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Mock Tests for **UPSC**

EPFO

Enforcement Officers Accounts Officers

Exam with 3 Previous Year
Solved Papers



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UPSC EPFO SOLVED PAPER 2023

Recruitment of Enforcement Officers/Accounts Officers in Employees Provident Fund Organisation (EPFO)

DIRECTIONS : *In the following five items, each item consists of six sentences of a passage. The first and sixth sentences are given at the beginning as S1 and S6. The four sentences in between S1 and S6 in each question have been jumbled up and labelled as P, Q, R, and S. You are required to find the proper sequence of the four sentences and mark your response accordingly on the Answer Sheet.*

R : However, the real motive behind this development was not necessarily to provide basic amenities to the people but to subserve various colonial interests.

DIRECTIONS : In the following five items, each item has a sentence with three underlined parts labelled as (a), (b), and (c). Read each sentence and identify any error in any underlined part, and indicate your response on the Answer Sheet against the corresponding letter, i.e. (a) (b) or (c). If you find no error, your response should be indicated as (d).

6. Ramesh liked (a) / his friend's music player (b)
/ to his own. (c) / No error (d)

7. Given the complex of the problem (a) / the
committee is not expected (b) /to arrive at a
decision any time soon. (c) / No error (d)

8. The group of students (a) / on a visit to Srinagar
(b) / circumnavigated around the Dal Lake. (c) /
No error (d)

9. Jitender was the smartest (a) / of the two (b) /
children in the room. (c) / No error (d)

10. He asked me if I would be (a) / interested in
signing up (b) / as a member of the group. (c) /
No error (d)

DIRECTIONS : *In the following five items, each sentence has a blank space and four options have been given after the sentence. Select the most appropriate option for the blank space and indicate your response on the Answer Sheet accordingly.*

11. I _____ walking past this particular shop for the past three years.
(a) was (b) have
(c) have been (d) had been

12. All effects can be connected with immediate causes, but it _____ whether they provide the whole explanation.
(a) is doubted (b) is a doubt
(c) may be a doubt (d) may be doubted

13. A bird _____ is better than two in the bush.
(a) in hand (b) to hand
(c) handy (d) in one's hands

14. Human history is ample proof that human ambition _____ no limits.
(a) knows (b) keeps
(c) crosses (d) marks

15. Good history presents several perspectives on a period but these divergent views must _____ into an integrated whole.
(a) be made (b) be fused
(c) fit (d) be balanced

DIRECTIONS : Read the following passage carefully and answer the five questions that follow by selecting your answers based solely on the content of the passage and opinion of the author only.

The world's life-supporting resources are being depleted at a faster rate than ever before! We have to change our practices and those of the world as a whole towards a more sustainable future. To give us an idea about the dimensions of change, the General Assembly of the United Nations has announced its 'Agenda 2030'. The 17 Sustainable Development Goals describe the framework of our common global efforts. Within each goal, education holds a key position.

Of course education and learning do not function in isolation. In a traditional sense they help to understand the world one lives in and prepare all for a job market with both intrinsic and instrumental values. What are the many roles of education in sustainable development? Its purpose is transformative in nature, in the sense that it should widen one's worldview, make one question 'unsustainability', and help one

build competencies to address global challenges and be accommodated into a global system. Beyond this, education for sustainable development means integrating the 'future' as a specific dimension of our learning activities and teaching. How to build a sustainable future must play a central role in educational processes. Globalization, which is sometimes merely seen as global capitalism, has an inevitability about it. Whether we like it or not, we live in a highly interconnected and interdependent world. It is now well recognized that 21st century challenges are global in nature and require cooperation beyond national boundaries. In a sustainable development sense we have to see ourselves as 'citizens' of the world and respond accordingly to the global challenges in the present century. In fact, global challenges have expanded the very notion of citizenship itself. There is an increasing recognition of the importance of global citizenship.

16. Which one of the following areas holds a common key position in United Nations 'Agenda 2030'?
 - (a) Environment
 - (b) Gender
 - (c) Globalization
 - (d) Education
17. What is the role of Education in sustainable development?
 - (a) Education will develop multiple competencies for sustainable development among people all over the world
 - (b) Education will provide books to read on sustainable development
 - (c) Education will increase the global capital
 - (d) Education will reduce interdependence of the people
18. 'We live in a highly interconnected and interdependent world'. What does this phrase mean in the passage?
 - (a) We are now more connected and dependent upon each other for our survival
 - (b) The means of transport have become faster
 - (c) We have become dependent on other countries
 - (d) We are facing challenges from globalization
19. 'The world's life-supporting resources are being depleted at a faster rate than ever before!' What does this phrase mean in the passage?
 - (a) Today we are facing an acute shortage of food products

- (b) Medical health systems are deteriorating at a fast pace
- (c) The natural resources necessary to sustain life are reducing drastically
- (d) Human life is becoming more dependent on the support of technology
20. 'There is an increasing recognition of the importance of global citizenship' because :
 - (a) People want to travel more and live in different parts of the world
 - (b) It will unite people from all over the world to face the challenges of the 21st century
 - (c) People believe that there is a future in foreign countries
 - (d) People will cooperate with each other to save themselves from natural disasters
21. Which one of the following was **not** provided in the Regulating Act of 1773 ?
 - (a) It made the Presidency of Bengal supreme over those of Bombay and Madras in matters relating to war and peace.
 - (b) The tenure of the Governor-General and his Councillors was fixed as five years.
 - (c) The Supreme Court of Justice was established at Calcutta.
 - (d) The Governor-General-in-Council was authorized to appoint successors to Bombay and Madras Presidencies.
22. Which one of the following statements about the Government of India Act of 1935 is **not** correct?
 - (a) It was an outcome of the Round Table Conferences.
 - (b) It provided for the establishment of an All India Federation.
 - (c) It retained the authority of the Secretary of State over the Government of India.
 - (d) It introduced the provision of Provincial Autonomy.
23. Match List I with List II and select the correct answer using the code given below the Lists :

List I (Congress Session)	List II (President)
A. Lahore Session, 1909	1. Madan Mohan Malaviya
B. Calcutta Session, 1911	2. Raghunath Narasinha Mudholkar

C. Bankipore Session, 3. Bishan Narayan
1912 Dar
D. Madras Session, 1914 4. Bhupendra
Nath Bose

Code:

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

24. Who among the following started the Bhonsala Military School at Nashik ?
(a) V.D. Savarkar (b) M.R. Jayakar
(c) N.C. Kelkar (d) B.S. Moonje

25. Arrange the following events associated with Pandit Madan Mohan Malaviya in chronological order, starting with the earliest :
1. Founding of the Banaras Hindu University-1916
2. Formation of the Congress Nationalist Party-1885
3. Founding of the English newspaper 'The Leader'-1909
4. Founding of the Hindu Boarding House at Allahabad

Select the correct answer using the code given below :

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

26. An employee shall be covered under the provisions of the Payment of Wages Act, 1936, should the employee be drawing a maximum monthly wage of :
(a) Rupees fifteen thousand
(b) Rupees eighteen thousand
(c) Rupees twenty-one thousand
(d) Rupees twenty-four thousand

27. A minimum rate of remuneration which shall be applied to an employee working on piece work for the purpose of securing to such employees a minimum rate of wages on a time work basis under the Minimum Wages Act, 1948 is known as :
(a) A minimum piece rate
(b) A guaranteed time rate
(c) A minimum time rate
(d) A guaranteed piece rate

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

List I (Provision)) List II (Legislation))

A. Recovery Officer	1. The Industrial Employment (Standing Orders) Act, 1946
B. Compulsory Insurance	2. The Minimum Wages Act, 1948
C. Scheduled Employment	3. The Payment of Gratuity Act, 1972
D. Subsistence Allowance	4. The Employees' Provident Fund and Miscellaneous Provisions Act, 1952

Code:

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

29. An adult worker who has joined on 1st January, 2022 in a factory and worked for 220 days during the year has been laid off for 25 days as per Standing Orders during the year. How many days of leave with wages shall he be entitled to during the calendar year 2023?

(a) Nil	(b) 10
(c) 12	(d) 11

30. As per the provisions of the Industrial Employment (Standing Orders) Act, 1946, standing orders shall come into operation after the expiry of how many days from the date on which copies of the order of the Appellate Authority are sent to the employer and to the trade unions?
(a) Seven days (b) Ten days
(c) Fifteen days (d) Thirty days

31. How many members are to be nominated by the Central Government to the National Social Security Board as per the provisions of the Unorganised Workers' Social Security Act, 2008?
(a) Eighteen (b) Twenty
(c) Twenty-six (d) Thirty-four

32. Which one of the following schemes is *not* a Social Security Scheme under the Unorganised Workers' Social Security Act, 2008?

(a) National Family Benefit Scheme
 (b) Janshree Bima Yojana
 (c) Employees' Pension Scheme
 (d) Rashtriya Swasthya Bima Yojana

33. Which one of the following authorities constituted by the Central Government shall be the Appellate Authority under the Employees' Provident Fund and Miscellaneous Provisions Act, 1952 ?
 (a) Employees Provident Funds Appellate Tribunal
 (b) National Tribunal
 (c) Labour Appellate Tribunal
 (d) Industrial Tribunal

34. As per the provisions of the Maternity Benefit Act, 1961, the maximum period for which a female employee shall be entitled to leave with wages as maternity benefit for giving birth to the third child is :
 (a) Eight weeks
 (b) Twelve weeks
 (c) Sixteen weeks
 (d) Twenty-six weeks

35. Which one of the following statements under the Employees' Provident Fund and Miscellaneous Provisions Act, 1952, is *not* correct?
 (a) It makes provision for pension scheme including family pension.
 (b) It makes provision for Employees' Deposit Linked Insurance Scheme.
 (c) The provisions of the Act shall not be applicable to Cooperative Societies employing fifty or more persons working without the aid of power.
 (d) The contribution by the employer to the Fund shall be on the basis of the basic wage, dearness allowance and retaining allowance (if any) of the employee.

36. In a desert, X and Y are two spots that are separated by 100 km. At point X, are placed two pillars, one black and one white. Along the line joining X and Y, a white pillar is placed for every 180 m and a black pillar is placed for every 350 m. How many times can one find black and white pillars together while traveling from X to Y?
 (a) 14
 (b) 15
 (c) 16
 (d) 17

37. P, Q, R, S, T and U are six friends. Which of the following is/are sufficient to compare heights of S and T ?
 1. R is shorter than P but taller than other friends.
 2. U is taller than Q but shorter than S although Q is not the shortest among the friends.
 Select the correct answer using the code given below:
 (a) 1 alone is sufficient
 (b) 2 alone is sufficient
 (c) Both 1 and 2 are not sufficient
 (d) 1 and 2 together are sufficient

38. Eight chairs are placed at a uniform distance from each other around a round table. C and D are equal distance away from both A and B; E sits between A and C; G and F sit opposite each other. Where does H sit?
 (a) Adjacent to D
 (b) Adjacent to A
 (c) Adjacent to F
 (d) Adjacent to G

39. A, B and C can individually finish a job in 10, 15 and 6 days, respectively. If all of them work together, in how many days will they finish the job ?
 (a) 2 days
 (b) 3 days
 (c) 4 days
 (d) 5 days

40. A dice is thrown two times. The number of ways that the number appearing on the first throw is *not* less than that on the second throw is:
 (a) 15
 (b) 20
 (c) 21
 (d) 36

41. Overhauling expenses of ₹ 25,000 for the engine of a motor car to get better fuel efficiency is :
 (a) Deferred revenue expenditure
 (b) Revenue receipt
 (c) Capital expenditure
 (d) Revenue expenditure

42. Which one of the following statements is *not* correct?
 (a) Depreciation is a non-cash expense.
 (b) Depreciation is the process of valuation of assets.
 (c) The main cause of depreciation is wear and tear caused by usage.
 (d) Depreciation must be charged so as to ascertain true profit or loss of a business.

43. A credit purchase of machinery recorded in Purchase Book instead of Journal Proper is an example of :

- Compensating errors
- Errors of commission
- Errors of principle
- Errors of omission

44. The practice of appending notes regarding contingent liability in accounting statements is pursuant to :

- Convention of consistency
- Money measurement concept
- Convention of conservatism
- Convention of full disclosure

45. 'Outstanding rent' may be classified as :

- Natural personal account
- Representative personal account
- Real account
- Nominal account

46. Which of the following tag is used to insert comments in the HTML source code ?

- <!-- -->
- <!-- -->
- <-- !-->
- <!-- -->

47. Which one among the following is used to create an e-mail hyperlink to a webpage ?

- mail: (b) mailto:
- mailto: (d) to_mail:

48. In the context of a buffer in memory area or disk, spool refers to :

- Simple peripheral operation on-line
- Simple peripheral operation off-line
- Simultaneous peripheral operation on-line
- Simultaneous peripheral operation off-line

49. Which one of the following is *not* a commutative law ?

- $A * b = b * A$ (b) $A + b = b + A$
- $A - b = b - A$ (d) $A * B = B * A$

50. Which OSI layer is responsible for managing the communication between computers in the network?

- Network layer (b) Transport layer
- Session layer (d) Data link layer

51. Consider the following statements about DNA:

1. DNA refers to Deoxyribonucleic Acid.
2. It is located in the ribosomes.

3. It is composed of Ribonucleic Acid.

4. It can make a copy of itself.

Which of the statements given above is/are correct?

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

52. Velamen, a spongy tissue, is formed in :

- Tap root (b) Epiphytic root
- Fibrous root (d) Respiratory root

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

- Hydrogen ions cannot exist alone.
- All compounds containing hydrogen are acidic.
- Separation of H^+ ions from HCl molecules cannot occur in the absence of water.
- Water soluble bases are known as alkalis.

54. Which one of the following elements has the highest boiling point ?

- Lithium (b) Sodium
- Potassium (d) Rubidium

55. An ice cube with 10 cm side is divided into eight smaller cubes, each with same side. Which one of the following statements is correct in this context ?

- Total volume will increase and total surface area will decrease.
- Total volume will decrease and total surface area will increase.
- Total volume will remain the same and total surface area will increase.
- Total volume will increase and total surface area will remain the same.

56. Which of the following statements regarding the attendance of retired judges at sittings of the Supreme Court of India is/are correct ?

1. Article 128 permits the attendance of retired judges at the sittings of the Supreme Court.
2. The Chief Justice of India may at any time request anyone who has held office as a Judge of the Supreme Court or of a High Court to sit and act as a Judge of the Supreme Court.
3. The Chief Justice of India may at any time, with the previous consent of the President of India, request any person who has held the office of Chief Justice of a High Court to sit and act as a Judge of the Supreme Court.

65. Which of the following statements are correct?

- Under the Cornwallis System, the districts were divided into thanas or police jurisdictions of 20 - 30 miles square.
- Each of them was placed under an officer of government, under the denomination of *daroga*.
- The *daroga* system was introduced in Madras in 1812.
- The *daroga* was nominated by the district magistrate.

Select the correct answer using the code given below:

- 1 and 2 only
- 2, 3 and 4
- 1, 3 and 4
- 1, 2 and 4

66. Model Standing Orders formed under the Industrial Employment (Standing Orders) Act, 1946 shall **not** apply to an establishment in respect of which the Appropriate Government is that of the State of :

- Madhya Pradesh
- Gujarat
- Kerala
- West Bengal

67. An 'out-worker' is expressly excluded from the definition of 'workman' under which one of the following legislations?

- The Factories Act, 1948
- The Plantations Labour Act, 1951
- The Contract Labour (Regulation and Abolition) Act, 1970
- The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979

68. Which one of the following nature of work shall **not** be taken into account while the Appropriate Government considers prohibiting employment of contract labour in an establishment under the Contract Labour (Regulation and Abolition) Act, 1970 ?

- The process, operation or other work is incidental to or necessary for the industry
- The work is of a permanent nature
- The work is done ordinarily through regular workmen
- The work is of intermittent nature

69. Which of the statements relating to the Grievance Redressal Committee under the Industrial Disputes Act, 1947 is *not* correct ?

- It shall consist of equal number of members from among employer and workmen.

- It shall be constituted in an industrial establishment employing twenty or more workmen.
- The Chairperson of the Committee shall be nominated by the Appropriate Government.
- The total members of the Committee shall not be more than six.

70. Under the provisions of the Factories Act, 1948, a Safety Committee is to be constituted in a factory where:

- 1000 or more workers are employed
- Hazardous substances are used or handled
- Heavy machinery is utilized
- 500 or more workers are employed

71. The eight-digit number 789459xy is divisible by 88, where x and y are digits. What are the possible values of x and y?

- $x = 1, y = 2$
- $x = 2, y = 2$
- $x = 3, y = 6$
- $x = 4, y = 4$

72. If x is the smallest natural number that is divisible by both 24 and 30, whereas y is the largest natural number that divides both 36 and 100, then what is the value of $x - y$?

- 116
- 124
- 128
- 132

73. What is the digit in the unit place of $2^{2^{100}}$?

- 2
- 4
- 6
- 8

74. A runner completed a 40 km race in 3 hours. She changed her speed after completing each quarter of the distance such that the proportion of the speeds in the first, second, third and the fourth quarter, is given by 2: 3 : 4 : 5 respectively. In how much time then (approximately) did she complete the last quarter of the race ?

- 32 minutes
- 31 minutes
- 29 minutes
- 28 minutes

75. If there are enough coins of denomination ₹1, ₹2 and ₹5, then in how many ways can one pay ₹10?

- 8
- 9
- 10
- 11

76. Which of the following is included in the 'Cost of Inventory' according to Accounting Standard-2 (Inventory Valuation):

- Administrative overheads that do not contribute to bringing the inventories to their present location and condition

(b) Storage costs which are necessary in the production process prior to a further production stage
 (c) Selling and distribution costs
 (d) Duties and taxes paid on purchases, subsequently recoverable by the enterprise from the Tax Authorities

77. Following is the trial balance of a firm as on 31.03.2022 :

Trade receivables	₹ 2,50,000
Provision for discount to debtors	₹ 14,000
Discount to debtors	₹ 4,000

Additional discount allowed to debtors during the year is ₹ 20,000. The firm has a policy of maintaining a provision for discount to debtors equal to 10% of the Trade Receivables' balances. Total amount to be charged to Profit and Loss Account (for the year ending 31.03.2022) for discount allowed and provision for discount created will be:

(a) ₹ 25,000 (b) ₹ 13,000
 (c) ₹ 9,000 (d) ₹ 33,000

78. Consider the following information :

Date	Particulars	Units	Rate per unit (₹)
January 1	Inventory in hand	200	7
January 8	Purchases	1100	8
January 25	Purchases	300	9
January 6	Issued for sale	100	—
January 9	Issued for sale	200	—

Which one of the following is the value of inventory on January 31 under perpetual inventory system using First-In-First-Out (FIFO) method ?

(a) ₹6,700 (b) ₹8,700
 (c) ₹10,700 (d) ₹12,000

79. Following is the information relating to a club for the year ending 31.03.2022:

Subscription outstanding as on 31.03.2021 ₹16,000
 Subscription outstanding as on 31.03.2022 ₹18,000

Subscription received in advance as on 31.03.2022 ₹12,000

Subscription received in advance as on 31.03.2022 ₹11,000

There are 70 members each paying an annual subscription of ₹1,000. Total subscription received during the year 2021 - 22 will be :

(a) ₹67,000 (b) ₹71,000
 (c) ₹69,000 (d) ₹77,000

80. Reporting on fraud is to be made by an auditor to the Central Government when the sums involved in the fraud :

(a) exceed ₹20 lakh (b) exceed ₹50 lakh
 (c) exceed ₹ 75 lakh (d) are ₹1 crore or above

81. Which one of the following is *not* a security protocol?

(a) TLS (b) SSL
 (c) IPsec (d) MIME

82. LaTeX document does *not* contain:

(a) \documentclass{article}
 (b) \begin{document}
 (c) \end{document}
 (d) \documentstyle{article}

83. The decimal equivalent of $(1101)_2$ is :

(a) 0.8122 (b) 0.8123
 (c) 0.8124 (d) 0.8125

84. In a worksheet, which one of the following is *not* a cell referencing style ?

(a) Relative referencing
 (b) Real-time referencing
 (c) Absolute referencing
 (d) Mixed referencing

85. Which one among the following is used to combine several object modules and libraries to a single executable program?

(a) Interpreter (b) Compiler
 (c) Linker (d) Loader

86. An incandescent bulb rated as 100 W at 110 V is connected to a 220 V power supply. The power that dissipates in the bulb would be :

(a) 50 W (b) 100 W
 (c) 200 W (d) 400 W

87. If the length of a current carrying wire is halved, for a given potential difference, the current in the wire would :

(a) be doubled (b) be halved
 (c) remain unchanged (d) become zero

88. Crystals of copper sulphate pentahydrate, on heating, form:
 (a) blue colour salt (b) white colour salt
 (c) green colour salt (d) brown colour salt

89. Tartaric acid is found in :
 (a) Tamarind (b) Tomato
 (c) Orange (d) Vinegar

90. Which one of the following is an example of chemical change ?
 (a) Melting of wax
 (b) Heating of iron
 (c) Dissolution of sugar in water
 (d) Burning of magnesium in air

91. Which one of the following is *not* a constitutional body in India ?
 (a) National Human Rights Commission
 (b) National Commission for Scheduled Tribes
 (c) National Commission for Backward Classes
 (d) National Commission for Scheduled Castes

92. Which of the following is/are elements of India's 'Panchamrit' view on climate change?
 1. India will reach its non-fossil energy capacity of 500 GW by 2030.
 2. India will meet 50% of its energy requirements from renewable energy by 2030.

Select the correct answer using the code given below:
 (a) 1 only (b) 2 only
 (c) Both 1 and 2 (d) Neither 1 nor 2

93. What are the prerequisites for declaring any area as a 'Scheduled Area' under the Fifth Schedule of the Constitution of India ?
 1. Preponderance of Tribal Population
 2. Compactness and reasonable size of the area
 3. Economic backwardness of the area
 4. The notification must be issued by the Governor of the concerned State

Select the correct answer using the code given below :
 (a) 2 and 4 only (b) 1, 2 and 3 only
 (c) 1 and 3 only (d) 1, 2, 3 and 4

94. The Railway Budget was separated from General Budget owing to :
 (a) Distributive Convention of 1925
 (b) Separation Convention of 1924
 (c) Bifurcation of Estimates of 1924
 (d) Equalising Convention of 1925

95. Which of the following statements regarding the non-electric cooling cabinet, for which the

Bureau of Indian Standards (BIS) has recently developed an Indian Standard (IS 17693 : 2022), is/are correct ?

1. It is a natural refrigerator made primarily to store vegetables, fruits, milk and also for cooling water.
2. This standard helps BIS in fulfilling 6 out of 17 United Nations Sustainable Development Goals.

Select the correct answer using the code given below :

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

Which of the following facilities are to be provided by the contractor to Inter-State migrant workers in connection with the work of an establishment to which the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 is applicable ?

1. Equal pay for equal work irrespective of sex
2. Provision for suitable residential accommodation
3. Provision for protective clothing
4. Provision for old age benefit scheme
5. Prescribed medical facilities

Select the correct answer using the code given below:

(a) 2, 3 and 5 only (b) 2, 4 and 5 only
 (c) 1, 2, 3 and 5 (d) 1, 3 and 4 only

97. A dispute relating to the age of an adolescent employed by an employer which arises due to the absence of any authentic document can be referred to which one of the following authorities for a decision under the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986?

(a) The Prescribed Medical Authority
 (b) The Labour Court
 (c) The Inspector appointed under the Act
 (d) The Appropriate Government

98. Under the provisions of the Factories Act, 1948, which one of the following statements relating to the appointment of the Chairman of the Site Appraisal Committee is correct ?

(a) Labour Commissioner of the State is the Chairman.
 (b) An independent person is appointed as the Chairman.
 (c) The Labour Minister of the State is the ex-officio Chairman.

(d) The Chief Inspector of the State is the Chairman.

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

List I (Provision)	List II (Act)
A. Displacement Allowance	1. The Factories Act, 1948
B. Certifying Surgeon	2. The Minimum Wages Act, 1948
C. Half-monthly payment	3. The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
D. Piece work	4. The Employees' Compensation Act, 1923

Code:

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

100. Under the provisions of the Industrial Disputes Act, 1947, right of legal representation before a Labour Court, or Industrial Tribunal or National Industrial Tribunal is :

- A statutory right
- Not at all permissible
- Can be permitted by the forum if the other party does not object or gives consent
- May be permitted if such permission is granted by the High Court of the State/Union Territory

101. A train of length 400 m takes 15 seconds to cross a train of length 300 m travelling at 60 km per hour from the opposite direction along a parallel track. What is the speed of the longer train, in km per hour ?

(a) 108	(b) 102
(c) 98	(d) 96

102. There is a water tank in the form of a rectangular parallelepiped of height 1.1 m and a square base of side 2 m. If a full tank of water is drained out completely in a long pipe of circular cross-sectional area of radius 1 cm, what should be

the minimum length of the pipe, in km, to hold the entire water in it ? (Take $\pi = 22/7$)

103. A person buys ten pens and eight pencils for ₹ 200. Price of each pen is same and price of each pencil is same. If he could have bought five pens and twenty-four pencils of same types using the same amount, then what is the price of each pen in rupees ?

104. A school has 100 students and every student plays either cricket or football or both. The number of students who play cricket is twice the number of students who play football. Also, the number of students who play only cricket is three times the number of students who play only football. The number of students who play both cricket and football is, therefore:

105. A man walks in a certain direction for 5 km and then walks in the south direction for 4 km. If he ends up in the east direction with respect to the starting position, how far is he from the starting position ?

(a) 2 km (b) 3 km
 (c) 4 km (d) 5 km

106. The beneficiaries under the Integrated Child Development Services (ICDS) Scheme are children in the age group of:

107. Which of the following statements about 'Truck farming' is/are correct?

1. Growing vegetables around urban centres to meet the daily demand of people is known as Truck Farming.
2. It is governed by the distance a truck can cover overnight between the farm and the market

Select the correct answer using the code given below:

Which of the following is correct in respect of the above statements ?

- (a) Both statement I and statement II are correct and statement II is the correct explanation for statement I
- (b) Both statement I and statement II are correct and statement II is **not** the correct explanation for statement I
- (c) Statement I is correct but statement II is incorrect
- (d) Statement I is incorrect but statement II is correct

115. Recently which one among the following committed up to \$ 25 billion for the next five years to fund India's infrastructure creation under the Prime Minister Gati Shakti initiative as well as social development and climate action, thus aiding India's aspirations for green growth ?

- (a) Asian Development Bank
- (b) International Finance Corporation
- (c) New Development Bank
- (d) World Bank

116. 'Large Language Models', sometimes described in news, can be used in which of the following?

1. Creation of reimagined search engines
2. Health care
3. Software development
4. Translating a language

Select the correct answer using the code given below :

117. With reference to the three types of carbon emissions from companies, consider the following pairs:

Emission	Example
1. Scope 1 emissions	Emissions as a result of employee commuting, business travel and waste produced

2. Scope 2 : Emissions as a result of purchase of electricity, steam, heating and cooling for own use

3. Scope 3 : Emissions from fuels consumed by company vehicles, owned & leased

Which of the above pairs is/are correctly matched?

118. 'Quantified Domestic Minimum Top-up Tax' is generally talked about in the context of :

- (a) Global Anti-Base Erosion Rules
- (b) Prevention of Money Laundering
- (c) Regulation of Crypto-currency
- (d) Virtual Digital Asset Transactions

119. Which one of the following statements best describes the term 'Prowess_{dx}' sometimes seen in news?

- (a) A special-purpose supercomputer with a hardware architecture dedicated to a single problem
- (b) A database of the financial performance of companies that is specially designed for academia
- (c) A computing machine that uses the properties of quantum physics to store data and perform computation
- (d) A database in which collection and storing of data is done on user's system and this is basically designed for a single user

120. 'NSE Prime', sometimes mentioned in news, denotes:

- (a) A high standard corporate governance initiative
- (b) Long-duration Sovereign Green Bonds
- (c) Concessions and tax-holidays for hi-tech startup companies
- (d) Special privileges for certain categories of Non-Banking Financial Institutions

Hints & Explanations

1. (b) This is an example of 'parajumbles', in it sentences of a paragraph are jumbled and one has to understand the logical sequence of the sentence that would make the paragraph meaningful and grammatically correct. Here, since the paragraph begins with the topic of geological mapping, it talks about the requirements of such a process. The qualities of a geologist have been specified in the corresponding sentences.
2. (d) The paragraph talks about basic infrastructure during the colonial regime. It continues further by discussing how roads were constructed mainly for the purpose of transport of raw materials and to fulfil colonial interests. This is also a parajumble in which sentences have to be put in a sequence to make a meaningful paragraph.
3. (c) The paragraph has been jumbled in a way that sentences have to be placed in a proper sequence so that the events follow the previous one. Here, the paragraph talks about contemporary history, even though it is a public record, but it often lacks the thoughts and suggestions of politicians on various events happening to be written in historical records, the discoveries made by scientists, etc.
4. (a) In this question, the paragraph starts with a statement which is then reasoned out in the following statements. This is also an example of a parajumble where sentences from a paragraph are jumbled and have to be placed in a logical sequence.
5. (b) Here, the correct sequence of the paragraph will be statement R, followed by statements Q, P and S. The paragraph begins with talking about the division of English literature through historical periods. When para jumbled sentences are given to be put in a logical sequence, it is important to understand how one sentence will connect to the other and form an entire paragraph.
In questions 6 to 10, errors have to be spotted which test the grammatical knowledge of individuals.
6. (c) Here, the error lies in part (c) where the subject is comparing his music player to his friend's. Hence, the word, 'compared' will be placed before the last part of the sentence. It will then be read as: Ramesh liked his friend's music player compared to his own.
7. (a) Here, the word, 'complexity' will be used in place of complex. Since a problem can have many aspects related to it, the word 'complexity' talks about the nature of something that is composed of several interconnected parts.
8. (c) Here, the word, 'circumnavigate' means to go around something. Therefore, 'around' is redundant if used after circumnavigating. The sentence should be restructured as: 'The group of students on a visit to Srinagar circumnavigated the Dal Lake.'
9. (a) In this sentence, only two individuals are being compared. Hence, we use the comparative form of the adjective, 'smarter' which will be smarter. The sentence would read as: 'Jitender was smarter of the two children in the room.'
10. (d) No error
11. (c) This sentence is in the present perfect continuous tense wherein the action which started in the past has been continuing in the present moment. The sentence structure will be formed as: subject + have been + present participle (verb + ing) + object + time reference.
I have been walking past this particular shop for the past three years.
12. (d) All effects can be connected with immediate causes, but it may be doubted whether they provide the whole explanation. The use of the modal verb "may" in the stated way is correct to express doubt in this context.
13. (a) This is an example of a proverb - 'A bird in hand is better than two in the bush.' It is a well-known proverb that gives advice or states something that is generally true in life.
14. (a) The sentence will be read as: 'Human history is ample proof that human ambition knows no limits.'
15. (c) In this sentence, the word 'fit' will be filled in the blank since it talks about how several perspectives must have divergent views that can be fitted into an integrated whole.
16. (d) In the first paragraph, the United Nations 'Agenda 2030' states 17 Sustainable Development Goals which says that within each goal, education is of utmost importance.

17. (a) Education will develop multiple competencies for sustainable development among people all over the world.

In the second paragraph, in the third line it states, "What are the many roles of education in sustainable development? Its purpose is transformative in nature, in the sense that it should widen one's worldview, make one question 'unsustainability', and help one build competencies to address global challenges and be accommodated into a global system." Thus, option (a) is the right answer.

18. (a) We are now more connected and dependent upon each other for our survival.

In the second paragraph it says, "It is now well recognised that 21st century challenges are global in nature and require cooperation beyond national boundaries. In a sustainable development sense, we have to see ourselves as 'citizens' of the world and respond accordingly to the global challenges in the present century."

19. (c) The natural resources necessary to sustain life are reducing drastically.

The world's life-supporting resources are those natural and renewable resources that help the human population to survive. In the first few sentences, it says, "We have to change our practices and those of the world as a whole towards a more sustainable future."

20. (b) It will unite people from all over the world to face the challenges of the 21st century.

In the last few lines of the second paragraph, it says, "It is now well recognized that 21st century challenges are global in nature and require cooperation beyond national boundaries. In a sustainable development sense, we have to see ourselves as 'citizens' of the world and respond accordingly to the global challenges in the present century. In fact, global challenges have expanded the very notion of citizenship itself." So, option (b) is the correct answer.

21. (d) The Regulating Act of 1773, a significant legislative measure during British rule in India, introduced several provisions to streamline the administration of the East India Company. It made the Presidency of Bengal supreme over those of Bombay and Madras in matters relating to war and peace. The Regulating Act of 1773 did indeed grant supremacy to the Presidency of Bengal over Bombay and Madras in certain matters, particularly in relation to war and peace.

22. (c) The Government of India Act of 1935 was enacted by the British government and passed by the Parliament of the United Kingdom. This legislation marked a significant step in the constitutional evolution of India. Contrary to option (c), the Act did not retain the authority of the Secretary of State over the Government of India. Instead, it sought to reduce the powers of the Secretary of State for India and provided for the establishment of a Federal Structure in India.

23. (a) The correct match is:

List I (Congress Session)	List II (President)
A. Lahore Session, 1909	1. Madan Mohan Malaviya
B. Calcutta Session, 1911	3. Bishan Narayan Dar
C. Bankipore Session, 1912	2. Raghunath Narasinha Mudholkar
D. Madras Session, 1914	4. Bhupendra Nath Bose

24. (d) The founder of the Bhonsala Military School at Nashik was **Dr. Balkrishna Shivramji Moonje**.

He established the school in 1937, driven by a strong belief in the importance of Indianization of the armed forces during British rule and the value of military training for Indian youth. To achieve this, he formed the Central Hindu Military Education Society in Nashik in 1935, laying the groundwork for the school's establishment.

25. (b) The correct chronological order is:

4-3-1-2

- Malaviyaji established Mac Donnel Hindu Boarding House (Now Known as Hindu Hostel) at Allahabad in 1903, to house about 230 students.
- The Leader was one of the most influential pre-independent English-language newspapers in India. Based in Allahabad, it was founded on October 24th, 1909, by Madan Mohan Malaviya, and continued publication until September 6th, 1967.
- Banaras Hindu University was founded by the great nationalist leader, Pandit Madan Mohan Malaviya, in 1916 with the cooperation of great personalities like Dr. Annie Besant, who perceived it as the University of India.

- The Congress Nationalist Party was a political party in British India. It was founded by Madan Mohan Malaviya and Madhav Shrihari Aney in 1934.

26. (d) An employee shall be covered under the provisions of the Payment of Wages Act, 1936, should the employee be drawing a maximum monthly wage of Rupees twenty-four thousand. S.O. 2806 (E) dated 28 August 2017 ("Notification") has widened the applicability of the Payment of Wages Act, 1936 ("Act") to cover employees receiving wages upto INR 24,000 per month from the existing wage amount of INR 18,000 per month.

27. (b) A minimum rate of remuneration which shall be applied to an employee working on piece work for the purpose of securing to such employees a minimum rate of wages on a time work basis under the Minimum Wages Act, 1948 is known as a guaranteed time rate. The minimum wages act, 1948, is the minimum amount that an organisation has to pay a particular employee (skilled or unskilled) for a specific job at a particular time that any contract agreement or collective agreement cannot reduce. The Minimum Wage Act was first implemented in 1948 and took effect on 15 March.

28. (a) Correct match is:

List I (Provision)	List II (Legislation)
A. Recovery Officer	4. The Employees' Provident Fund and Miscellaneous Provisions Act, 1952
B. Compulsory Insurance	3. The Payment of Gratuity Act, 1972
C. Scheduled Employment	2. The Minimum Wages Act, 1948
D. Subsistence Allowance	1. The Industrial Employment (Standing Orders) Act, 1946

29. (b) An adult worker who has joined on 1st January, 2022 in a factory and worked for 220 days during the year has been laid off for 25 days as per Standing Orders during the year. 10 days of leave with wages shall he be entitled to during the calendar year 2023.

Calculation:

Number of days worked: 220 - 25 = 195 days, Leave entitlement rate: 1 day / 20 days of work Number of days of leave with wages: 195 x (1/20) = 9.75 days Number of days of leave with wages (rounded up): **10 days**

30. (a) As per the provisions of the Industrial Employment (Standing Orders) Act, 1946, standing orders shall come into operation after the expiry of Seven days from the date on which copies of the order of the Appellate Authority are sent to the employer and to the trade unions.

31. (d) **Thirty-four members** are to be nominated by the Central Government to the National Social Security Board as per the provisions of the Unorganized Workers' Social Security Act, 2008. The Union Minister for Labour and Employment serves as the Chairperson of the board in an ex-officio capacity. The Director-General (Labour Welfare) also holds a position on the board as the Member-Secretary, ex officio. The Central Government nominates 34 members, who represent various sectors and groups.

32. (c) '**Employees' Pension Scheme**' is not a Social Security Scheme under the Unorganised Workers' Social Security Act, 2008. Unorganised Workers' Social Security Act 2008 was an Act of the Parliament of India enacted to provide for the social security and welfare of the unorganised workers. This act received the assent of the President of India on 30 December 2008. **It is replaced by The Code on Social Security, 2020.**

33. (d) The Employees Provident Funds Appellate Tribunal is constituted under the Employees' Provident Funds and Miscellaneous Provisions Act, 1952. The Central Government has the authority to establish one or more Appellate Tribunals through official notifications in the Official Gazette, and these are known as the Employees' Provident Funds Appellate Tribunal. This tribunal serves as the appellate authority to adjudicate matters related to the Employees' Provident Fund on merits.

34. (b) As per the provisions of the Maternity Benefit Act, 1961, the maximum period for which a female employee shall be entitled to leave with wages as maternity benefit for giving birth to the third child is **Twelve weeks**. **As per the Maternity Benefit Amendment**

Bill, 2017, female employees are now entitled to 26 weeks of paid maternity leave, which is an increase from the 12-week leave earlier.

35. (c) The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 provides for the institution of compulsory Provident Fund, [Pension] Fund and Deposit-Linked Insurance Fund, for the benefit of the employees in factories and other establishments.

The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 applies to every factory engaged in any industry specified in Schedule - I of the Act and in which 20 or more persons are employed and to other establishments like road motor transport establishments, hotels, restaurant cinema theatres, hospitals etc. as notified by Central Government in the Official Gazette.

36. (b) L.C.M of 180 and 350
 $= 6300 \text{ m} = 6.3 \text{ km.}$
 Hence, number of times two pillars fixed together
 $= \frac{100}{6.3} \approx 15$

37. (d) $S_1 : P > R > > >$
 $S_2 : S > U > Q >$
 From (1) and (2), we get $P > R > S > U > Q > T$.

38. (a)

Hence H sits adjacent to D

39. (b) In one day A can finish $\frac{1}{10}$ work, B can finish $\frac{1}{15}$ work, C can finish $\frac{1}{6}$ work together they will finish the job in $\frac{1}{\frac{1}{6} + \frac{1}{10} + \frac{1}{15}} = \frac{1}{\frac{5}{30} + \frac{3}{30} + \frac{2}{30}} = \frac{1}{\frac{10}{30}} = \frac{30}{10} = 3$ days.

40. (c) Let the number on first throw = 1.
 Then there is only 1 way in which the number on second throw is not more than number on first throw.
 Similarly if the number of first throw is 2
 Then there are two ways
 If number on first throw is 3, then there are three ways.
 Hence total number of ways = $6 + 5 + 4 + 3 + 2 + 1 = 21$

41. (c) Overhauling expenses of 25,000 for the engine of a motor car to get better fuel efficiency is Capital expenditure.
 Capital expenditures are the funds used to acquire or upgrade a company's fixed assets, such as expenditures towards property, plant, or equipment (PP&E).

42. (b) Depreciation is a process of allocation of cost. Depreciation can be defined as a continuing, permanent and gradual decrease in the book value of fixed assets. This type of shrinkage is based on the cost of assets utilised in a firm and not on its market value.

43. (c) A credit purchase of machinery recorded in Purchase Book instead of Journal Proper is an example of Errors of principle.
 All credit purchases of goods are recorded in the purchases journal whereas cash purchases are recorded in the cash book. Other purchases such as purchases of office equipment, furniture, building, and machinery are recorded in the journal proper if purchased on credit or in the cash book if purchased for cash.

44. (d) The practice of appending notes regarding contingent liability in accounting statements is pursuant to Convention of full disclosure. The principle of full disclosure requires that all material and relevant facts concerning financial performance of an enterprise must be fully and completely disclosed in the financial statements and their accompanying footnotes. This is to enable the users to make correct assessment about the profitability and financial soundness of the enterprise and help them to take informed decisions.

45. (b) 'Outstanding rent' may be classified as **Representative personal account**, because it represents the outstanding expenses to a person.

46. (d) The tag used to insert comments in the HTML source code is:
`<!-- -->`

These tags tell the browser that the text inside them is a comment and should not be rendered on the front end.

47. (b) ‘mailto:’ is used to create an e-mail hyperlink to a webpage. When a website visitor clicks on one of these mailto links, the default email client on that person's computer opens and they can send a message to that email address specified in the mailto link.

48. (c) In the context of a buffer in memory area or disk, spool refers to **Simultaneous peripheral operation on-line**. An acronym for Simultaneous Peripheral Operations On-Line, spooling refers to putting jobs in a buffer, a special area in memory or on a disk, where a device can access them when it is ready. Spooling is useful because different devices access data at different rates.

49. (c) ‘ $A - b = b - A$ ’ is not an example of commutative law.

Commutative law: Commutative law refers to the operation on the numbers where the order of the numbers can be altered. There are two laws relating to commutative on the operations of addition and multiplication, that is, $a + b = b + a$ and $ab = ba$ respectively.

50. (a) Network layer is responsible for managing the communication between computers in the network.

The **open systems interconnection (OSI)** model is a conceptual model created by the International Organization for Standardization which enables diverse communication systems to communicate using standard protocols. This data transfer framework can be modeled and used by almost all computer systems in internal networks and in the cloud/internet. And that's how the OSI Model defines how data is transferred.

51. (a) DNA (Deoxyribonucleic Acid) is a molecule that carries the genetic instructions used in the development, functioning, and reproduction of all known living organisms. DNA is not located in ribosomes. Ribosomes are cellular structures involved in protein synthesis, and they contain Ribonucleic Acid (RNA), not DNA. DNA is not composed of Ribonucleic Acid (RNA). DNA and RNA are distinct molecules with different structures and functions. One of the essential features of

DNA is its ability to replicate or make a copy of itself, which is crucial for the transmission of genetic information during cell division.

52. (b) Velamen is a spongy tissue that is formed in **epiphytic roots**. Epiphytic roots are specialized roots that develop on the surface of other plants, such as trees, without penetrating the soil directly. Velamen is a unique tissue found in the epiphytic roots of certain plants. It acts as a sponge, aiding in the absorption of moisture and nutrients from the atmosphere.

53. (b) Compounds containing hydrogen can be acidic, basic, or neutral. For example, compounds like water (H_2O) and methane (CH_4) contain hydrogen but are not acidic.

54. (a) Out of the listed elements, Lithium has the highest boiling point.

Elements	Boiling point
Lithium	1347
Sodium	883
Potassium	760
Rubidium	688

However, Lithium exhibits an anomalous behavior due to its small size (smallest among the given elements). This small size results in a stronger attraction between the positively charged nucleus and the valence electron, leading to a stronger metallic bond and a higher boiling point compared to the other elements.

55. (c) ‘**Total volume will remain the same and total surface area will increase**’.

Total volume: When the large cube is divided into eight smaller cubes, the total volume of the smaller cubes will be equal to the volume of the larger cube. This is because the volume of each smaller cube is $(1/2)^3$ times the volume of the larger cube (since the side length is half), and there are eight of them. **Therefore, the total volume remains the same.**

Total surface area: When the large cube is divided into eight smaller cubes, the total surface area will increase. This is because each smaller cube adds six new faces to the total surface area. Previously, the large cube had six faces. In total, the eight smaller cubes will have $8 \times 6 = 48$ faces, while the large cube had only 6 faces. **Therefore, the total surface area increases.**

56. (c) Article 128 of the Indian Constitution permits the Chief Justice of India to request any person who has held the office of a Judge of the Supreme Court or of a High Court to sit and act as a Judge of the Supreme Court. The Chief Justice of India may, with the previous consent of the President of India, request any person who has held the office of a Judge of the Supreme Court to sit and act as a Judge of the Supreme Court (this is covered under the provision mentioned in option 4).

57. (d) 1, 2 and 3
The board of a cooperative society can be superseded or kept under suspension if:

1. There is negligence in the performance of duties.
2. There is any act prejudicial to the interest of the co-operative society or its members.
3. The body has failed to conduct elections in accordance with the provisions of the State Act.

58. (b)

59. (a) The Global Multidimensional Poverty Index (MPI) developed by the United Nations Development Programme (UNDP) does indeed take into account all **four of the listed factors**:
Nutrition: Measured through indicators like child stunting and underweight prevalence.
Cooking fuel: Captured through indicators like the lack of clean cooking fuels and practices.
Assets: Assessed through indicators like ownership of land, livestock, and durable goods.
School attendance: Evaluated through indicators like years of schooling and school enrollment rates.

60. (b) In 1990, the Dinesh Goswami Committee was formed to make recommendations on electoral reforms. It proposed giving political parties in-kind governmental money. It also suggested that a candidate should not be permitted to contest in more than two constituencies. Dinesh Goswami was a politician in India. In 1989, he served as the Law and Justice Minister in the V.P. Singh government. Electoral reform is the modification of electoral systems to better the expression of public desires in election results.

61. (a) Rani Chennamma fought fiercely with the aid of her deputy, **Sangolli Rayanna**, but was ultimately captured and imprisoned at Bailhongal Fort, where she died on 21 February 1829 due to health deterioration.

62. (c) The first Indian Factory Act was passed in 1881. **The Act primarily dealt with the problem of child labour.** It laid down that children below 7 could not work in factories, while children between 7 and 12 would not work for more than 9 hours a day.

63. (a) The Provisional Government of Free India or, more simply, Azad Hind, was a short-lived Japanese-supported provisional government in India. **It was established in Japanese occupied Singapore** during World War II in October 1943 and has been considered a puppet state of the Empire of Japan.

64. (b) The Harcourt Butler Committee under the chairmanship of **Sir Harcourt Butler** was appointed in 1927 to investigate and clarify the relationship between the paramount power of the British Raj in India, and the rulers of Princely States. **There were two other members, William Searle Holdsworth and Sidney Peel.**

65. (d) Lord Cornwallis (1786-1793) introduced the system of Daroga as part of Police reforms. Police of each district was placed under District Judge. Each district was divided into Thanas/Police circles which will be headed by Daroga, an Indian officer assisted by constables. Each Thana/Police circle is about an area of 20 square Miles. **The daroga system was introduced in Madras in 1802.**

66. (b) Model Standing Orders formed under the Industrial Employment (Standing Orders) Act, 1946 shall not apply to an establishment in respect of which the Appropriate Government is that of the State of **Gujarat**.

67. (c) An 'out-worker' is expressly excluded from the definition of 'workman' under '**The Contract Labour (Regulation and Abolition) Act, 1970**'.
"Workman" means any person employed in or in connection with the work of any establishment to do any skilled, semi-skilled or un-skilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment be express or implied.

68. (d) Contract Labour (Regulation and Abolition) Act, 1970 is an Act to regulate the employment of contract labour in certain establishments and to provide for its abolition in certain circumstances and for matters connected therewith. The objective and scope of the Act are: To prevent exploitation of contract labour.

To provide proper and habitable working conditions. To regulate the functioning of the advisory boards.

69. (c) **In the Factory Act of 1948, a Grievance Redressal Committee** is a designated body established within a factory to address and resolve grievances raised by workers or employees. The committee is responsible for ensuring a fair and effective mechanism for handling complaints, disputes, and concerns related to work conditions, wages, safety, and other employment-related matters.

70. (b) Under the provisions of the Factories Act, 1948, a Safety Committee is to be constituted in a factory where **Hazardous substances are handled used or handeld.**

71. (d) A number is divisible by 88, if it is divisible by both 8 and 11.

789459xy is divisible by 11 if the difference of $y + 9 + 4 + 8$ and $x + 5 + 9 + 7$ is either 0 or divisible by 11

Hence, $y + 9 + 4 + 8 = 21 + y$ and

$$x + 5 + 9 + 7 = 21 + x$$

$$21 + x - 21 - y = x - y$$

789459xy is divisible by 11 if $x - y = 0$ or $x - y$ is divisible by 11.

Since x and y are single digits Hence $x - y$ should be equal to zero

$$x - y = 0$$

$$x = y$$

784459xy is divisible by 8, if 9xy is divisible by 8 thus from the given option only "d" satisfies both condition.

72. (a) x is the LCM of 24 and 30

$$\therefore x = 120$$

y is the HCF of 36 and 100

$$\therefore y = 4$$

$$\therefore x - y = 120 - 4 = 116$$

73. (c) $2^{100} = (2^2)^{100} = (4)^{100}$

Now $4^1 = 4$, $4^2 = 16$, $4^3 = 64$, $4^4 = 256$.
 \therefore Periodicity = 2

$$\text{Now, } (4)^{100} = (4^{50})^2 = \text{ ----- 6}$$

74. (d) Each quarter is of 10 km

Let the speed during first, second, third and fourth quarter is $2x$, $3x$, $4x$ and $5x$

Total time is 3 hours.

Hence

$$\frac{10}{2x} + \frac{10}{3x} + \frac{10}{4x} + \frac{10}{5x} = 3$$

$$\frac{10}{x} \left[\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} \right] = 3$$

$$\frac{10}{x} \left[\frac{30 + 20 + 15 + 12}{60} \right] = 3$$

$$x = \frac{77}{18}$$

Time to complete last quarter

$$= \frac{10}{5x} = \frac{10 \times 18}{5 \times 77} = \frac{36}{77} \text{ hrs}$$

$$\frac{36}{77} \text{ hrs} = \frac{36 \times 60}{77} \approx 28 \text{ min}$$

75. (c) There are 10 ways in which ₹10 can be paid using coins of denomination ₹1, ₹2 and ₹5.

$1 \times 10 = 10$	$1 \times 8 + 2 \times 1 = 10$	$1 \times 5 + 5 = 10$
$2 \times 5 = 10$	$1 \times 6 + 2 \times 2 = 10$	$1 \times 3 + 5 + 2 = 10$
$5 \times 2 = 10$	$1 \times 4 + 2 \times 3 = 10$	$1 + 5 + 2 \times 2 = 10$
	$1 \times 2 + 2 \times 4 = 10$	

76. (b) Accounting Standard-2 (Inventory Valuation) '**Storage costs which are necessary in the production process prior to a further production stage**' is included in the 'Cost of Inventory'.

77. (d)

Total Discount on debtors	24,000
Less : Adjusted from existing provision	(14,000)
Amount charged to Profit & Loss A/c	10,000

Amount charged for creation of Provision for discount on debtors = 10% of (2,50,000 - 20,000) = ₹ 23,000

Total Amount charged to Profit & Loss a/c = 10,000 + 23,000 = ₹ 33,000

78. (c) Value of Inventory on 31st Jan = 1000 units x ₹ 8 + 300 units x ₹ 9 = ₹ 10,700

79. (a) Amount received of subscription = $(70 \times 1000) + 16,000 - 18,000 - 12,000 + 11,000 = 67,000$

80. (d) 1 crore or if more is being or has been performed against the organization through the officers or employees of the firm, in that case, the auditor can report the situation to the Central Government.

81. (d) **MIME not a security protocol.**
MIME stands for Multipurpose Internet

Mail Extensions. It's an email protocol that extends the capabilities of other internet email protocols, such as SMTP.

82. (d) LaTeX document does not contain '**document style (article)**'.

LaTeX is a software system for typesetting documents. LaTeX markup describes the content and layout of the document, as opposed to the formatted text found in WYSIWYG word processors like Microsoft Word, Libre Office Writer and Apple Pages.

83. (d)
$$0.1 \times \frac{1}{2} + 1 \times \frac{1}{2^2} + 0. + 1 \times \frac{1}{2^4}$$

$$= 0.5 + 0.25 + 0.0625 = 0.8125$$

84. (b) In a worksheet, '**Real-time referencing**' is not a cell referencing style.

85. (c) '**Linker**' is used to combine several object modules and libraries to a single executable program.

In computing, a linker or link editor is a computer system program that takes one or more object files (generated by a compiler or an assembler) and combines them into a single executable file, library file, or another "object" file.

86. (d) The power dissipated by an incandescent bulb can be calculated using the formula:

$$P = V^2/R$$

The power rating of the bulb (100 W) is given for its rated voltage (110 V). To find the resistance (R), you can use Ohm's Law:

$$R = V^2/P$$

$$R_{110} = 110^2/100 = 121\Omega$$

Now,

$$P_{220} = 220^2/121 = 400\text{ W}$$

Therefore, the power dissipated by the bulb when connected to a 220 V power supply would be approximately 400 watts.

87. (a) At a given temperature, the resistance (R) of a conductor depends on its length (L), area of cross - section (A) and the material it is made of. If the length of the wire is halved then the resistance of the wire will decrease to half. **Hence, the Current will increase to double.**

88. (b) Copper sulphate pentahydrate has a blue colour due to water hydration. It loses water molecules and transforms into **white anhydrous copper sulphate when heated.**

89. (a) Tartaric acid is found in Tamarind. Dihydroxybutane-dioic acid is another name for tartaric acid. Tamarind is a rich source of magnesium.

90. (d) **Burning of magnesium in air** is a chemical change because of the following reasons: It is an irreversible change, as after burning the ribbon cannot be unburnt. A new product is formed with new properties, i.e., [MgO]. The composition of magnesium changes.

91. (a) **The national human rights commission** is one of the bodies in **non-constitutional** bodies. NHRC of India is an independent statutory body established on 12 October, 1993 as per provisions of Protection of Human Rights Act, 1993, later amended in 2006. NHRC has celebrated its Silver Jubilee (25 years) on October 12, 2018. Its headquarter is located in New Delhi.

92. (c) **The 'Panchamrit' strategy of India includes the following plans:** Reaching 500GW Non-fossil energy capacity by 2030. Ensuring that 50 per cent of its energy requirements are met by renewable energy sources by 2030. Reducing the total projected carbon emissions by 1 billion tonnes by 2030.

93. (b) **The criteria for declaring any area as a "Scheduled Area" under the Fifth Schedule are:**

- Preponderance of tribal population,
- Compactness and reasonable size of the area,
- A viable administrative entity such as a district, block or taluk, and,
- Economic backwardness of the area as compared to the neighboring areas.

94. (b) The Railway Budget was separated from General Budget owing to **Separation Convention of 1924**.

Pursuant to the recommendations of the **Acworth Committee (1920-21)**, Railway Finances were separated in 1924 for General Finances primarily to secure stability for civil estimates by providing for an assured contribution from Railway Revenues and also to introduce flexibility in the administration of Railway Finances.

95. (c) National Standards Body "Bureau of Indian Standards (BIS)" recently developed an Indian Standard for "non-electric cooling cabinet made of clay or **"Mitticool refrigerator"**". The developed standard is **"IS 17693: 2022"**. It is a natural refrigerator made primarily to store vegetables, fruits, milk and also for cooling water. This standard helps BIS in fulfilling 6 out of 17 United Nations Sustainable Development Goals.

96. (c) The facilities that are to be provided by the contractor to Inter-State migrant workers in connection with the work of an establishment to which the **Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979** is applicable:

1. Equal pay for equal work irrespective of sex
2. Provision for suitable residential accommodation
3. Provision for protective clothing
5. Prescribed medical facilities

97. (a) A dispute relating to the age of an adolescent employed by an employer which arises due to the absence of any authentic document can be referred to '**The Prescribed Medical Authority**' for a decision under the Child and Adolescent Labour (Prohibition Regulation) Act, 1986.

Child labour practice is a hindrance to the mental as well as physical development of children as it deprives them of the most important phase of their life – their childhood. Children of or below the age of 14 years are strictly prohibited from being employed in hazardous occupations, as per the Child Labour (Prohibition and Regulation) Act of 1986.

98. (d) Under the provisions of the Factories Act, 1948, the correct statement relating to the appointment of the Chairman of the Site Appraisal Committee is:

'The Chief Inspector of the State is the Chairman'.

The Factories Act of 1948 aims to protect the interests of workers, including their safety, hygiene, and welfare at their places of work. It was passed by the Lok Sabha on September 23, 1948 and became operational on April 1, 1949.

99. (b)

100. (a) Under the provisions of the Industrial Disputes Act, 1947, right of legal representation before a Labour Court, or Industrial Tribunal or National Industrial Tribunal is a **statutory right**.

The Industrial Disputes Act, 1947 was enacted on **March 11, 1947** and came into force on April 1, 1947. The act regulates Indian labor law for trade unions and individual workers in the Indian mainland. It also provides

safeguards for workers and aims to reduce conflicts between labor and management.

The act has 40 sections and seven chapters.

It includes provisions for the investigation and settlement of industrial disputes. It also includes special provisions for lay-off, retrenchment, and closure in certain establishments.

101. (a) Let speed of longer train = x m/s

$$\text{Total length} = 300 + 400 = 700 \text{ m}$$

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$60 \text{ km/h} = 60 \times \frac{5}{18} = \frac{300}{18} = \frac{50}{3} \text{ m/s}$$

$$\text{Total speed} = \frac{50}{3} + x$$

$$\therefore \frac{50}{3} + x = \frac{700}{15}$$

$$\frac{50}{3} + x = \frac{140}{3}$$

$$\therefore x = 30 \text{ m/s or } 30 \times \frac{18}{5} = 108 \text{ km/hour.}$$

102. (c) Volume of tank = Volume of pipe
Volume of tank = Height \times (Area of base)
 $= 1.1 \times 4 = 4.4 \text{ m}^3$

$$\text{Volume of pipe} = \pi r^2 h = \pi \times \left(\frac{1}{100}\right)^2 \times h$$

$$\text{Hence, } 4.4 = \pi \times \left(\frac{1}{100}\right)^2 \times h$$

$$\frac{44}{10} = \frac{22}{7} \times \frac{1}{100} \times \frac{1}{100} \times h$$

$$h = 14000 \text{ m} = 14 \text{ km.}$$

103. (a) Let cost of each pens be x and cost of each pencil is y .

ATQ

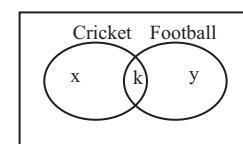
$$10x + 8y = 200 \quad \dots(\text{I})$$

and

$$5x + 24y = 200 \quad \dots(\text{II})$$

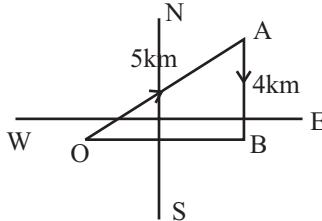
On solving I and II, we get $x = 16, y = 5$

104. (c)



Let the number of students who play only cricket = x
 Let number of students who play only football = y
 Let k be the student who play both cricket & football
 ATQ
 $x + y = 100$... (I)
 $x = 3y$... (II)
 $x + k = 2(y + k)$... (III)
 On solving (III) using (II)
 $3y + k = 2y + 2k$
 $y = k$... (IV)
 from (I) and (II)
 $3y + y = 100$; $y = 25$
 Hence $k = 25$ (from in)

105. (b)



Let O be the starting point. Let the person walk in South direction from A.
 Let the person ends up at point B
 $(OA)^2 = (AB)^2 + (OB)^2$
 $(5)^2 = (4)^2 + (OB)^2$
 $OB = 3$ km

106. (a) The beneficiaries under the Integrated Child Development Services (ICDS) Scheme are children in the age group of **0-6 years**. The scheme also benefits pregnant and lactating mothers, women between the ages of 15-44, and adolescent girls up to the **age of 18**.

107. (c) The correct statements about "Truck farming" are:

1. Growing vegetables around urban centers to meet the daily demand of people is known as Truck Farming.
2. It is governed by the distance a truck can cover overnight between the farm and the market.

'Truck farming is a horticultural practice that involves growing vegetables on a large scale for shipment to distant markets. It's also known as market gardening'.

108. (c) The correct statements with reference to the service sector are:

1. Retail trade falls under tertiary activity.
2. Research and Development based activity comes under quaternary activity.

Tertiary Sector – Activities

The Tertiary activities of the service sector/ tertiary sector can be broadly divided into the following:

- Trade and Commerce (Wholesale trade, Retail trade)
- Services
- Transportation
- Communication

109. (c) The correct statements about the National Skill Development Corporation are:

1. It is a not-for-profit Public Limited Company set up by the Ministry of Skill Development and Entrepreneurship.
2. It promotes skill development by catalysing the creation of only large, quality and non-profit vocational institutions.

National Skill Development Corporation is a not-for-profit public limited company incorporated on July 31, 2008, under section 25 of the Companies Act, 1956. NSDC was set up by Ministry of Finance as Public Private Partnership model.

110. (c) National Action Plan for Senior Citizen (NAPSrc) had been revamped, renamed as Atal Vayo Abhyuday Yojana (AVYAY). The Department of Social Justice and Empowerment is the Nodal Department for welfare of senior citizens.

Aim: To empower the elderly, ensuring their active participation and inclusion in society. To create an environment where senior citizens can live a life of dignity, respect, and fulfilment, acknowledging their invaluable contributions to the nation.

111. (c) The Central Government shall, in consultation with the Bank, determine the inflation target in terms of the Consumer Price Index, once in every five years.

The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy. This responsibility is explicitly mandated under the Reserve Bank of India Act, 1934.

112. (d) In India, the RTGS and NEFT payment systems are owned and operated by RBI. Systems like IMPS, RuPay, UPI, etc., are owned and operated by the National Payments Corporation of India (NPCI), which is a not-for-profit entity promoted by banks.

113. (a) Both statement I and statement II are correct and statement II is the correct explanation for statement I.

A strong dollar can put a financial squeeze across the developing world. Many companies and governments in such emerging markets borrow money in U.S.-dollar terms, instead of in their own currencies. When they must repay their debts in U.S. dollars, while their own currencies buy fewer dollars by the day, it can create lots of stress.

114. (a) The Government has approved mandatory packaging of 100 per cent food grains and 20 pc sugar in diversified jutebags for the Jute Year 2023-24.

Under the Jute Packaging Materials (Compulsory use in Packing Commodities) Act, 1987 (hereinafter “the JPM Act”), the Government is required to consider and provide for the compulsory use of jute packaging material in the supply and distribution of certain commodities in the interest of production of raw jute and jute packaging material and of persons engaged in the production thereof.

115. (a) Recently **Asian Development Bank** committed up to \$25 billion for the next five years to fund India's infrastructure creation under the Prime Minister Gati Shakti initiative as well as social development and climate action, thus aiding India's aspirations for green growth.

Hon'ble Prime Minister launched the PM Gati Shakti National Master Plan (NMP) on 13th October 2021 for providing multimodal connectivity infrastructure to various economic zones.

116. (d) Large language models (LLMs) are a type of artificial intelligence (AI) algorithm that can perform a variety of natural language processing (NLP) tasks. LLMs are trained using large amounts of text data and transformer models, which allows them to: Recognize, Translate, Predict, Generate text or other content, Summarize.

'Large Language Models', sometimes described in news, can be used in: **1. Creation of reimagined search engines, 2. Health care, 3. Software development, 4. Translating a language**

117. (b) The Protocol further categorizes direct and indirect emissions into three different scopes:

Scope 1	Direct emissions from sources owned or controlled by the company. These emissions include the combustion of fossil fuels, industrial processes, and transportation.
Scope 2	Indirect emissions from the generation of purchased energy. This includes the purchase of electricity, steam, heat, or cooling.
Scope 3	Indirect emissions that are a consequence of the company's activities but occur from sources not owned or controlled by it. These emissions are also known as the company's carbon footprint.

118. (a) 'Quantified Domestic Minimum Top-up Tax' is generally talked about in the context of **Global Anti-Base Erosion Rules**.

Anti-base erosion rules are designed to address concerns related to the shifting of profits to low-tax jurisdictions and the erosion of the tax base in higher-tax jurisdictions. Various international efforts, such as the Base Erosion and Profit Shifting (BEPS) project led by the Organisation for Economic Co-operation and Development (OECD), have been working on developing rules and guidelines to prevent such practices.

119. (b) Prowessdx is a database of financial data on Indian companies. It's a subset of the Prowess database, which is used by researchers and analysts to study Indian companies.

Prowessdx is designed for academics. It provides a time series of financial and market data since 1990. Prowessdx also provides standardized data on listed and unlisted companies.

120. (a) 'NSE Prime', sometimes mentioned in news, denotes a **high standard corporate governance initiative**.

NSE Prime is a framework that prescribes higher standards of corporate governance for listed companies than those required by regulations, the exchange said in a statement. Additional disclosure requirements have also been prescribed to provide for higher quality of public information and greater transparency.

UPSC EPFO SOLVED PAPER 2021

Recruitment of Enforcement Officers/Accounts Officers in Employees Provident Fund Organisation (EPFO)

DIRECTIONS : Each item in this section consists of a sentence with an underlined word followed by four words. Select the option that is opposite in meaning to the underlined word and mark your response in your Answer Sheet accordingly.

DIRECTIONS: Each of the following sentences in this section has a blank space and four words or group of words given after the sentence. Select the word or group of words you consider most appropriate for the blank space and indicate your response on the Answer Sheet accordingly.

6. It's time you went out and your own living.
(a) afforded (b) earned
(c) gained (d) won

7. The elephant fell into a the hunters had set.
(a) track (b) trap
(c) trick (d) trunk

8. The dress isn't really tight. It'll when you've worn it.
(a) bend (b) expand
(c) squeeze (d) stretch

9. With his back to the old man, he stood at the window, fists clenched, and his shoulders with his choked sobbing.
(a) shivered (b) shook
(c) vibrated (d) moved

DIRECTIONS : Each item in this section has a sentence with three underlined parts labelled (a), (b) and (c). Read each sentence to find out whether there is any error in any underlined part and indicate your response in the Answer Sheet against the corresponding letter i.e., (a) or (b) or (c). If you find no error, your response should be indicated as (d).

11. Neither the servants nor the clerk has done his
(a) (b) (c)
No error
(d)

12. The car which went past us
(a)
when we were driving on the highway
(b)
must have been doing at least a hundred miles
an hour
(c) No error
(d)

13. Raju will be back home in an year
(a) (b)
after his stay abroad No error
(c) (d)

14. I have much work to do. No error
(a) (b) (c) (d)

15. Psychology did not develop into a science
(a)
based of careful observation
(b)
and experimentation until the late 1800s.
(c)
No error
(d)