----------------|
| a. A. - v | B. - iii | C. - ii | D. - i | E. - iv |
| b. A. - iv | B. - i | C. - ii | D. - iii | E. - v |
| c. A. - ii | B. - iii | C. - v | D. - iv | E. - i |
| d. A. - iii | B. - ii | C. - i | D. - v | E. - iv |

104. Which of the following is/are wrong?

- Mg_2C_3 on hydrolysis gives acetylene
- Be_2C on hydrolysis gives methane

III. Al_4C_3 on hydrolysis gives allylene

- a. I and II b. II and III c. I and III d. I, II and III

105. Government of Tamilnadu awards Dr. A.P.J. Abdul kalam award for a Tamilian for his/her contribution to

- a. Development of rural health services
b. Scientific, art and literature development, humanities and student welfare
c. Tamil literature development
d. Development of sports

106. Identify from the options the name of the Central government portal for students looking for educational loans

- a. Vidya Vikas b. Edu Care
c. Vidya Lakshmi d. Shodhganga

107. Which of the following day is observed as the National Statistics Day?

- a. June, 8 b. June, 29 c. July, 1 d. October, 5

108. Match the following - Establishment of states and choose the correct one :

- | | States | | | |
|-------------------------------|------------------------|--|--|--|
| A. 36 th Amendment | 1. Goa | | | |
| B. 13 th Amendment | 2. Manipur and Tripura | | | |
| C. 27 th Amendment | 3. Sikkim | | | |
| D. 56 th Amendment | 4. Nagaland | | | |

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

109. The portion of incident radiation reflection back to space from the planet is called

- a. Atmospheric windows b. Albedo
c. Rayleigh scattering d. Law of scattering

110. A major diamond mining centre in Belgium is

- a. Aalberg b. Aberdeen c. Aabenraa d. Antwerp

111. Rank the given soils of India in descending order in terms of their area/extent

- a. Red soil, Alluvial soil, Laterite soil, Black soil
 b. Alluvial soil, Red soil, Laterite soil, Black soil
 c. Red soil, Black soil, Alluvial soil, Laterite soil
 d. Alluvial soil, Red soil, Black soil, Laterite soil
112. The planet which is known as the 'God of War'
 a. Mercury b. Venus c. Mars d. Jupiter
113. The ice-crystal theory to explain precipitation was propounded by
 a. Tor Bergeron b. E.G. Boven c. Richl d. Davis
114. What is the standard deviation of the first n natural numbers?
 a. $\sqrt{\frac{n^2-1}{12}}$ b. $\sqrt{\frac{n^2+1}{12}}$ c. $\sqrt{\frac{n(n+1)}{2}}$ d. $\sqrt{\frac{n(n+1)(2n+1)}{6}}$
115. In the series
 6 4 1 2 2 8 7 4 2 1 5 3 8 6 2 1 7 1 4 1 3 2 8 6
 How many pairs of alternate numbers have a difference of 2?
 a. 2 b. 4 c. 6 d. 8
116. If + mean X, X means -, ÷ means + and - means ÷ then what is the value of $(175 - 25) \div (5+20) \times (3 + 10)$
 a. 265 b. 78 c. 77 d. 354
117. In a geometric series, if the fourth term is $\frac{2}{3}$ and seventh term is $\frac{16}{81}$, then what is the first term of the series?
 a. $\frac{2}{3}$ b. $\frac{4}{9}$ c. $\frac{8}{27}$ d. $\frac{9}{4}$
118. In which of the following states of India, Inland water transport is not important?
 a. Kerala b. West Bengal c. Bihar d. Gujarat
119. Which kind of power accounts for the largest share of power generation in India?
 a. Hydro - electricity b. Thermal
 c. Nuclear d. Solar
120. What is India's rank in the global production of milk in 2010 - 2011?

- a. First b. Second c. Third d. Fourth

121. Industry which is reversed for public sector in New Economic Policy
 a. Atomic Energy b. Cotton Industry
 c. Sugar Industry d. Tea Industry

122. Tuoyou of China has been awarded the Nobel Prize in medicine for developing a new drug called
 a. Avermectin b. Artemisinin
 c. Ivermectin d. Parasitin

123. Article 25 of the Constitution of India guarantees
 a. Right to Religion b. Right to Property
 c. Right to life d. Right to equality

124. Which one of the following is not a formally prescribed device available to the members of Parliament?
 a. Question Hour b. Zero Hour
 c. Half-an-hour discussion d. Short duration discussion

125. The National Commission to review the working of the Constitution was set-up in the year
 a. 2001 b. 2004 c. 2003 d. 2002
 Constituted in feb 2000. Report submitted in 2002

126. Match the following:

A. Krebs cycle	1. Occurs in cytoplasm
B. Ubiquinone	2. Diffuse from cytoplasm to mitochondria
C. Glycolysis	3. Mobile carrier
D. Acetyl-CoA	4. Occurs in mitochondrial matrix

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

127. Match List I with List II correctly and select answer

	List I	List II
A.	Dupleix	1. Nawab of Bengal
B.	Anwar-ud-din	2. British Admiral

C. Shuja-ud-Daul

3. French Governor

D. Polock

4. Nawab of Carnatic

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

128. In a cylinder, if radius is double and height is halved then what happens to the curved surface area?
- a. Halved
b. Double
c. Does not change
d. Four times
129. The length of side of a rhombus is 5 m and one of its diagonal is 8 m. Then what is the length of other diagonal?
- a. 5 m
b. 7 m
c. 6 m
d. 8 m
130. A, B and C can complete a piece of work in 24, 6 and 12 days respectively. If they work together, in how many days they will complete the same work?
- a. 1/24 day
b. 7/24 days
c. 24/7 days
d. 24/11 days
131. 12 men complete the 2400 sq.m ploughing work in 10 days. How many men are required to complete 3600 sq.m ploughing work in 18 days?
- a. 10 men
b. 15 men
c. 18 men
d. 20 men
132. 2 men and 7 boys can do a piece of work in 14 days, 3 men and 8 boys can do the same in 11 days. In how many days, 3 times the work can be completed by 8 men and 6 boys?
- a. 21 days
b. 18 days
c. 24 days
d. 36 days
133. Which corporation in Tamilnadu was awarded the best corporation award for the year 2015?
- (A) Chennai
(B) Vellore
(C) Madurai
(D) Tirunelveli
134. Every year 13th of August is observed as
- (A) Voluntary Blood Donation Day
(B) World Hepatitis Day
(C) Swachch Bharat Day
(D) Organ Donation Day

135. 'International Day of the Disappeared' observed by United Nations Organization every year falls on
(A) November 30 (B) December 26
(C) August 30 (D) October 25
136. The President of Srilanka as on June 2015
(A) Maithripala Sirisena (B) Ravi Karunanayake
(C) Mahinda Samarasinghe (D) Mahinda Amaraweera
137. Which one of the following statement is/are true with regard to formulation of the government?
(A) There is a rule in the business of the government which mentions that single largest party that gets majority will form the government
(B) There is no written rule on inviting the single largest party by the 2nd largest party to form the government. It is a convention
(C) There is a provision in Part I of the Constitution
(D) Representation of Peoples Act provides for inviting the longest party to form the government
138. New elements and rare - earths are discovered and fixed in the periodic table using
a. Bragg's law b. Moseley's law
c. Compton's effect d. Bravais Lattices
139. Where is the head quarter of the Forest Survey of India (FSI) located?
a. New Delhi b. Dehradun
c. Chennai d. Mumbai
140. Which among these sanctuaries is not present in Tamil Nadu?
a. Anaimalai b. Point Calimer
c. Mundanthurai d. Periyar
141. In which Indian National Congress session, Mahatma Gandhi was made its President?
a. Nagpur b. Gaya c. Belgaum d. Kanpur
142. Match the List I and List II and Choose the correct code given below;
List I List II

- A. Amrit Basaar Patrika
- B. Indian Mirror
- C. Voice of India
- D. Advocate

- 1. Dadabhai Naoroji
- 2. Sisir Kumar Gosh
- 3. G. Varma
- 4. N.N. Sen

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

143. Which Act is called as black Act by the Indians?

- a. Vernacular Press Act
- b. Indian Arms Act
- c. Rowlatt Act
- d. Opium Act

144. Arrange the following in the order of increasing solubility in water

- i. NaHCO_3
 - ii. KHCO_3
 - iii. $\text{Mg}(\text{HCO}_3)_2$
 - iv. $\text{Ca}(\text{HCO}_3)_2$
- a. $\text{iv} < \text{iii} < \text{ii} < \text{i}$
 - b. $\text{i} < \text{ii} < \text{iii} < \text{iv}$
 - c. $\text{ii} < \text{iii} < \text{i} < \text{iv}$
 - d. $\text{iii} < \text{i}, \text{iv} < \text{ii}$

145. Match the following:

Actinide element	Atomic number
A. Plutonium	1. 102
B. Curium	2. 100
C. Fermium	3. 96
D. Nobelium	4. 94

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

146. Match the Number of electrons transferred (a) when one mole of KMnO_4 is reduced to (b)

- A. 1, 3, 4, 4
 - B. Mn_2O_3 , MnO_2 , MnO_4^{2-} , Mn^{2+}
- a. 1 - MnO_4^{2-} , 3 - MnO_2 , 4 - Mn_2O_3 , 5 - Mn^{2+}
 - b. 1 - Mn^{2+} , 3 - Mn_2O_3 , 4 - MnO_2 , 5 - MnO_4^{2-} ,
 - c. 1 - MnO_2 , 3 - MnO_4^{2-} , 4 - Mn^{2+} , 5 - Mn_2O_3 ,
 - d. 1 - Mn_2O_3 , 3 - Mn^{2+} , 4 - MnO_4^{2-} , 5 - MnO_2 ,

147. Which state government in India has started the 'Labli Beti' scheme for the girl child?

- a. Madhya Pradesh
- b. Uttarakhand
- c. Jharkhand
- d. Jammu & Kashmir

148. Consider the following statements about Suraksha Hose:

1. The hose is made of rubber and is green - coloured
2. The outer layer of the hose is fire resistant
3. The middle layer of the hose is made of brass- coated high carbon steel wire mesh

which of the above statement is/are correct?

- a. 1, 2 and 3 are correct
- b. Only 2 and 3 are correct
- c. Only 1 and 3 are correct
- d. Only 3 is correct

149. In which one of the case, "Passport" is considered as part of personal liberty?

- a. A. K. Gopalan (1950)
- b. Indian Express Newspapers (1985)
- c. Arumugham (1953)
- d. Meneka Gandhi (1978)

150. Which of the schedules deals with division of powers between states and union?

- a. Fourth
- b. Sixth
- c. Seventh
- d. Ninth

151. The plant type which colours the ocean surface water red is

- a. Dinoflagellates
- b. Golden algae
- c. Green algae
- d. Red algae

152. Match List I with List II and select the correct answer:

List I (Climate)

List II (Reason)

- | | |
|--|------------------------|
| A. Chennai is warmer than kolkatta | 1. Distance form sea |
| B. Snowfall in Himalayas | 2. Altitude |
| C. Rainfall decreases from west Bengal to Punjab | 3. Western Disturbance |
| D. Winter Rainfall | 4. Latitude |

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

153. Which of the following is not a planetary wind?

- a. Westerlies
- b. Trade winds
- c. Monsoon
- d. Polar easterlies

154. Among the 50 students in a class, what percentage of students like biology and chemistry?

subjects	No.of students
Mathematics	6
Physics	12
Chemistry	15
Biology	8
Computer science	9

- a. 64%
- b. 46%
- c. 23%
- d. 77%

155. For any n observations of data, what is the value of $(\sum x) - n\bar{x}$?

- a. $n(\sum x)$
- b. $(n - 2) \bar{x}$
- c. $(n - 1) \bar{x}$
- d. 0

156. Match the following and select the correct answer

- | | |
|-------------------------|------------------------------------|
| A. Tax revenue | 1. Provident funds |
| B. Capital receipts | 2. Taxes on income and expenditure |
| C. Non-plan expenditure | 3. Sales tax |
| D. Value added tax | 4. Interest payments |

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

157. The National statistical commission of India was headed by

- a. Monteck singh Ahluwalia
- b. C. Rangarajan
- c. Raghuram Rajan
- d. V.K.R.V. Rao

158. The structure of Indian Financial system does not include

- a. Industrial finance
- b. Agricultural finance
- c. Development finance
- d. Deficit finance

159. 2020 Olympic games will be held at

- a. Beijing
- b. New York
- c. Chicago
- d. Tokyo

160. Nobel prize 2015 in Physics was given for the discovery of

- a. Path of electrons in electro magnetic waves

- b. Path of neutrons in magnetic fields
- c. proton oscillation
- d. Neutrino oscillation

161. In October 2015 Russia's Sergey Karjakin won the World cup for
a. Table Tennis b. Chess c. Golf d. Polo

162. Identify the numbered substances in steps of Glycolysis
Glucose \rightarrow 1 \rightarrow 2 \rightarrow Fructose 1, 6 bisphosphate
a. 1 is Pyruvate (2) is citrate
b. 1 is Glucose - 6 - phosphate (2) is pyruvate
c. 1 is Glucose -6- phosphate (2) is Fructose -6- phosphate
d. 1 is phosphoglycerate 2 is Glyceric acid

163. Consider the following pairs:

- I. Thallophyta - Algae and Fungi
- II. Tracheophyta - All vascular plants
- III. Bryophyta - Liver worts and Fungi
- IV. Pteridophyta - Mosses and Mushrooms

Which of the pair given above is/are correct?

- a. III and IV b. I and II c. I and IV d. II and III

164. Give the correct chronological order:

- I. Pitt's India Act
- II. Minto-Morley Act
- III. Regulating Act
- IV. Montague - Chelmsfor Act

- a. II, I, III, IV b. IV, II, III, I c. III, I, II, IV d. I, II, III IV

165. Who was known as the Father of Library movement in Tamil Nadu?

- a. Thiru. T.K. Avanashilingam b. Thiru. M.P. Periyasamy
- c. Thiru. M. Bhaktavatsalam d. Thiru. Muthiah Chettiar

166. Alex invested an amount of Rs. 8,000 in a fixed deposit scheme for 2 years at compound interest rate 5% per annum. How much amount will Alax get on maturity of the fixed deposit?

- a. Rs. 8,600 b. Rs. 8,620 c. Rs. 8,820 d. Rs. 8,840

167. The difference between the compound interest and simple interest on a certain sum at 8% per annum for 2 years is Rs. 240. Find the sum.

- a. Rs. 35,000 b. Rs. 35,700 c. Rs. 37,500 d. Rs. 40,000

168. If the rate of simple interest is 12% per annum, then find the amount that would get interest of Rs. 6,000 per annum.

- a. Rs. 82,000 b. Rs. 50,000 c. 72,000 d. Rs. 45,000

169. Three solid metal cubes, whose edges are 6 cm, 8 cm and 10 cm are melted and a new cube is made. Find the length of edge of the new cube.

- a. 12 cm b. 24 cm c. 20 cm d. 48 cm

170. Find the number in the place of question mark.

21, 25, 34, 50, ?, 111, 160

- a. 86 b. 72 c. 75 d. 59

171. Which country was affected by "Typhoon Goni"?

- a. Philippines b. Japan
c. Sri Lanka d. Canada

172. Match the Android OS versions with their Names:

OS Version	Name
A. Abdul Kalam Award	1. G. Jothimani
B. Kalpana Chawla Award	2. S. Sampath Kumar
C. Best Doctor Award	3. P. Simmachadran
D. Best Social Worker Award	4. N. Valarmathi

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

173. Which one of the following amendment was called a revision of the constitution and it introduced changes in preamble, as many as 53 articles and seventh schedule?

- a. 40th amendment b. 42nd amendment
c. 41st amendment d. 43rd amendment

174. Which one of the following statement with to the enactment of the Act of 1935 is WRONG?

- a. Turko-Italian war happened
b. Rowlatt Act and Jallianwala Bagh Tragedy occurred

182. Find the next number in the following series

4, 6, 9, $13\frac{1}{2}$

a. $20\frac{1}{4}$

b. $22\frac{3}{4}$

c. 19

d. $17\frac{1}{2}$

183. Consider the following statements:

Assertion (A): Scholars distinguished a culture midway between Palaeolithic and Neolithic called Mesolithic.

Reason (R) : The chief characteristics Mesolithic were the stone implements used were extremely small and made up of Chalcedony and silicate instead of quartzite.

Select your answer according to the coding scheme below:

a. Both (A) and (R) are False

b. Both (A) and (R) are true but (R) is not the explanation for (A)

c. Both (A) and (R) are true and (R) is the correct explanation for (A)

d. (A) is true but (R) is false

184. Which country devalued its own currency in August 2015?

a. India

b. Japan

c. Germany

d. China

185. The 50th Anniversary of 1965 Indo-Pak war was observed on

a. 27 August 2015

b. 30 July 2015

c. 30 August 2015

d. 28 August 2015

186. Match the Android OS versions with their Names:

OS Version	Name
A. Android 6.0	1. Kitkat
B. Android 5.0	2. Lollipop
C. Android 4.4	3. Jelly Bean
D. Android 4.3	4. Marsh Mallow

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

187. The Protection of Civil Rights Act came into force on

a. 19th December 1974

b. 19th November 1976

c. 19th December 1975

d. 19th November 1977

188. Who one of the following persons is the ex-officio chairmen of the Rules Committee, General Purpose Committee and business Advisory Committee?
a. The Speaker
b. A member elected by the house
c. The Deputy Speaker
d. A member of Ruling Party

189. The list of coded instruction in computer is called
a. Program
b. Algorithm
c. Flowchart
d. Application Software

190. Choose the correct match:

List I

- A. Fault
- B. Fold
- C. Earthquake
- D. Volcano

List II

- 1. Stromboli
- 2. San-Andreas
- 3. Himalayan Range
- 4. Epicentre
- 5. Weathering
- 6. Exfoliation

- a. P-1 Q-2 R-5 S-6
- b. P-5 Q-6 R-1 S-2
- c. P-2 Q-3 R-4 S-1
- d. P-4 Q-3 R-1 S-6

191. The major temperature fluctuations in surface waters of the tropical Eastern Pacific Ocean is Called as
a. Temperature inversion
b. Convention
c. Thermocline
d. El Nino and La Nina

192. Choose the correct answer from the codes given below:

Assertion (A): The Indian National Movement reached its crescendo in the non-cooperation movement in 1920-22. It was in this context that there occurred resurgence of working class activity in the years 1920-22. The working class created its own organisation to defend its class rights.

Reason (R) : Lokamanya Tilak was one of the moving spirits in the formation of AICTU. AITCU was formed in 1920.

- a. Both (A) and (R) are correct
- b. (A) alone is correct
- c. (R) alone is correct
- d. (A) is partly correct (R) wrong

193. The Indian Constitution describes legislative relations between Union and States in Article from
a. Articles 245 to 255
b. Articles 256 to 263
c. Articles 264 to 267
d. Articles 268 to 276
194. Which of the following is/are incorrectly matched? Select your answer according to the codes given below
I. Credit Creation - Reserve Bank of India
II. Commercial Bank - Adopting deposits
III. Reserve Bank of India - Control Credit
IV. Quantitative control - Scheduled Bank
a. I only b. I and II c. II and IV d. I and IV
195. The phase of rapid growth of population in India falls
a. between 1891-1921
b. between 1921-1951
c. between 1951-1981
d. between 1981-2001
196. Which of the following recommendations. Are made by the Administrative Reforms Commission to improve relations between the political and permanent executive?
i. Minister should try to develop a climate of fearless and fair play among senior officers.
ii. Minister should not intervene in day-to-day administration except incase of servous maladministration.
iii. The official relationship of Secretary to Minister should be one of confidence of that of minister to Secretary one of loyalty.
iv. Prime Minister Should takes special interest to arrest/growing of unhealthy personal affiliations.
v. All major decisions should be briefly reduced to writings
a. 1, 2, 4 and 5
b. 1, 2, 3 and 5
c. 2, 3 and 4
d. 1, 2 and 5
197. The last movie for which late M.S. Viswanathan composed music is
a. Engirundho Vanthan
b. Suvadugal
c. Devadoss
d. Ninaithalae Inikkum
198. Who was awarded the Stockholm Water prize for the year 2015?
a. Amalendu Krishna
b. Rajendra Singh
c. Mansingh Rawat
d. Modadugu Vijay Gupta

199. Google's Alphabet website is

- a. alpgoogle.com
- c. abc.com

- b. googlealbet.com
- d. abc.xyz

200. _____ Organisation slapped fine to the companies for not appointing women directors.

a. BSE

b. BSI

c. SBI

d. BCCI

