PUNJAB PUBLIC SERVICE COMMISSION

Objective Type Test (Apr-2022) for Recruitment to the post of Accountant in the Department of Housing and Urban Development, Government of Punjab

READ INSTRUCTIONS BEFORE FILLING ANY DETAILS OR ATTEMPTING TO ANSWER THE QUESTIONS.

Total Questions: 120
Time Allowed: 2 Hours

Candidate's Name _____

Father's Name _____

Date of Birth ☐☐ ☐☐ ☐☐☐☐

DD MM YYYY

OMR Response Sheet No. _____

Roll No. _____

Candidate's Signature **(Please sign in the box)**

Question Booklet Set	Booklet Series
A	

INSTRUCTIONS

1. The candidate shall NOT open this booklet till the time told to do so by the Invigilation Staff. However, in the meantime, the candidate can read these instructions carefully and subsequently fill the appropriate columns given above in CAPITAL letters. The candidate may also fill the relevant boxes out of 1 to 9 of the Optical Mark Reader (OMR) response sheet, supplied separately
2. Use only blue or black **ball point pen** to fill the relevant columns on this page as well as in OMR sheet. Use of Ink pen or any other pen is not allowed.
3. The candidate shall be liable for any adverse effect if the information given above is wrong or illegible or incomplete.
4. Each candidate is required to attempt 120 questions in 120 minutes, except for orthopedically/visually impaired candidates, who would be given 40 extra minutes, for marking correct responses on the OMR sheet.
5. The question paper booklet has 25 pages.
6. The candidates, when allowed to open the question paper booklet, must first check the entire booklet to confirm that the booklet has complete number of pages, the pages printed correctly and there are no blank pages. In case there is any such error in the question paper booklet then the candidate should IMMEDIATELY bring this fact to the notice of the Invigilation Staff and obtain a new booklet of the same series as given earlier.
7. The serial number of the new Question booklet if issued for some reason should be entered in the relevant column of the OMR. The Invigilation Staff must make necessary corrections in their record regarding the change in the serial no. of Question booklet.
8. The paper consists of total 300 Marks. Each question shall carry 2.5 marks. There are four options for each question and the candidate has to mark the MOST APPROPRIATE answer on the OMR response sheet.
9. There is no negative marking.
10. Use of Electronic/Manual Calculator is prohibited.
11. The candidate **MUST READ INSTRUCTIONS BEHIND THE OMR SHEET** before answering the Questions and check that two carbon copies attached to the OMR sheet are intact.

1. $\lim_{x \to 1} \frac{1}{1 - x}$ is equal to

   (a) 0

   (b) ∞

   (c) $-\infty$

   (d) does not exist

2. The positive numbers whose sum is 20 and their product is maximum are

   (a) 5, 15
   (b) 8, 12
   (c) 10, 10
   (d) 9, 11

3. The order of the differential equation $\left[1 + \left(\frac{d^3y}{dx^3}\right)^2\right]^{4/3} = \frac{d^2y}{dx^2}$ is given by

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

4. $\int \frac{e^{\tan^{-1} x}}{1 + x^2} dx$ is equal to

   (a) $\tan^{-1} x + c$

   (b) $e^{\tan^{-1} x} + c$

   (c) $\sec^{-1} x + c$

   (d) None of these

5. The series $1 + \frac{3}{2!} + \frac{5}{3!} + \frac{7}{4!} + \ldots$ is

   (a) convergent

   (b) divergent

   (c) not convergent

   (d) None of these

6. If $A = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$ then AB is

(a) unit matrix

(b) $\begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 0 & 0 \\ 1 & 1 \end{bmatrix}$

(d) Null matrix

7. If A is a square matrix of order 3×3, then the order of A^7 is

(a) 7×7
(b) 3×3
(c) 21×21
(d) Not defined

8. If the line $2x + ky = 1$ and $3y - x = 3$ are perpendicular then the value of *k* is

(a) $\frac{1}{2}$

(b) $\frac{2}{3}$

(c) $\frac{3}{2}$

(d) $\frac{1}{6}$

9. The centre and radius of the circle represented by the equation $x^2 + y^2 + 4x - 4y - 1 = 0$ are

(a) (2, –2) and 3

(b) (2, –2) and $\sqrt{7}$

(c) (–2, 2) and 3

(d) (2, –2) and $\sqrt{7}$

10. The sum of the series $\frac{2}{\pi}-\frac{4}{\pi^2}+\frac{8}{\pi^3}-$ ---- is

(a) $\frac{2}{\pi+2}$

(b) $\frac{2}{\pi-2}$

(c) $\frac{1}{\pi+2}$

(d) $\frac{1}{\pi-2}$

11. Which one of the following is correct?

(a) Curvature of a straight line is infinite

(b) The radius of curvature of a straight line is zero

(c) The curvature of a circle is constant

(d) The radius and radius of curvature of a circle are reciprocal

12. If the resultant of two perpendicular forces P and Q makes an angle 60^0 with P, then

(a) P = $\sqrt{3}$ Q

(b) Q = $\sqrt{3}$ P

(c) P = $\sqrt{2}$ Q

(d) Q = $\sqrt{2}$ P

13. Angular velocity of rotation of the earth about its axis is

(a) π/12 radian/hour

(b) π/6 radian/hour

(c) π/18 radian/hour

(d) π/24 radian/hour

14. Which of the following polynomial has zeros −4 and 5i

(a) $x^3-4x^2+25x-100$

(b) $x^3+4x^2+25x+100$

(c) $x^3+4x^2-25x-100$

(d) $x^3-4x^2-25x+100$

15. For the roots α, β of the polynomial $ax^2 + bx + c = 0$, where a, b, c ∈ R and a, b > 0, c < 0, the maximum value of $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$ is

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

16. If a straight line makes an angle of $\frac{\pi}{4}$ with the X and the Y -axis, then what angle does it make with the Z-axis?

(a) $\frac{\pi}{4}$
(b) $\frac{\pi}{2}$
(c) $\frac{\pi}{3}$
(d) $\frac{\pi}{6}$

17. Evaluate $\left(\sqrt{3} + i\right)^{2019}$

(a) $2019i$
(b) $-2019i$
(c) $2^{2019} i$
(d) $-2^{2019} i$

18. The radius and centre of the circle, which is described on the line joining the points (1, 2) and (2, 1) as diameter, are

(a) $\sqrt{2}$, (1/2, 1/2)
(b) $\frac{\sqrt{2}}{2}$, (3/2, 3/2)
(c) $\frac{\sqrt{2}}{2}$, $(-3/2, -3/2)$
(d) 2, $(-1/2, -1/2)$

19. A person X speaks truth 4 out of 5 times. A die is thrown. He reports that there is a six. What is the chance that there actually was a six?

(a) 4/5
(b) 4/9
(c) 1/2
(d) 1/4

20. What is the expectation of the number on a throw of a single dice?
(a) 3
(b) 6
(c) 7/2
(d) 7

21. When a good is taxed, tax burden mainly falls on consumers if:
(a) Tax is levied on consumers
(b) Tax is levied on producers
(c) Supply is inelastic, and demand is elastic
(d) Supply is elastic, and demand is inelastic

22. The Golden Rule of level of capital is that level of capital per worker which maximizes:

(a) Consumption
(b) Savings
(c) Investment
(d) Output

23. The first ministerial conference of WTO of 1996 was organised in:
(a) Geneva, Switzerland
(b) Singapore
(c) Seattle, USA
(d) Cancun, Mexico

24. Which of the following is not a tool of the monetary policy in India?
(a) Liquidity Adjustment Facility
(b) Marginal Standing Facility
(c) Market Stabilization Scheme
(d) External Commercial Borrowings

25. The Foreign Exchange Management Act (FEMA) was enacted in the year
(a) 2000
(b) 1999
(c) 1998
(d) 2001

26. Structural transformation of an economy is about
(a) Changing social conditions
(b) Shifting labour from low productivity sectors to high productivity sectors
(c) Changing structure of industries
(d) All of above

27. Laissez Faire is an economic policy propounded by
(a) Paul Sweezy
(b) Nicholas Kaldor
(c) Adam Smith
(d) Raghurajan

28. NNP (Net National Product) equals
(a) GNP - depreciation
(b) GNP – indirect taxes
(c) Consumer expenditure on durable goods
(d) Indirect business tax

29. The term 'Smart Money' is used for-
(a) Credit Card
(b) Internet Banking
(c) Cash with Bank
(d) Cash with Public

30. For how many years, Central government is supposed to compensate the loss of State governments due to GST?
(a) 3 years
(b) 4 years
(c) 5 years
(d) No compensation

31. At present, the base year for calculating Wholesale Price Index is -
(a) 2000-01
(b) 2002-03
(c) 2011-12
(d) 2005-06

32. What is full form of IHDI developed by UNDP?
(a) Indian Human Development Index
(b) Inequality Adjusted Human Development Index
(c) International Human Development Index
(d) Inequality of Human Development Index

33. Which among the following is not an Indirect Tax?
    (a) Service Tax
    (b) Custom Duty
    (c) Excise Duty
    (d) Corporation Tax

34. Mutual Funds are regulated in India by which among the following?
    (a) SEBI
    (b) RBI
    (c) RBI and SEBI both
    (d) Stock Exchanges

35. MUDRA (Micro Units Development Refinance Agency) Banks will
    (a) Provide finance to other banks and Micro Finance Institutions (MFIs), who in turn will do the lending activities
    (b) Primarily lend to SC/ST enterprises
    (c) Set up a branch in every district of the country by 2019 in order to promote financial inclusion
    (d) Primarily lend to enterprises being run by women

36. In the least square linear trend equation $Y = a + bX$, if b is positive, it indicates:
    (a) Declining trend
    (b) Rising trend
    (c) No trend at all
    (d) All of these

37. Cost of a firm's self-owned and self-employed resources are called:
    (a) Real cost
    (b) Implicit cost
    (c) Explicit cost
    (d) Opportunity cost

38. Stagflation occurs when
    (a) Price level increases and real GDP decreases
    (b) Price level decreases and real GDP increases
    (c) Price level and real GDP decrease at the same time
    (d) Price level and real GDP increase at the same time

39. If the elasticity of demand for imports is less than unity, then the value of:
    (a) Exports will increase
    (b) Imports will decrease
    (c) Exports will decrease
    (d) Imports will increase

40. Which of the following is NOT an item on capital account?

(a) Receipt of loan
(b) Payment of loan
(c) Payment of reciprocal amount of loan
(d) Interest and dividend

41. The geometric mean of 8, 9 and 24 is

(a) 4
(b) 9
(c) 12
(d) 24

42. The empirical relationship among AM, GM and HM is:

(a) $GM = (AM \times HM)^2$
(b) $(GM)^2 = AM \times HM$
(c) $(GM)^2 = (AM \times HM)^2$
(d) $GM = (AM)^2 \times (HM)^2$

43. Upper limit of class interval is considered for calculating

(a) Less than cumulative frequency
(b) More than cumulative frequency
(c) Quartile
(d) Median

44. The variance of *n* natural numbers is:

(a) $\frac{1}{6}(n^2 - 1)$
(b) $\frac{1}{6}(n^2 + 1)$
(c) $\frac{1}{12}(n^2 - 1)$
(d) $\frac{1}{12}(n^2 + 1)$

45. A graph plotted with the help of cumulative frequencies is called as

(a) Ogive
(b) Histogram
(c) Pie
(d) Bar diagram

46. As the number of observations and classes increase, the shape of the frequency polygon

(a) Remains unchanged
(b) Tend to become jumbled
(c) Tend to become smooth
(d) Tend to become straight

47. For a group of 100 candidates, the mean was found to be 40. Later on it was discovered that a value 45 was misread as 54. The correct mean is:

(a) 40.50
(b) 39.85
(c) 39.80
(d) 39.91

48. The mean of the distribution is 23, median is 24, and the mode is 25.5. It is most likely that this distribution is:

(a) Positively skewed
(b) Symmetrical
(c) Asymmetrical
(d) Negatively skewed

49. If a constant value 5 is subtracted from each observation of a set, the variance is:

(a) Reduced by 5
(b) Reduced by 25
(c) Unaltered
(d) Increased by 25

50. Which of the following statements about the correlation coefficient are true?

I. The correlation coefficient and the slope of the regression line may have opposite signs
II. A correlation of 1 indicates a perfect cause-and-effect relationship between the variables
III. Correlations of +0.87 and −0.87 indicate the same degree of clustering around the regression line

(a) I only
(b) II only
(c) III only
(d) I and II only

51. If Coefficient of variation is 75% and standard deviation is 15, then mean is
    (a) 10
    (b) 20
    (c) 30
    (d) 40

52. Regression coefficient is independent of the change of
    (a) Scale
    (b) Origin
    (c) Number of observation
    (d) Neither scale nor origin

53. Median can be determined graphically with the help of
    (a) Line diagram
    (b) Bar diagram
    (c) Histogram
    (d) Ogive

54. The harmonic mean of 3, 6 and 10 is:
    (a) 5.0
    (b) 6.5
    (c) 6.33
    (d) 4.5

55. The coefficient of quartile deviation is
    (a) $\frac{Q_3 + Q_1}{Q_3 - Q_1}$
    (b) $\frac{Q_3 - Q_1}{Q_3 + Q_1}$
    (c) $\frac{Q_3 + Q_2}{Q_3 - Q_2}$
    (d) $\frac{Q_2 + Q_1}{Q_2 - Q_1}$

56. Formula of mode for grouped data is
    (a) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 + l_1)$
    (b) $l_1 + \frac{f_1 + f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
    (c) $l_1 - \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
    (d) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

57. Weighted mean can be obtained with

(a) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 + n_2 + ... + n_k}$

(b) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 + X_2 + ... + X_k}$

(c) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 - n_2 - ... - n_k}$

(d) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 - X_2 - ... - X_k}$

58. The mean difference between 9 paired observations is 15.0 and the standard deviation of difference is 5.0. The value of statistic is:
    (a) 27
    (b) 9
    (c) 3
    (d) Zero

59. A coin is tossed six times. The probability of obtaining heads and tails alternatively is:
    (a) 1/2
    (b) 1/8
    (c) 1/32
    (d) 1/64

60. If the group indices are 80, 120 and 125 and their respective group weights are 60, 20 and 20, the consumer price index is:
    (a) 108.33
    (b) 97.00
    (c) 98.49
    (d) 104.66

61. In case of disclosure of accounting policies, the following fundamental assumptions may not be required to be stated if they are followed in preparation of final accounts of a company.
    1) Materiality and accounting period
    2) Going concern and consistency
    3) Accrual basis of accounting
    4) Conservatism and accounting period

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

62. In case the depreciable assets are revalued, the provision for depreciation is based upon

(a) The revalued amount on the estimate of the remaining useful life of such assets
(b) Original cost of assets
(c) Depreciated value of assets
(d) AS-10 is silent in this regard

63. Which of the following cannot be treated as revenue expenditure?

(a) Cost of goods purchase for resale
(b) Wages paid for the erection of plant and machinery
(c) Obsolescence cost
(d) Expenses incurred by way of repairs of existing assets which do not in any way add to their earning capacity

64. Match list I (items of Expenditure and Receipt) with List II (nature of Expenditure and receipt) and select the correct answer using the codes given below:-

	List I	List II
A.	Premium paid for a lease property	I. Revenue expenditure
B.	Insurance premium paid for a risk against accidental losses of properties (fixed assets)	II. Capital Receipt
C.	Amount realized from the sale of securities (investments) purchased earlier	III Deferred revenue expenditure
D.	Huge sales promotional expenditure	IV. Capital expenditure

Codes

	A	B	C	D
(a)	IV	II	I	III
(b)	III	II	I	IV
(c)	IV	I	II	III
(d)	III	I	II	IV

65. Which of the following is a deferred revenue expenditure?

(a) Legal expenses incurred on the purchase of land
(b) Expenses on a mega advertisement campaign while launching a new product
(c) Expenses incurred on installation of a new machine
(d) Wages paid for construction of an additional room in the building

66. Match list I with List II and select the correct answer using the codes given below –

	List I (Items)	List II (Heading)
A.	Preliminary expenses	I. Current assets
B.	Unclaimed dividend	II. Loan and advances
C.	Bills Receivable	III. Current liabilities
D.	Loose tools	IV. Miscellaneous Expenditure

Codes

	A	B	C	D
(a)	IV	III	II	I
(b)	I	II	III	IV
(c)	IV	III	I	II
(d)	II	I	IV	III

67. What does the 'net worth' of a company signifies?

(a) Total assets
(b) Total assets – Total liabilities
(c) Total Fixed Assets – Current assets
(d) Total assets – Total outside liabilities

68. 'A' and 'B' who are partners share profits in the ratio of 7:3, 'C' is admitted as a new partner. 'A' surrenders 1/7 of his share and 'B' surrenders 1/3 of his share in favor of 'C'. The new profit sharing ratio will be

(a) 3:1:1
(b) 4:1:1
(c) 3:2:2
(d) None of the above

69. X, Y and Z have been sharing profit and loss in the ratio of 3:2:1. Z retires. His share is taken over by X and Y in the ratio of 2:1. The new profit sharing ratio will be

(a) 3:2
(b) 1:1
(c) 11:7
(d) 2:1

70. As per SEBI guidelines, the amount of premium on issue of shares is decided by -

(a) Company law Board

(b) Board of directors

(c) Registrar of companies

(d) Shareholders

71. A company forfeited 700 shares of Rs. 10 each, on which Rs. 5 per share were paid. Of these, 200 shares were reissued at Rs. 9 per share. Amount from share forfeited to capital reserve account will be transferred

(a) Rs. 800

(b) Rs. 200

(c) Rs. 3500

(d) Rs. 2500

72. Match the items of List – I with those of List – II and choose the correct code :

List – I	List – II
A. Provision for taxation	i. Current Assets
B. Live-stock	ii. Unsecured loans
C. Sundry Debtors	iii. Fixed Assets
D. Interest accrued on unsecured loans	iv. Provisions

Codes :

	A	B	C	D
(a)	ii	i	iii	iv
(b)	iv	iii	i	ii
(c)	iii	ii	i	iv
(d)	iv	iii	ii	i

73. Intrinsic value of a share is given by

(a) Total net assets/No. of shares
(b) Total assets/No. of shares
(c) Share capital/No. of shares
(d) Market capitalisation/No. of shares

74. The basic difference between a static budget and flexible budget is that:

(a) A flexible budget considers only variable costs but a static budget considers all costs

(b) Flexible budgets allow management latitude in meeting goals, whereas static budget is based on fixed standards

(c) A flexible budget is applicable for a single department only but a static budget for entire production facility

(d) A flexible budget can be prepared for any production level within a relevant range but a static budget is based on one specific level of production

75. Profit volume ratio of an enterprise is 40%. To offset 10% decrease in selling price, how much sales must be increased?

(a) 10%
(b) 20%
(c) 25%
(d) 40%

76. The components of consolidated financial statements includes

I. Consolidated balance sheet

II. Consolidated statement of profit and loss

III. Notes and other statements and explanatory material forming part of financial statements.

IV. Balance sheet

V. Cash flow statement

Identify the correct code

(a) I,II and III
(b) I,II
(c) I,II and V
(d) I,II,III and V

77. Profit volume ratio can be improved by:

(a) Reducing variable cost
(b) Reducing the selling price
(c) Increasing the fixed cost
(d) Increasing the key factor

78. Expenditure incurred by a publisher for acquiring copyright is a _____

(a) Deferred revenue expenditure
(b) Capital expenditure
(c) Revenue expenditure
(d) Assets

79. If profits are 25% of selling price, what is the percentage of profit to cost?

(a) 20%
(b) 25%
(c) 30%
(d) 33.33%

80. Given that current liabilities are at Rs. 300,000, current ratio is 3:1 and quick ratio is 1:1, the value of stock will be:

(a) Rs. 600,000
(b) Rs. 1,600,000
(c) Rs. 900,000
(d) Rs. 12, 00,000

81. Pointing towards a woman in picture, Sarita said "She is mother of Neha whose father is my son". How is Sarita related to the woman in the picture?

(a) Mother in law
(b) Cousin
(c) Mother
(d) Grandmother

82. A student attempts an examination of X number of questions. He answers 15 correctly out of first 20 questions and of the remaining questions, he answers 1/3 correctly. If all the questions have the same credit and the student gets 50 % marks, then find X.

(a) 25
(b) 50
(c) 70
(d) Can't be calculated

83. ASSERTION (A): Glass tumbler breaks in winter when hot water is poured into it.
REASON (R): When hot water is poured, the outer surface of glass expands.

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

84. Which is the smallest fraction 6/11, 13/18, 15/22, 19/36, 5/6?

(a) 6/11
(b) 13/18
(c) 15/22
(d) 19/36

85. The percentage increase in area of rectangle, if each of its side is increased by 30% is

(a) 90%
(b) 69%
(c) 60%
(d) 30%

86. A boat whose speed is 15 km/hr in still water goes 30 km downstream and comes back in total of 4 hr 30 min. The speed of stream is

(a) 4 km/hr
(b) 5 km/hr
(c) 6 km/hr
(d) 7 km/hr

87. If a flash light flashes every 10 seconds, how many times will it flash in ¾ of an hour?

(a) 270
(b) 271
(c) 272
(d) 273

88. In how many ways can the letters of word KEYBOARD be arranged in such a way that vowels always remain together?

(a) 4320
(b) 4330
(c) 720
(d) 2156

89. Five persons fire bullets at a target at an interval of 6, 7, 8, 9 and 12 seconds respectively. The number of times they would fire the bullets together at the target in an hour is

(a) 6
(b) 7
(c) 8
(d) 9

90. Four persons A, B, C and D have a total of ₹ 100. A and B have in total as much money as C and D have in total, but A has more money than B; and C has only half the money that D has. A has in fact ₹ 5 more than D has. Who has the maximum amount of money?

(a) A
(b) B
(c) C
(d) D

91. In a garrison, there was food for 100 soldiers for one month. After 10 days, 100 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?

(a) 25 days
(b) 20 days
(c) 15 days
(d) 10 days

92. If POND is coded as RSTL, how is HEAR written in that code?

(a) GHIJ
(b) GHIZ
(c) JIGZ
(d) JCLZ

Directions: (Question Nos. 93 to 97) Study the following information carefully to answer the given questions : Madan and Rohit are in the same team of hockey. Parth defeated Rohit in badminton but lost to Sachin in tennis. Nitin teams with Sagar in football and with Sachin in hockey. Rohit defeated Sachin in chess. Those who play cricket do not play badminton, volleyball or tennis. Madan and Parth are in opposite teams of basketball. Nitin represents his state in cricket while Sagar does so at the district level. Boys who play chess do not play football, basketball or volleyball. Madan and Parth are together in the volleyball team. Boys who play football also play hockey.

93. Name the boys who do not play football.
(a) Sachin, Nitin
(b) Rohit, Sagar
(c) Rohit, Sachin
(d) Rohit, Nitin

94. Who plays both hockey and tennis?
(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

95. Which is the most popular game with this group?

(a) Cricket
(b) Hockey
(c) Football
(d) Badminton

96. Who plays the largest number of games?

(a) Sagar
(b) Rohit
(c) Parth
(d) Nitin

97. Which boy plays both badminton and hockey?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

98. Kunal walks 10 km towards North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point?

(a) 5 km West
(b) 5 km North-east
(c) 7 km East
(d) 7 km West

99. In a row of boys, A is fifteenth from the left and B is fourth from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th
(b) 10^{th}
(c) 12^{th}
(d) 13^{th}

100. If '–' stands for 'division', '+' for 'multiplication', '÷' for 'subtraction' and 'x' for 'addition', then which one of the following equations is correct?

(a) 4 x 5 + 9 – 3 ÷ 4 = 15
(b) 4 x 5 x 9 + 3 ÷ 4 = 11
(c) 4 – 5 ÷ 9 x 3 – 4 = 17
(d) 4 ÷ 5 + 9 – 3 + 4 = 18

101. Who is considered as father of local self-government in India?

(a) Lord Mayo
(b) Lord Ripon
(c) Lord Montague
(d) Lord Morley

102. The battle of Mudki was fought between the forces of

(a) Sikhs and Mughals
(b) Maharaja Ranjit Singh and Afghans
(c) East India Company and Sikhs
(d) None of the above

103. Bhagat Singh and his friends decided to take revenge from the person who had lathi charged Lala Lajpat Rai. Who was he?

(a) James A. Scott
(b) John P. Saunders
(c) Reginald Dyer
(d) None of the above

104. Who among the following architects designed Chandigarh?

(a) Le Corbusier
(b) Pierre Jeanneret
(c) John Lockwood Kipling
(d) Edwin Lutyens

105. Rajkumari coaching scheme is named after

(a) Mohinder Kaur
(b) Amrita Shergill
(c) Sophia Duleep Singh
(d) Amrit Kaur

106. Which one of the following river is not west flowing river?

(a) Bhadra
(b) Purna
(c) Ulhas
(d) Yeleru

107. Hpungan Pass lying at an altitude of 3072 m is an important link between which of the following countries?

(a) India and Bangladesh
(b) India and Myanmar
(c) India and Nepal
(d) India and China

108. Match the following;

International Boundary	**Countries**
A. Rad Cliffe line	1.France-Germany
B. McMahon line	2.India-China
C. Durand line	3.India-Pakistan
D. Siegfried line	4.Pakistan-Afganistan

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

109. When was the National Monetisation Pipeline launched?

(a) June, 2021
(b) July, 2021
(c) August, 2021
(d) September, 2021

110. Which of the following state is bound by Bay of Bengal in the east and state of Karnataka in the west?

(a) Telangana
(b) Orissa
(c) Tamil Nadu
(d) Andhra Pradesh

111. The largest glacier in the world is the
(a) Siachen glacier
(b) Eismeer glacier
(c) Lambert fisher glacier
(d) Petermanns glacier

112. With reference to Agni-IV Missile, which of the following statements is/are correct?
1) It is a surface-to-surface missile.
2) It is fuelled by liquid propellant only
3) It can deliver one-tonne nuclear warheads about 7500 km away.
Select the correct answer using the codes given below

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

113. “Project Loon” is associated with
(a) Waste management technology
(b) Wireless communication Technology
(c) Solar power Technology
(d) Water conservation Technology

114. The concept of vaccination was first developed by
(a) Louis Pasteur
(b) Edward Jenner
(c) Carl Landsteiner
(d) Joseph Miester

115. World’s first Wood Satellite WISA Woodsat was launched by
(a) Finland
(b) China
(c) Russia
(d) New Zealand

116. Consider the following statements:

1) Food Safety and Standards Authority of India (FSSAI) restricted the permissible amount of industrial Trans Fatty Acid (TFA) in food products to 3 per cent from January 01, 2022
2) The permissible amount of industrial Trans Fatty Acid (TFA) in food products till 2021 was 5 percent as per Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2021
3) Industrial Trans Fatty Acids, a sub category of unsaturated fatty acids, are processed artificially via a method known as hydrogenation
4) Trans fats are associated with increased risk of heart attacks and death from coronary heart disease

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

117. Consider the following statements:

1) Bharat Dynamics Limited (BDL) was given the deal for supplying MILAN-2T anti tank guided missiles by Ministry of Defense recently
2) The headquarters of Bharat Dynamics Limited is located in Visakhapatnam, Andhra Pradesh
3) Commodore Siddharth Mishra (Retd) is the current Chairman and Managing Director of Bharat Dynamics Limited

Which of the above statement/s is correct?

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

118. Consider the following statements:

1) ICC Men's T20 World Cup 2021 was held in India as BCCI hosted the event
2) Australia won the T20 World Cup title by defeating New Zealand in the final by 8 wickets

Which of the above statements are correct?

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

119. Which of the following cities has been adjudged as the cleanest city of India for the fifth consecutive year under Swachh Survekshan Awards, 2021?

(a) Surat
(b) Vijayawada
(c) Chandigarh
(d) Indore

120. Consider the following statements:

1) The Chief Economic Advisor (CEA) heads the Economic Division under the Department of Economic Affairs (DEA)
2) The Economic Division examines domestic and international economic trends
3) The Office of the Economic Advisor (OEA) is an attached office of the Ministry of Finance
4) The Chief Economic Advisor (CEA) reports directly to the Ministry of Commerce & Industry

Which of the statements given above are correct?

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

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Space for Rough Work

PUNJAB PUBLIC SERVICE COMMISSION

Objective Type Test (Apr-2022) for Recruitment to the post of Accountant in the Department of Housing and Urban Development, Government of Punjab

READ INSTRUCTIONS BEFORE FILLING ANY DETAILS OR ATTEMPTING TO ANSWER THE QUESTIONS.

Total Questions: 120
Time Allowed: 2 Hours

Candidate's Name _____

Father's Name _____

Date of Birth ☐☐ ☐☐ ☐☐☐☐
DD MM YYYY

OMR Response Sheet No. _____

Roll No. _____

Candidate's Signature **(Please sign in the box)**

Question Booklet Set	Booklet Series
B	

INSTRUCTIONS

1. The candidate shall NOT open this booklet till the time told to do so by the Invigilation Staff. However, in the meantime, the candidate can read these instructions carefully and subsequently fill the appropriate columns given above in CAPITAL letters. The candidate may also fill the relevant boxes out of 1 to 9 of the Optical Mark Reader (OMR) response sheet, supplied separately.
2. Use only blue or black **ball point pen** to fill the relevant columns on this page as well as in OMR sheet. Use of Ink pen or any other pen is not allowed.
3. The candidate shall be liable for any adverse effect if the information given above is wrong or illegible or incomplete.
4. Each candidate is required to attempt 120 questions in 120 minutes, except for orthopedically/visually impaired candidates, who would be given 40 extra minutes, for marking correct responses on the OMR sheet.
5. The question paper booklet has 25 pages.
6. The candidates, when allowed to open the question paper booklet, must first check the entire booklet to confirm that the booklet has complete number of pages, the pages printed correctly and there are no blank pages. In case there is any such error in the question paper booklet then the candidate should IMMEDIATELY bring this fact to the notice of the Invigilation Staff and obtain a new booklet of the same series as given earlier.
7. The serial number of the new Question booklet if issued for some reason should be entered in the relevant column of the OMR. The Invigilation Staff must make necessary corrections in their record regarding the change in the serial no. of Question booklet.
8. The paper consists of total 300 Marks. Each question shall carry 2.5 marks. There are four options for each question and the candidate has to mark the MOST APPROPRIATE answer on the OMR response sheet.
9. There is no negative marking.
10. Use of Electronic/Manual Calculator is prohibited.
11. The candidate **MUST READ INSTRUCTIONS BEHIND THE OMR SHEET** before answering the Questions and check that two carbon copies attached to the OMR sheet are intact.

1. When a good is taxed, tax burden mainly falls on consumers if:
   (a) Tax is levied on consumers
   (b) Tax is levied on producers
   (c) Supply is inelastic, and demand is elastic
   (d) Supply is elastic, and demand is inelastic

2. The Golden Rule of level of capital is that level of capital per worker which maximizes:

   (a) Consumption
   (b) Savings
   (c) Investment
   (d) Output

3. The first ministerial conference of WTO of 1996 was organised in:
   (a) Geneva, Switzerland
   (b) Singapore
   (c) Seattle, USA
   (d) Cancun, Mexico

4. Which of the following is not a tool of the monetary policy in India?
   (a) Liquidity Adjustment Facility
   (b) Marginal Standing Facility
   (c) Market Stabilization Scheme
   (d) External Commercial Borrowings

5. The Foreign Exchange Management Act (FEMA) was enacted in the year
   (a) 2000
   (b) 1999
   (c) 1998
   (d) 2001

6. Structural transformation of an economy is about
   (a) Changing social conditions
   (b) Shifting labour from low productivity sectors to high productivity sectors
   (c) Changing structure of industries
   (d) All of above

7. Laissez Faire is an economic policy propounded by
   (a) Paul Sweezy
   (b)Nicholas Kaldor
   (c) Adam Smith
   (d) Raghurajan

8. NNP (Net National Product) equals
   (a) GNP - depreciation
   (b) GNP – indirect taxes
   (c) Consumer expenditure on durable goods
   (d) Indirect business tax

9. The term 'Smart Money' is used for-
   (a) Credit Card
   (b) Internet Banking
   (c) Cash with Bank
   (d) Cash with Public

10. For how many years, Central government is supposed to compensate the loss of State governments due to GST?
   (a) 3 years
   (b) 4 years
   (c) 5 years
   (d) No compensation

11. At present, the base year for calculating Wholesale Price Index is -
   (a) 2000-01
   (b) 2002-03
   (c) 2011-12
   (d) 2005-06

12. What is full form of IHDI developed by UNDP?
   (a) Indian Human Development Index
   (b) Inequality Adjusted Human Development Index
   (c) International Human Development Index
   (d) Inequality of Human Development Index

13. Which among the following is not an Indirect Tax?
   (a) Service Tax
   (b) Custom Duty
   (c) Excise Duty
   (d) Corporation Tax

14. Mutual Funds are regulated in India by which among the following?
   (a) SEBI
   (b) RBI
   (c) RBI and SEBI both
   (d) Stock Exchanges

15. MUDRA (Micro Units Development Refinance Agency) Banks will
    (a) Provide finance to other banks and Micro Finance Institutions (MFIs), who in turn will do the lending activities
    (b) Primarily lend to SC/ST enterprises
    (c) Set up a branch in every district of the country by 2019 in order to promote financial inclusion
    (d) Primarily lend to enterprises being run by women

16. In the least square linear trend equation Y = a + bX, if b is positive, it indicates:
    (a) Declining trend
    (b) Rising trend
    (c) No trend at all
    (d) All of these

17. Cost of a firm's self-owned and self-employed resources are called:
    (a) Real cost
    (b) Implicit cost
    (c) Explicit cost
    (d) Opportunity cost

18. Stagflation occurs when
    (a) Price level increases and real GDP decreases
    (b) Price level decreases and real GDP increases
    (c) Price level and real GDP decrease at the same time
    (d) Price level and real GDP increase at the same time

19. If the elasticity of demand for imports is less than unity, then the value of:
    (a) Exports will increase
    (b) Imports will decrease
    (c) Exports will decrease
    (d) Imports will increase

20. Which of the following is NOT an item on capital account?
    (a) Receipt of loan
    (b) Payment of loan
    (c) Payment of reciprocal amount of loan
    (d) Interest and dividend

21. The geometric mean of 8, 9 and 24 is

    (a) 4
    (b) 9
    (c) 12
    (d) 24

22. The empirical relationship among AM, GM and HM is:

(a) $GM = (AM \times HM)^2$

(b) $(GM)^2 = AM \times HM$

(c) $(GM)^2 = (AM \times HM)^2$

(d) $GM = (AM)^2 \times (HM)^2$

23. Upper limit of class interval is considered for calculating

(a) Less than cumulative frequency
(b) More than cumulative frequency
(c) Quartile
(d) Median

24. The variance of *n* natural numbers is:

(a) $\frac{1}{6}(n^2 - 1)$

(b) $\frac{1}{6}(n^2 + 1)$

(c) $\frac{1}{12}(n^2 - 1)$

(d) $\frac{1}{12}(n^2 + 1)$

25. A graph plotted with the help of cumulative frequencies is called as

(a) Ogive
(b) Histogram
(c) Pie
(d) Bar diagram

26. As the number of observations and classes increase, the shape of the frequency polygon

(a) Remains unchanged
(b) Tend to become jumbled
(c) Tend to become smooth
(d) Tend to become straight

27. For a group of 100 candidates, the mean was found to be 40. Later on it was discovered that a value 45 was misread as 54. The correct mean is:

(a) 40.50
(b) 39.85
(c) 39.80
(d) 39.91

28. The mean of the distribution is 23, median is 24, and the mode is 25.5. It is most likely that this distribution is:
    (a) Positively skewed
    (b) Symmetrical
    (c) Asymmetrical
    (d) Negatively skewed

29. If a constant value 5 is subtracted from each observation of a set, the variance is:
    (a) Reduced by 5
    (b) Reduced by 25
    (c) Unaltered
    (d) Increased by 25

30. Which of the following statements about the correlation coefficient are true?

    I. The correlation coefficient and the slope of the regression line may have opposite signs
    II. A correlation of 1 indicates a perfect cause-and-effect relationship between the variables
    III. Correlations of +0.87 and −0.87 indicate the same degree of clustering around the regression line
    (a) I only
    (b) II only
    (c) III only
    (d) I and II only

31. If Coefficient of variation is 75% and standard deviation is 15, then mean is
    (a) 10
    (b) 20
    (c) 30
    (d) 40

32. Regression coefficient is independent of the change of
    (a) Scale
    (b) Origin
    (c) Number of observation
    (d) Neither scale nor origin

33. Median can be determined graphically with the help of
    (a) Line diagram
    (b) Bar diagram
    (c) Histogram
    (d) Ogive

34. The harmonic mean of 3, 6 and 10 is:

(a) 5.0
(b) 6.5
(c) 6.33
(d) 4.5

35. The coefficient of quartile deviation is

(a) $\frac{Q_3 + Q_1}{Q_3 - Q_1}$
(b) $\frac{Q_3 - Q_1}{Q_3 + Q_1}$
(c) $\frac{Q_3 + Q_2}{Q_3 - Q_2}$
(d) $\frac{Q_2 + Q_1}{Q_2 - Q_1}$

36. Formula of mode for grouped data is

(a) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 + l_1)$
(b) $l_1 + \frac{f_1 + f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
(c) $l_1 - \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
(d) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

37. Weighted mean can be obtained with

(a) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 + n_2 + ... + n_k}$
(b) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 + X_2 + ... + X_k}$
(c) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 - n_2 - ... - n_k}$
(d) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 - X_2 - ... - X_k}$

38. The mean difference between 9 paired observations is 15.0 and the standard deviation of difference is 5.0. The value of statistic is:

(a) 27
(b) 9
(c) 3
(d) Zero

39. A coin is tossed six times. The probability of obtaining heads and tails alternatively is:

(a) 1/2
(b) 1/8
(c) 1/32
(d) 1/64

40. If the group indices are 80, 120 and 125 and their respective group weights are 60, 20 and 20, the consumer price index is:

(a) 108.33
(b) 97.00
(c) 98.49
(d) 104.66

41. In case of disclosure of accounting policies, the following fundamental assumptions may not be required to be stated if they are followed in preparation of final accounts of a company.

1) Materiality and accounting period
2) Going concern and consistency
3) Accrual basis of accounting
4) Conservatism and accounting period

Select the correct answer using the codes given below

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

42. In case the depreciable assets are revalued, the provision for depreciation is based upon

(a) The revalued amount on the estimate of the remaining useful life of such assets
(b) Original cost of assets
(c) Depreciated value of assets
(d) AS-10 is silent in this regard

43. Which of the following cannot be treated as revenue expenditure?

(a) Cost of goods purchase for resale
(b) Wages paid for the erection of plant and machinery
(c) Obsolescence cost
(d) Expenses incurred by way of repairs of existing assets which do not in any way add to their earning capacity

44. Match list I (items of Expenditure and Receipt) with List II (nature of Expenditure and receipt) and select the correct answer using the codes given below:-

	List I	List II
A.	Premium paid for a lease property	I. Revenue expenditure
B.	Insurance premium paid for a risk against accidental losses of properties (fixed assets)	II. Capital Receipt
C.	Amount realized from the sale of securities (investments) purchased earlier	III Deferred revenue expenditure
D.	Huge sales promotional expenditure	IV. Capital expenditure

Codes

	A	B	C	D
(a)	IV	II	I	III
(b)	III	II	I	IV
(c)	IV	I	II	III
(d)	III	I	II	IV

45. Which of the following is a deferred revenue expenditure?

(a) Legal expenses incurred on the purchase of land
(b) Expenses on a mega advertisement campaign while launching a new product
(c) Expenses incurred on installation of a new machine
(d) Wages paid for construction of an additional room in the building

46. Match list I with List II and select the correct answer using the codes given below –

	List I (Items)	List II (Heading)
A.	Preliminary expenses	I. Current assets
B.	Unclaimed dividend	II. Loan and advances
C.	Bills Receivable	III. Current liabilities
D.	Loose tools	IV. Miscellaneous Expenditure

Codes

	A	B	C	D
(a)	IV	III	II	I
(b)	I	II	III	IV
(c)	IV	III	I	II
(d)	II	I	IV	III

47. What does the 'net worth' of a company signifies?
    (a) Total assets
    (b) Total assets – Total liabilities
    (c) Total Fixed Assets – Current assets
    (d) Total assets – Total outside liabilities

48. 'A' and 'B' who are partners share profits in the ratio of 7:3, 'C' is admitted as a new partner. 'A' surrenders 1/7 of his share and 'B' surrenders 1/3 of his share in favor of 'C'. The new profit sharing ratio will be
    (a) 3:1:1
    (b) 4:1:1
    (c) 3:2:2
    (d) None of the above

49. X, Y and Z have been sharing profit and loss in the ratio of 3:2:1. Z retires. His share is taken over by X and Y in the ratio of 2:1. The new profit sharing ratio will be
    (a) 3:2
    (b) 1:1
    (c) 11:7
    (d) 2:1

50. As per SEBI guidelines, the amount of premium on issue of shares is decided by -
    (a) Company law Board
    (b) Board of directors
    (c) Registrar of companies
    (d) Shareholders

51. A company forfeited 700 shares of Rs. 10 each, on which Rs. 5 per share were paid. Of these, 200 shares were reissued at Rs. 9 per share. Amount from share forfeited to capital reserve account will be transferred
    (a) Rs. 800
    (b) Rs. 200
    (c) Rs. 3500
    (d) Rs. 2500

52. Match the items of List – I with those of List – II and choose the correct code :

List – I	List – II
A. Provision for taxation	i. Current Assets
B. Live-stock	ii. Unsecured loans
C. Sundry Debtors	iii. Fixed Assets
D. Interest accrued on unsecured loans	iv. Provisions

Codes :

	A	B	C	D
(a)	ii	i	iii	iv
(b)	iv	iii	i	ii
(c)	iii	ii	i	iv
(d)	iv	iii	ii	i

53. Intrinsic value of a share is given by

(a) Total net assets/No. of shares
(b) Total assets/No. of shares
(c) Share capital/No. of shares
(d) Market capitalisation/No. of shares

54. The basic difference between a static budget and flexible budget is that:

(a) A flexible budget considers only variable costs but a static budget considers all costs

(b) Flexible budgets allow management latitude in meeting goals, whereas static budget is based on fixed standards

(c) A flexible budget is applicable for a single department only but a static budget for entire production facility

(d) A flexible budget can be prepared for any production level within a relevant range but a static budget is based on one specific level of production

55. Profit volume ratio of an enterprise is 40%. To offset 10% decrease in selling price, how much sales must be increased?

(a) 10%
(b) 20%
(c) 25%
(d) 40%

56. The components of consolidated financial statements includes

I. Consolidated balance sheet

II. Consolidated statement of profit and loss

III. Notes and other statements and explanatory material forming part of financial statements.

IV. Balance sheet

V. Cash flow statement

Identify the correct code

(a) I,II and III
(b) I,II
(c) I,II and V
(d) I,II,III and V

57. Profit volume ratio can be improved by:
(a) Reducing variable cost
(b) Reducing the selling price
(c) Increasing the fixed cost
(d) Increasing the key factor

58. Expenditure incurred by a publisher for acquiring copyright is a _____
(a) Deferred revenue expenditure
(b) Capital expenditure
(c) Revenue expenditure
(d) Assets

59. If profits are 25% of selling price, what is the percentage of profit to cost?
(a) 20%
(b) 25%
(c) 30%
(d) 33.33%

60. Given that current liabilities are at Rs. 300,000, current ratio is 3:1 and quick ratio is 1:1, the value of stock will be:
(a) Rs. 600,000
(b) Rs. 1,600,000
(c) Rs. 900,000
(d) Rs. 12, 00,000

61. Pointing towards a woman in picture, Sarita said “She is mother of Neha whose father is my son”. How is Sarita related to the woman in the picture?

(a) Mother in law
(b) Cousin
(c) Mother
(d) Grandmother

62. A student attempts an examination of X number of questions. He answers 15 correctly out of first 20 questions and of the remaining questions, he answers 1/3 correctly. If all the questions have the same credit and the student gets 50 % marks, then find X.

(a) 25
(b) 50
(c) 70
(d) Can’t be calculated

63. ASSERTION (A): Glass tumbler breaks in winter when hot water is poured into it.
REASON (R): When hot water is poured, the outer surface of glass expands.

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

64. Which is the smallest fraction 6/11, 13/18, 15/22, 19/36, 5/6?

(a) 6/11
(b) 13/18
(c) 15/22
(d) 19/36

65. The percentage increase in area of rectangle, if each of its side is increased by 30% is

(a) 90%
(b) 69%
(c) 60%
(d) 30%

66. A boat whose speed is 15 km/hr in still water goes 30 km downstream and comes back in total of 4 hr 30 min. The speed of stream is

(a) 4 km/hr
(b) 5 km/hr
(c) 6 km/hr
(d) 7 km/hr

67. If a flash light flashes every 10 seconds, how many times will it flash in ¾ of an hour?

(a) 270
(b) 271
(c) 272
(d) 273

68. In how many ways can the letters of word KEYBOARD be arranged in such a way that vowels always remain together?

(a) 4320
(b) 4330
(c) 720
(d) 2156

69. Five persons fire bullets at a target at an interval of 6, 7, 8, 9 and 12 seconds respectively. The number of times they would fire the bullets together at the target in an hour is

(a) 6
(b) 7
(c) 8
(d) 9

70. Four persons A, B, C and D have a total of ₹ 100. A and B have in total as much money as C and D have in total, but A has more money than B; and C has only half the money that D has. A has in fact ₹ 5 more than D has. Who has the maximum amount of money?

(a) A
(b) B
(c) C
(d) D

71. In a garrison, there was food for 100 soldiers for one month. After 10 days, 100 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?

(a) 25 days
(b) 20 days
(c) 15 days
(d) 10 days

72. If POND is coded as RSTL, how is HEAR written in that code?

(a) GHIJ
(b) GHIZ
(c) JIGZ
(d) JCLZ

Directions: (Question Nos. 73 to 77) Study the following information carefully to answer the given questions : Madan and Rohit are in the same team of hockey. Parth defeated Rohit in badminton but lost to Sachin in tennis. Nitin teams with Sagar in football and with Sachin in hockey. Rohit defeated Sachin in chess. Those who play cricket do not play badminton, volleyball or tennis. Madan and Parth are in opposite teams of basketball. Nitin represents his state in cricket while Sagar does so at the district level. Boys who play chess do not play football, basketball or volleyball. Madan and Parth are together in the volleyball team. Boys who play football also play hockey.

73. Name the boys who do not play football.

(a) Sachin, Nitin
(b) Rohit, Sagar
(c) Rohit, Sachin
(d) Rohit, Nitin

74. Who plays both hockey and tennis?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

75. Which is the most popular game with this group?

(a) Cricket
(b) Hockey
(c) Football
(d) Badminton

76. Who plays the largest number of games?

(a) Sagar
(b) Rohit
(c) Parth
(d) Nitin

77. Which boy plays both badminton and hockey?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

78. Kunal walks 10 km towards North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point?

(a) 5 km West
(b) 5 km North-east
(c) 7 km East
(d) 7 km West

79. In a row of boys, A is fifteenth from the left and B is fourth from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th
(b) 10^{th}
(c) 12^{th}
(d) 13^{th}

80. If '–' stands for 'division', '+' for 'multiplication', '÷' for 'subtraction' and 'x' for 'addition', then which one of the following equations is correct?

(a) 4 x 5 + 9 – 3 ÷ 4 = 15
(b) 4 x 5 x 9 + 3 ÷ 4 = 11
(c) 4 – 5 ÷ 9 x 3 – 4 = 17
(d) 4 ÷ 5 + 9 – 3 + 4 = 18

81. Who is considered as father of local self-government in India?

(a) Lord Mayo
(b) Lord Ripon
(c) Lord Montague
(d) Lord Morley

82. The battle of Mudki was fought between the forces of

(a) Sikhs and Mughals
(b) Maharaja Ranjit Singh and Afghans
(c) East India Company and Sikhs
(d) None of the above

83. Bhagat Singh and his friends decided to take revenge from the person who had lathi charged Lala Lajpat Rai. Who was he?

(a) James A. Scott
(b) John P. Saunders
(c) Reginald Dyer
(d) None of the above

84. Who among the following architects designed Chandigarh?

(a) Le Corbusier
(b) Pierre Jeanneret
(c) John Lockwood Kipling
(d) Edwin Lutyens

85. Rajkumari coaching scheme is named after

(a) Mohinder Kaur
(b) Amrita Shergill
(c) Sophia Duleep Singh
(d) Amrit Kaur

86. Which one of the following river is not west flowing river?

(a) Bhadra
(b) Purna
(c) Ulhas
(d) Yeleru

87. Hpungan Pass lying at an altitude of 3072 m is an important link between which of the following countries?

(a)India and Bangladesh
(b)India and Myanmar
(c)India and Nepal
(d)India and China

88. Match the following;

International Boundary	**Countries**
A. Rad Cliffe line	1.France-Germany
B. McMahon line	2.India-China
C. Durand line	3.India-Pakistan
D. Siegfried line	4.Pakistan-Afganistan

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

89. When was the National Monetisation Pipeline launched?

(a) June, 2021
(b) July, 2021
(c) August, 2021
(d) September, 2021

90. Which of the following state is bound by Bay of Bengal in the east and state of Karnataka in the west?

(a) Telangana
(b) Orissa
(c) Tamil Nadu
(d) Andhra Pradesh

91. The largest glacier in the world is the

(a) Siachen glacier
(b) Eismeer glacier
(c) Lambert fisher glacier
(d) Petermanns glacier

92. With reference to Agni-IV Missile, which of the following statements is/are correct?

1) It is a surface-to-surface missile.
2) It is fuelled by liquid propellant only
3) It can deliver one-tonne nuclear warheads about 7500 km away.

Select the correct answer using the codes given below

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

93. "Project Loon" is associated with

(a) Waste management technology
(b) Wireless communication Technology
(c) Solar power Technology
(d) Water conservation Technology

94. The concept of vaccination was first developed by

(a) Louis Pasteur
(b) Edward Jenner
(c) Carl Landsteiner
(d) Joseph Miester

95. World's first Wood Satellite WISA Woodsat was launched by

(a) Finland
(b) China
(c) Russia
(d) New Zealand

96. Consider the following statements:

1) Food Safety and Standards Authority of India (FSSAI) restricted the permissible amount of industrial Trans Fatty Acid (TFA) in food products to 3 per cent from January 01, 2022
2) The permissible amount of industrial Trans Fatty Acid (TFA) in food products till 2021 was 5 percent as per Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2021
3) Industrial Trans Fatty Acids, a sub category of unsaturated fatty acids, are processed artificially via a method known as hydrogenation
4) Trans fats are associated with increased risk of heart attacks and death from coronary heart disease

Which of the statements given above is/are correct?

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

97. Consider the following statements:

1) Bharat Dynamics Limited (BDL) was given the deal for supplying MILAN-2T anti tank guided missiles by Ministry of Defense recently
2) The headquarters of Bharat Dynamics Limited is located in Visakhapatnam, Andhra Pradesh
3) Commodore Siddharth Mishra (Retd) is the current Chairman and Managing Director of Bharat Dynamics Limited

Which of the above statement/s is correct?

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

98. Consider the following statements:

1) ICC Men's T20 World Cup 2021 was held in India as BCCI hosted the event
2) Australia won the T20 World Cup title by defeating New Zealand in the final by 8 wickets

Which of the above statements are correct?

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

99. Which of the following cities has been adjudged as the cleanest city of India for the fifth consecutive year under Swachh Survekshan Awards, 2021?

(a) Surat
(b) Vijayawada
(c) Chandigarh
(d) Indore

100. Consider the following statements:

1) The Chief Economic Advisor (CEA) heads the Economic Division under the Department of Economic Affairs (DEA)
2) The Economic Division examines domestic and international economic trends
3) The Office of the Economic Advisor (OEA) is an attached office of the Ministry of Finance
4) The Chief Economic Advisor (CEA) reports directly to the Ministry of Commerce & Industry

Which of the statements given above are correct?

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

101. $\lim_{x \to 1} \frac{1}{1 - x}$ is equal to

(a) 0
(b) ∞
(c) –∞
(d) does not exist

102. The positive numbers whose sum is 20 and their product is maximum are

(a) 5, 15
(b) 8, 12
(c) 10, 10
(d) 9, 11

103. The order of the differential equation $\left[1 + \left(\frac{d^3y}{dx^3}\right)^2\right]^{4/3} = \frac{d^2y}{dx^2}$ is given by

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

104. $\int \frac{e^{\tan^{-1}x}}{1+x^2}dx$ is equal to

(a) $\tan^{-1}x + c$

(b) $e^{\tan^{-1}x} + c$

(c) $\sec^{-1}x + c$

(d) None of these

105. The series $1 + \frac{3}{2!} + \frac{5}{3!} + \frac{7}{4!} + \ldots$ is

(a) convergent

(b) divergent

(c) not convergent

(d) None of these

106. If $A = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$ then AB is

(a) unit matrix

(b) $\begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 0 & 0 \\ 1 & 1 \end{bmatrix}$

(d) Null matrix

107. If A is a square matrix of order 3×3, then the order of A^7 is

(a) 7×7

(b) 3×3

(c) 21×21

(d) Not defined

108. If the line $2x + ky = 1$ and $3y - x = 3$ are perpendicular then the value of *k* is

(a) $\frac{1}{2}$

(b) $\frac{2}{3}$

(c) $\frac{3}{2}$

(d) $\frac{1}{6}$

109. The centre and radius of the circle represented by the equation $x^2 + y^2 + 4x - 4y - 1 = 0$ are

(a) (2, –2) and 3

(b) (2, –2) and $\sqrt{7}$

(c) (–2, 2) and 3

(d) (2, –2) and $\sqrt{7}$

110. The sum of the series $\frac{2}{\pi} - \frac{4}{\pi^2} + \frac{8}{\pi^3} -$ ---- is

(a) $\frac{2}{\pi + 2}$

(b) $\frac{2}{\pi - 2}$

(c) $\frac{1}{\pi + 2}$

(d) $\frac{1}{\pi - 2}$

111. Which one of the following is correct?

(a) Curvature of a straight line is infinite

(b) The radius of curvature of a straight line is zero

(c) The curvature of a circle is constant

(d) The radius and radius of curvature of a circle are reciprocal

112. If A graph plotted of two perpendicular forces P and Q makes an angle 60^0 with P, then

(a) P = $\sqrt{3}$ Q

(b) Q = $\sqrt{3}$ P

(c) P = $\sqrt{2}$ Q

(d) Q = $\sqrt{2}$ P

113. Angular velocity of rotation of the earth about its axis is

(a) π/12 radian/hour
(b) π/6 radian/hour
(c) π/18 radian/hour
(d) π/24 radian/hour

114. Which of the following polynomial has zeros −4 and 5i

(a) $x^3 - 4x^2 + 25x - 100$

(b) $x^3 + 4x^2 + 25x + 100$

(c) $x^3 + 4x^2 - 25x - 100$

(d) $x^3 - 4x^2 - 25x + 100$

115. For the roots α, β of the polynomial $ax^2 + bx + c = 0$, where a, b, c ∈ R and a, b > 0, c < 0, the maximum value of $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$ is

(a) 1
(b) 2
(c) −1
(d) −2

116. If a straight line makes an angle of $\frac{\pi}{4}$ with the X and the Y -axis, then what angle does it make with the Z-axis?

(a) $\frac{\pi}{4}$

(b) $\frac{\pi}{2}$

(c) $\frac{\pi}{3}$

(d) $\frac{\pi}{6}$

117. Evaluate $\left(\sqrt{3}+i\right)^{2019}$

(a) $2019i$

(b) $-2019i$

(c) $2^{2019}i$

(d) $-2^{2019}i$

118. The radius and centre of the circle, which is described on the line joining the points (1, 2) and (2, 1) as diameter, are

(a) $\sqrt{2}$, (1/2, 1/2)

(b) $\frac{\sqrt{2}}{2}$, (3/2, 3/2)

(c) $\frac{\sqrt{2}}{2}$, $(-3/2, -3/2)$

(d) 2, $(-1/2, -1/2)$

119. A person X speaks truth 4 out of 5 times. A die is thrown. He reports that there is a six. What is the chance that there actually was a six?

(a) 4/5
(b) 4/9
(c) 1/2
(d) 1/4

120. What is the expectation of the number on a throw of a single dice?

(a) 3
(b) 6
(c) 7/2
(d) 7

****

Space for Rough Work

PUNJAB PUBLIC SERVICE COMMISSION

Objective Type Test (Apr-2022) for Recruitment to the post of Accountant in the Department of Housing and Urban Development, Government of Punjab

READ INSTRUCTIONS BEFORE FILLING ANY DETAILS OR ATTEMPTING TO ANSWER THE QUESTIONS.

Total Questions: 120
Time Allowed: 2 Hours

Candidate's Name _____

Father's Name _____

Date of Birth ☐☐ ☐☐ ☐☐☐☐

DD MM YYYY

OMR Response Sheet No. _____

Roll No. _____

Candidate's Signature **(Please sign in the box)**

Question Booklet Set
C

Booklet Series

INSTRUCTIONS

1. The candidate shall NOT open this booklet till the time told to do so by the Invigilation Staff. However, in the meantime, the candidate can read these instructions carefully and subsequently fill the appropriate columns given above in CAPITAL letters. The candidate may also fill the relevant boxes out of 1 to 9 of the Optical Mark Reader (OMR) response sheet, supplied separately
2. Use only blue or black **ball point pen** to fill the relevant columns on this page as well as in OMR sheet. Use of Ink pen or any other pen is not allowed.
3. The candidate shall be liable for any adverse effect if the information given above is wrong or illegible or incomplete.
4. Each candidate is required to attempt 120 questions in 120 minutes, except for orthopedically/visually impaired candidates, who would be given 40 extra minutes, for marking correct responses on the OMR sheet.
5. The question paper booklet has 25 pages.
6. The candidates, when allowed to open the question paper booklet, must first check the entire booklet to confirm that the booklet has complete number of pages, the pages printed correctly and there are no blank pages. In case there is any such error in the question paper booklet then the candidate should IMMEDIATELY bring this fact to the notice of the Invigilation Staff and obtain a new booklet of the same series as given earlier.
7. The serial number of the new Question booklet if issued for some reason should be entered in the relevant column of the OMR. The Invigilation Staff must make necessary corrections in their record regarding the change in the serial no. of Question booklet.
8. The paper consists of total 300 Marks. Each question shall carry 2.5 marks. There are four options for each question and the candidate has to mark the MOST APPROPRIATE answer on the OMR response sheet.
9. There is no negative marking.
10. Use of Electronic/Manual Calculator is prohibited.
11. The candidate **MUST READ INSTRUCTIONS BEHIND THE OMR SHEET** before answering the Questions and check that two carbon copies attached to the OMR sheet are intact.

1. The geometric mean of 8, 9 and 24 is

(a) 4
(b) 9
(c) 12
(d) 24

2. The empirical relationship among AM, GM and HM is:

(a) $GM = (AM \times HM)^2$
(b) $(GM)^2 = AM \times HM$
(c) $(GM)^2 = (AM \times HM)^2$
(d) $GM = (AM)^2 \times (HM)^2$

3. Upper limit of class interval is considered for calculating

(a) Less than cumulative frequency
(b) More than cumulative frequency
(c) Quartile
(d) Median

4. The variance of *n* natural numbers is:

(a) $\frac{1}{6}(n^2 - 1)$
(b) $\frac{1}{6}(n^2 + 1)$
(c) $\frac{1}{12}(n^2 - 1)$
(d) $\frac{1}{12}(n^2 + 1)$

5. A graph plotted with the help of cumulative frequencies is called as

(a) Ogive
(b) Histogram
(c) Pie
(d) Bar diagram

6. As the number of observations and classes increase, the shape of the frequency polygon

(a) Remains unchanged
(b) Tend to become jumbled
(c) Tend to become smooth
(d) Tend to become straight

7. For a group of 100 candidates, the mean was found to be 40. Later on it was discovered that a value 45 was misread as 54. The correct mean is:

(a) 40.50
(b) 39.85
(c) 39.80
(d) 39.91

8. The mean of the distribution is 23, median is 24, and the mode is 25.5. It is most likely that this distribution is:

(a) Positively skewed
(b) Symmetrical
(c) Asymmetrical
(d) Negatively skewed

9. If a constant value 5 is subtracted from each observation of a set, the variance is:

(a) Reduced by 5
(b) Reduced by 25
(c) Unaltered
(d) Increased by 25

10. Which of the following statements about the correlation coefficient are true?

I. The correlation coefficient and the slope of the regression line may have opposite signs
II. A correlation of 1 indicates a perfect cause-and-effect relationship between the variables
III. Correlations of +0.87 and −0.87 indicate the same degree of clustering around the regression line

(a) I only
(b) II only
(c) III only
(d) I and II only

11. If Coefficient of variation is 75% and standard deviation is 15, then mean is
    (a) 10
    (b) 20
    (c) 30
    (d) 40

12. Regression coefficient is independent of the change of
    (a) Scale
    (b) Origin
    (c) Number of observation
    (d) Neither scale nor origin

13. Median can be determined graphically with the help of
    (a) Line diagram
    (b) Bar diagram
    (c) Histogram
    (d) Ogive

14. The harmonic mean of 3, 6 and 10 is:
    (a) 5.0
    (b) 6.5
    (c) 6.33
    (d) 4.5

15. The coefficient of quartile deviation is
    (a) $\frac{Q_3 + Q_1}{Q_3 - Q_1}$
    (b) $\frac{Q_3 - Q_1}{Q_3 + Q_1}$
    (c) $\frac{Q_3 + Q_2}{Q_3 - Q_2}$
    (d) $\frac{Q_2 + Q_1}{Q_2 - Q_1}$

16. Formula of mode for grouped data is
    (a) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 + l_1)$
    (b) $l_1 + \frac{f_1 + f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
    (c) $l_1 - \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$
    (d) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

17. Weighted mean can be obtained with

(a) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 + n_2 + ... + n_k}$

(b) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 + X_2 + ... + X_k}$

(c) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 - n_2 - ... - n_k}$

(d) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 - X_2 - ... - X_k}$

18. The mean difference between 9 paired observations is 15.0 and the standard deviation of difference is 5.0. The value of statistic is:
    (a) 27
    (b) 9
    (c) 3
    (d) Zero

19. A coin is tossed six times. The probability of obtaining heads and tails alternatively is:
    (a) 1/2
    (b) 1/8
    (c) 1/32
    (d) 1/64

20. If the group indices are 80, 120 and 125 and their respective group weights are 60, 20 and 20, the consumer price index is:
    (a) 108.33
    (b) 97.00
    (c) 98.49
    (d) 104.66

21. In case of disclosure of accounting policies, the following fundamental assumptions may not be required to be stated if they are followed in preparation of final accounts of a company.
    1) Materiality and accounting period
    2) Going concern and consistency
    3) Accrual basis of accounting
    4) Conservatism and accounting period

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

22. In case the depreciable assets are revalued, the provision for depreciation is based upon

(a) The revalued amount on the estimate of the remaining useful life of such assets
(b) Original cost of assets
(c) Depreciated value of assets
(d) AS-10 is silent in this regard

23. Which of the following cannot be treated as revenue expenditure?

(a) Cost of goods purchase for resale
(b) Wages paid for the erection of plant and machinery
(c) Obsolescence cost
(d) Expenses incurred by way of repairs of existing assets which do not in any way add to their earning capacity.

24. Match list I (items of Expenditure and Receipt) with List II (nature of Expenditure and receipt) and select the correct answer using the codes given below:-

	List I	List II
A.	Premium paid for a lease property	I. Revenue expenditure
B.	Insurance premium paid for a risk against accidental losses of properties (fixed assets)	II. Capital Receipt
C.	Amount realized from the sale of securities (investments) purchased earlier	III Deferred revenue expenditure
D.	Huge sales promotional expenditure	IV. Capital expenditure

Codes

	A	B	C	D
(a)	IV	II	I	III
(b)	III	II	I	IV
(c)	IV	I	II	III
(d)	III	I	II	IV

25. Which of the following is a deferred revenue expenditure?

(a) Legal expenses incurred on the purchase of land
(b) Expenses on a mega advertisement campaign while launching a new product
(c) Expenses incurred on installation of a new machine
(d) Wages paid for construction of an additional room in the building

26. Match list I with List II and select the correct answer using the codes given below –

	List I (Items)	List II (Heading)
A.	Preliminary expenses	I. Current assets
B.	Unclaimed dividend	II. Loan and advances
C.	Bills Receivable	III. Current liabilities
D.	Loose tools	IV. Miscellaneous Expenditure

Codes

	A	B	C	D
(a)	IV	III	II	I
(b)	I	II	III	IV
(c)	IV	III	I	II
(d)	II	I	IV	III

27. What does the 'net worth' of a company signifies?

(a) Total assets
(b) Total assets – Total liabilities
(c) Total Fixed Assets – Current assets
(d) Total assets – Total outside liabilities

28. 'A' and 'B' who are partners share profits in the ratio of 7:3, 'C' is admitted as a new partner. 'A' surrenders 1/7 of his share and 'B' surrenders 1/3 of his share in favor of 'C'. The new profit sharing ratio will be

(a) 3:1:1
(b) 4:1:1
(c) 3:2:2
(d) None of the above

29. X, Y and Z have been sharing profit and loss in the ratio of 3:2:1. Z retires. His share is taken over by X and Y in the ratio of 2:1. The new profit sharing ratio will be

(a) 3:2
(b) 1:1
(c) 11:7
(d) 2:1

30. As per SEBI guidelines, the amount of premium on issue of shares is decided by -

(a) Company law Board
(b) Board of directors
(c) Registrar of companies
(d) Shareholders

31. A company forfeited 700 shares of Rs. 10 each, on which Rs. 5 per share were paid. Of these, 200 shares were reissued at Rs. 9 per share. Amount from share forfeited to capital reserve account will be transferred

(a) Rs. 800
(b) Rs. 200
(c) Rs. 3500
(d) Rs. 2500

32. Match the items of List – I with those of List – II and choose the correct code :

List – I	List – II
A. Provision for taxation	i. Current Assets
B. Live-stock	ii. Unsecured loans
C. Sundry Debtors	iii. Fixed Assets
D. Interest accrued on unsecured loans	iv. Provisions

Codes :

	A	B	C	D
(a)	ii	i	iii	iv
(b)	iv	iii	i	ii
(c)	iii	ii	i	iv
(d)	iv	iii	ii	i

33. Intrinsic value of a share is given by

(a) Total net assets/No. of shares
(b) Total assets/No. of shares
(c) Share capital/No. of shares
(d) Market capitalisation/No. of shares

34. The basic difference between a static budget and flexible budget is that:

(a) A flexible budget considers only variable costs but a static budget considers all costs

(b) Flexible budgets allow management latitude in meeting goals, whereas static budget is based on fixed standards

(c) A flexible budget is applicable for a single department only but a static budget for entire production facility

(d) A flexible budget can be prepared for any production level within a relevant range but a static budget is based on one specific level of production

35. Profit volume ratio of an enterprise is 40%. To offset 10% decrease in selling price, how much sales must be increased?

(a) 10%
(b) 20%
(c) 25%
(d) 40%

36. The components of consolidated financial statements includes

I. Consolidated balance sheet

II. Consolidated statement of profit and loss

III. Notes and other statements and explanatory material forming part of financial statements.

IV. Balance sheet

V. Cash flow statement

Identify the correct code

(a) I,II and III
(b) I,II
(c) I,II and V
(d) I,II,III and V

37. Profit volume ratio can be improved by:

(a) Reducing variable cost
(b) Reducing the selling price
(c) Increasing the fixed cost
(d) Increasing the key factor

38. Expenditure incurred by a publisher for acquiring copyright is a _____
    (a) Deferred revenue expenditure
    (b) Capital expenditure
    (c) Revenue expenditure
    (d) Assets

39. If profits are 25% of selling price, what is the percentage of profit to cost?
    (a) 20%
    (b) 25%
    (c) 30%
    (d) 33.33%

40. Given that current liabilities are at Rs. 300,000, current ratio is 3:1 and quick ratio is 1:1, the value of stock will be:
    (a) Rs. 600,000
    (b) Rs. 1,600,000
    (c) Rs. 900,000
    (d) Rs. 12, 00,000

41. Pointing towards a woman in picture, Sarita said "She is mother of Neha whose father is my son". How is Sarita related to the woman in the picture?
    (a) Mother in law
    (b) Cousin
    (c) Mother
    (d) Grandmother

42. A student attempts an examination of X number of questions. He answers 15 correctly out of first 20 questions and of the remaining questions, he answers 1/3 correctly. If all the questions have the same credit and the student gets 50 % marks, then find X.
    (a) 25
    (b) 50
    (c) 70
    (d) Can't be calculated

43. ASSERTION (A): Glass tumbler breaks in winter when hot water is poured into it.
    REASON (R): When hot water is poured, the outer surface of glass expands.
    (a) Both A and R are correct and R is correct explanation of A
    (b) Both A and R are correct and R is not correct explanation of A
    (c) A is true but R is false
    (d) A is false but R is true

44. Which is the smallest fraction 6/11, 13/18, 15/22, 19/36, 5/6?

(a) 6/11
(b) 13/18
(c) 15/22
(d) 19/36

45. The percentage increase in area of rectangle, if each of its side is increased by 30% is

(a) 90%
(b) 69%
(c) 60%
(d) 30%

46. A boat whose speed is 15 km/hr in still water goes 30 km downstream and comes back in total of 4 hr 30 min. The speed of stream is

(a) 4 km/hr
(b) 5 km/hr
(c) 6 km/hr
(d) 7 km/hr

47. If a flash light flashes every 10 seconds, how many times will it flash in ¾ of an hour?

(a) 270
(b) 271
(c) 272
(d) 273

48. In how many ways can the letters of word KEYBOARD be arranged in such a way that vowels always remain together?

(a) 4320
(b) 4330
(c) 720
(d) 2156

49. Five persons fire bullets at a target at an interval of 6, 7, 8, 9 and 12 seconds respectively. The number of times they would fire the bullets together at the target in an hour is

(a) 6
(b) 7
(c) 8
(d) 9

50. Four persons A, B, C and D have a total of ₹ 100. A and B have in total as much money as C and D have in total, but A has more money than B; and C has only half the money that D has. A has in fact ₹ 5 more than D has. Who has the maximum amount of money?

(a) A
(b) B
(c) C
(d) D

51. In a garrison, there was food for 100 soldiers for one month. After 10 days, 100 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?

(a) 25 days
(b) 20 days
(c) 15 days
(d) 10 days

52. If POND is coded as RSTL, how is HEAR written in that code?

(a) GHIJ
(b) GHIZ
(c) JIGZ
(d) JCLZ

Directions: (Question Nos. 53 to 57) Study the following information carefully to answer the given questions : Madan and Rohit are in the same team of hockey. Parth defeated Rohit in badminton but lost to Sachin in tennis. Nitin teams with Sagar in football and with Sachin in hockey. Rohit defeated Sachin in chess. Those who play cricket do not play badminton, volleyball or tennis. Madan and Parth are in opposite teams of basketball. Nitin represents his state in cricket while Sagar does so at the district level. Boys who play chess do not play football, basketball or volleyball. Madan and Parth are together in the volleyball team. Boys who play football also play hockey.

53. Name the boys who do not play football.

(a) Sachin, Nitin
(b) Rohit, Sagar
(c) Rohit, Sachin
(d) Rohit, Nitin

54. Who plays both hockey and tennis?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

55. Which is the most popular game with this group?

(a) Cricket
(b) Hockey
(c) Football
(d) Badminton

56. Who plays the largest number of games?

(a) Sagar
(b) Rohit
(c) Parth
(d) Nitin

57. Which boy plays both badminton and hockey?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

58. Kunal walks 10 km towards North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point?

(a) 5 km West
(b) 5 km North-east
(c) 7 km East
(d) 7 km West

59. In a row of boys, A is fifteenth from the left and B is fourth from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th
(b) 10^{th}
(c) 12^{th}
(d) 13^{th}

60. If '–' stands for 'division', '+' for 'multiplication', '÷' for 'subtraction' and 'x' for 'addition', then which one of the following equations is correct?

(a) 4 x 5 + 9 – 3 ÷ 4 = 15
(b) 4 x 5 x 9 + 3 ÷ 4 = 11
(c) 4 – 5 ÷ 9 x 3 – 4 = 17
(d) 4 ÷ 5 + 9 – 3 + 4 = 18

61. Who is considered as father of local self-government in India?

(a) Lord Mayo
(b) Lord Ripon
(c) Lord Montague
(d) Lord Morley

62. The battle of Mudki was fought between the forces of

(a) Sikhs and Mughals
(b) Maharaja Ranjit Singh and Afghans
(c) East India Company and Sikhs
(d) None of the above

63. Bhagat Singh and his friends decided to take revenge from the person who had lathi charged Lala Lajpat Rai. Who was he?

(a) James A. Scott
(b) John P. Saunders
(c) Reginald Dyer
(d) None of the above

64. Who among the following architects designed Chandigarh?

(a) Le Corbusier
(b) Pierre Jeanneret
(c) John Lockwood Kipling
(d) Edwin Lutyens

65. Rajkumari coaching scheme is named after

(a) Mohinder Kaur
(b) Amrita Shergill
(c) Sophia Duleep Singh
(d) Amrit Kaur

66. Which one of the following river is not west flowing river?

(a) Bhadra
(b) Purna
(c) Ulhas
(d) Yeleru

67. Hpungan Pass lying at an altitude of 3072 m is an important link between which of the following countries?

(a)India and Bangladesh
(b)India and Myanmar
(c)India and Nepal
(d)India and China

68. Match the following;

International Boundary	Countries
A. Rad Cliffe line	1.France-Germany
B. McMahon line	2.India-China
C. Durand line	3.India-Pakistan
D. Siegfried line	4.Pakistan-Afganistan

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

69. When was the National Monetisation Pipeline launched?

(a) June, 2021
(b) July, 2021
(c) August, 2021
(d) September, 2021

70. Which of the following state is bound by Bay of Bengal in the east and state of Karnataka in the west?

(a) Telangana
(b) Orissa
(c) Tamil Nadu
(d) Andhra Pradesh

71. The largest glacier in the world is the

(a) Siachen glacier
(b) Eismeer glacier
(c) Lambert fisher glacier
(d) Petermanns glacier

72. With reference to Agni-IV Missile, which of the following statements is/are correct?

1) It is a surface-to-surface missile.
2) It is fuelled by liquid propellant only
3) It can deliver one-tonne nuclear warheads about 7500 km away.

Select the correct answer using the codes given below

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

73. “Project Loon” is associated with
(a) Waste management technology
(b) Wireless communication Technology
(c) Solar power Technology
(d) Water conservation Technology

74. The concept of vaccination was first developed by
(a) Louis Pasteur
(b) Edward Jenner
(c) Carl Landsteiner
(d) Joseph Miester

75. World’s first Wood Satellite WISA Woodsat was launched by
(a) Finland
(b) China
(c) Russia
(d) New Zealand

76. Consider the following statements:

1) Food Safety and Standards Authority of India (FSSAI) restricted the permissible amount of industrial Trans Fatty Acid (TFA) in food products to 3 per cent from January 01, 2022
2) The permissible amount of industrial Trans Fatty Acid (TFA) in food products till 2021 was 5 percent as per Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2021
3) Industrial Trans Fatty Acids, a sub category of unsaturated fatty acids, are processed artificially via a method known as hydrogenation
4) Trans fats are associated with increased risk of heart attacks and death from coronary heart disease

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

77. Consider the following statements:
1) Bharat Dynamics Limited (BDL) was given the deal for supplying MILAN-2T anti tank guided missiles by Ministry of Defense recently
2) The headquarters of Bharat Dynamics Limited is located in Visakhapatnam, Andhra Pradesh
3) Commodore Siddharth Mishra (Retd) is the current Chairman and Managing Director of Bharat Dynamics Limited

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

78. Consider the following statements:
1) ICC Men's T20 World Cup 2021 was held in India as BCCI hosted the event
2) Australia won the T20 World Cup title by defeating New Zealand in the final by 8 wickets

Which of the above statements are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

79. Which of the following cities has been adjudged as the cleanest city of India for the fifth consecutive year under Swachh Survekshan Awards, 2021?
(a) Surat
(b) Vijayawada
(c) Chandigarh
(d) Indore

80. Consider the following statements:
1) The Chief Economic Advisor (CEA) heads the Economic Division under the Department of Economic Affairs (DEA)
2) The Economic Division examines domestic and international economic trends
3) The Office of the Economic Advisor (OEA) is an attached office of the Ministry of Finance
4) The Chief Economic Advisor (CEA) reports directly to the Ministry of Commerce & Industry

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

81. $\lim_{x \to 1} \frac{1}{1 - x}$ is equal to

(a) 0

(b) ∞

(c) –∞

(d) does not exist

82. The positive numbers whose sum is 20 and their product is maximum are
(a) 5, 15
(b) 8, 12
(c) 10, 10
(d) 9, 11

83. The order of the differential equation $\left[1+\left(\frac{d^3y}{dx^3}\right)^2\right]^{4/3} = \frac{d^2y}{dx^2}$ is given by

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

84. $\int \frac{e^{\tan^{-1}x}}{1+x^2}dx$ is equal to

(a) $\tan^{-1}x + c$

(b) $e^{\tan^{-1}x} + c$

(c) $\sec^{-1}x + c$

(d) None of these

85. The series $1+\frac{3}{2!}+\frac{5}{3!}+\frac{7}{4!}+\ldots$ is

(a) convergent
(b) divergent
(c) not convergent
(d) None of these

86. If $A = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$ then AB is

(a) unit matrix

(b) $\begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 0 & 0 \\ 1 & 1 \end{bmatrix}$

(d) Null matrix

87. If A is a square matrix of order 3×3, then the order of A^7 is

(a) 7×7

(b) 3×3

(c) 21×21

(d) Not defined

88. If the line $2x + ky = 1$ and $3y - x = 3$ are perpendicular then the value of *k* is

(a) $\frac{1}{2}$

(b) $\frac{2}{3}$

(c) $\frac{3}{2}$

(d) $\frac{1}{6}$

89. The centre and radius of the circle represented by the equation $x^2 + y^2 + 4x - 4y - 1 = 0$ are

(a) (2, –2) and 3

(b) (2, –2) and $\sqrt{7}$

(c) (–2, 2) and 3

(d) (2, –2) and $\sqrt{7}$

90. The sum of the series $\frac{2}{\pi} - \frac{4}{\pi^2} + \frac{8}{\pi^3} -$ ---- is

(a) $\frac{2}{\pi + 2}$

(b) $\frac{2}{\pi - 2}$

(c) $\frac{1}{\pi + 2}$

(d) $\frac{1}{\pi - 2}$

91. Which one of the following is correct?

(a) Curvature of a straight line is infinite

(b) The radius of curvature of a straight line is zero

(c) The curvature of a circle is constant

(d) The radius and radius of curvature of a circle are reciprocal

92. If the resultant of two perpendicular forces P and Q makes an angle 60^0 with P, then

(a) P = $\sqrt{3}$ Q

(b) Q = $\sqrt{3}$ P

(c) P = $\sqrt{2}$ Q

(d) Q = $\sqrt{2}$ P

93. Angular velocity of rotation of the earth about its axis is
(a) π/12 radian/hour
(b) π/6 radian/hour
(c) π/18 radian/hour
(d) π/24 radian/hour

94. Which of the following polynomial has zeros −4 and 5i

(a) $x^3 - 4x^2 + 25x - 100$

(b) $x^3 + 4x^2 + 25x + 100$

(c) $x^3 + 4x^2 - 25x - 100$

(d) $x^3 - 4x^2 - 25x + 100$

95. For the roots α, β of the polynomial $ax^2 + bx + c = 0$, where a, b, c ∈ R and a, b > 0, c < 0, the maximum value of $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$ is

(a) 1
(b) 2
(c) −1
(d) −2

96. If a straight line makes an angle of $\frac{\pi}{4}$ with the X and the Y -axis, then what angle does it make with the Z-axis?

(a) $\frac{\pi}{4}$

(b) $\frac{\pi}{2}$

(c) $\frac{\pi}{3}$

(d) $\frac{\pi}{6}$

97. Evaluate $\left(\sqrt{3}+i\right)^{2019}$

(a) $2019i$

(b) $-2019i$

(c) $2^{2019}i$

(d) $-2^{2019}i$

98. The radius and centre of the circle, which is described on the line joining the points (1, 2) and (2, 1) as diameter, are

(a) $\sqrt{2}$, (1/2, 1/2)

(b) $\frac{\sqrt{2}}{2}$, (3/2, 3/2)

(c) $\frac{\sqrt{2}}{2}$, $(-3/2, -3/2)$

(d) 2, $(-1/2, -1/2)$

99. A person X speaks truth 4 out of 5 times. A die is thrown. He reports that there is a six. What is the chance that there actually was a six?

(a) 4/5
(b) 4/9
(c) 1/2
(d) 1/4

100. What is the expectation of the number on a throw of a single dice?

(a) 3
(b) 6
(c) 7/2
(d) 7

101. When a good is taxed, tax burden mainly falls on consumers if:
(a) Tax is levied on consumers
(b) Tax is levied on producers
(c) Supply is inelastic, and demand is elastic
(d) Supply is elastic, and demand is inelastic

102. The Golden Rule of level of capital is that level of capital per worker which maximizes:

(a) Consumption
(b) Savings
(c) Investment
(d) Output

103. The first ministerial conference of WTO of 1996 was organised in:
(a) Geneva, Switzerland
(b) Singapore
(c) Seattle, USA
(d) Cancun, Mexico

104. Which of the following is not a tool of the monetary policy in India?
(a) Liquidity Adjustment Facility
(b) Marginal Standing Facility
(c) Market Stabilization Scheme
(d) External Commercial Borrowings

105. The Foreign Exchange Management Act (FEMA) was enacted in the year
(a) 2000
(b) 1999
(c) 1998
(d) 2001

106. Structural transformation of an economy is about
(a) Changing social conditions
(b) Shifting labour from low productivity sectors to high productivity sectors
(c) Changing structure of industries
(d) All of above

107. Laissez Faire is an economic policy propounded by
(a) Paul Sweezy
(b)Nicholas Kaldor
(c) Adam Smith
(d) Raghurajan

108. NNP (Net National Product) equals
(a) GNP - depreciation
(b) GNP – indirect taxes
(c) Consumer expenditure on durable goods
(d) Indirect business tax

109. The term 'Smart Money' is used for-
(a) Credit Card
(b) Internet Banking
(c) Cash with Bank
(d) Cash with Public

110. For how many years, Central government is supposed to compensate the loss of State governments due to GST?
(a) 3 years
(b) 4 years
(c) 5 years
(d) No compensation

111. At present, the base year for calculating Wholesale Price Index is -
(a) 2000-01
(b) 2002-03
(c) 2011-12
(d) 2005-06

112. What is full form of IHDI developed by UNDP?
(a) Indian Human Development Index
(b) Inequality Adjusted Human Development Index
(c) International Human Development Index
(d) Inequality of Human Development Index

113. Which among the following is not an Indirect Tax?
(a) Service Tax
(b) Custom Duty
(c) Excise Duty
(d) Corporation Tax

114. Mutual Funds are regulated in India by which among the following?
(a) SEBI
(b) RBI
(c) RBI and SEBI both
(d) Stock Exchanges

115. MUDRA (Micro Units Development Refinance Agency) Banks will
(a) Provide finance to other banks and Micro Finance Institutions (MFIs), who in turn will do the lending activities
(b) Primarily lend to SC/ST enterprises
(c) Set up a branch in every district of the country by 2019 in order to promote financial inclusion
(d) Primarily lend to enterprises being run by women

116. In the least square linear trend equation Y = a + bX, if b is positive, it indicates:
    (a) Declining trend
    (b) Rising trend
    (c) No trend at all
    (d) All of these

117. Cost of a firm's self-owned and self-employed resources are called:
    (a) Real cost
    (b) Implicit cost
    (c) Explicit cost
    (d) Opportunity cost

118. Stagflation occurs when
    (a) Price level increases and real GDP decreases
    (b) Price level decreases and real GDP increases
    (c) Price level and real GDP decrease at the same time
    (d) Price level and real GDP increase at the same time

119. If the elasticity of demand for imports is less than unity, then the value of:
    (a) Exports will increase
    (b) Imports will decrease
    (c) Exports will decrease
    (d) Imports will increase

120. Which of the following is NOT an item on capital account?
    (a) Receipt of loan
    (b) Payment of loan
    (c) Payment of reciprocal amount of loan
    (d) Interest and dividend

****

Space for Rough Work

PUNJAB PUBLIC SERVICE COMMISSION

Objective Type Test (Apr-2022) for Recruitment to the post of Accountant in the Department of Housing and Urban Development, Government of Punjab

READ INSTRUCTIONS BEFORE FILLING ANY DETAILS OR ATTEMPTING TO ANSWER THE QUESTIONS.

Total Questions: 120
Time Allowed: 2 Hours

Candidate's Name _____

Father's Name _____

Date of Birth ☐☐ ☐☐ ☐☐☐☐
DD MM YYYY

OMR Response Sheet No. _____

Roll No. _____

Candidate's Signature **(Please sign in the box)**

Question Booklet Set	Booklet Series
D	

INSTRUCTIONS

1. The candidate shall NOT open this booklet till the time told to do so by the Invigilation Staff. However, in the meantime, the candidate can read these instructions carefully and subsequently fill the appropriate columns given above in CAPITAL letters. The candidate may also fill the relevant boxes out of 1 to 9 of the Optical Mark Reader (OMR) response sheet, supplied separately
2. Use only blue or black **ball point pen** to fill the relevant columns on this page as well as in OMR sheet. Use of Ink pen or any other pen is not allowed.
3. The candidate shall be liable for any adverse effect if the information given above is wrong or illegible or incomplete.
4. Each candidate is required to attempt 120 questions in 120 minutes, except for orthopedically/visually impaired candidates, who would be given 40 extra minutes, for marking correct responses on the OMR sheet.
5. The question paper booklet has 25 pages.
6. The candidates, when allowed to open the question paper booklet, must first check the entire booklet to confirm that the booklet has complete number of pages, the pages printed correctly and there are no blank pages. In case there is any such error in the question paper booklet then the candidate should IMMEDIATELY bring this fact to the notice of the Invigilation Staff and obtain a new booklet of the same series as given earlier.
7. The serial number of the new Question booklet if issued for some reason should be entered in the relevant column of the OMR. The Invigilation Staff must make necessary corrections in their record regarding the change in the serial no. of Question booklet.
8. The paper consists of total 300 Marks. Each question shall carry 2.5 marks. There are four options for each question and the candidate has to mark the MOST APPROPRIATE answer on the OMR response sheet.
9. There is no negative marking.
10. Use of Electronic/Manual Calculator is prohibited.
11. The candidate **MUST READ INSTRUCTIONS BEHIND THE OMR SHEET** before answering the Questions and check that two carbon copies attached to the OMR sheet are intact.

1. In case of disclosure of accounting policies, the following fundamental assumptions may not be required to be stated if they are followed in preparation of final accounts of a company.
    5) Materiality and accounting period
    6) Going concern and consistency
    7) Accrual basis of accounting
    8) Conservatism and accounting period

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

2. In case the depreciable assets are revalued, the provision for depreciation is based upon
(a) The revalued amount on the estimate of the remaining useful life of such assets
(b) Original cost of assets
(c) Depreciated value of assets
(d) AS-10 is silent in this regard

3. Which of the following cannot be treated as revenue expenditure?
(a) Cost of goods purchase for resale
(b) Wages paid for the erection of plant and machinery
(c) Obsolescence cost
(d) Expenses incurred by way of repairs of existing assets which do not in any way add to their earning capacity

4. Match list I (items of Expenditure and Receipt) with List II (nature of Expenditure and receipt) and select the correct answer using the codes given below:-

	List I	List II
A.	Premium paid for a lease property	I. Revenue expenditure
B.	Insurance premium paid for a risk against accidental losses of properties (fixed assets)	II. Capital Receipt
C.	Amount realized from the sale of securities (investments) purchased earlier	III Deferred revenue expenditure
D.	Huge sales promotional expenditure	IV. Capital expenditure

Codes

	A	B	C	D
(a)	IV	II	I	III
(b)	III	II	I	IV
(c)	IV	I	II	III
(d)	III	I	II	IV

5. Which of the following is a deferred revenue expenditure?

(a) Legal expenses incurred on the purchase of land
(b) Expenses on a mega advertisement campaign while launching a new product
(c) Expenses incurred on installation of a new machine
(d) Wages paid for construction of an additional room in the building

6. Match list I with List II and select the correct answer using the codes given below –

	List I (Items)	List II (Heading)
A.	Preliminary expenses	I. Current assets
B.	Unclaimed dividend	II. Loan and advances
C.	Bills Receivable	III. Current liabilities
D.	Loose tools	IV. Miscellaneous Expenditure

Codes

	A	B	C	D
(a)	IV	III	II	I
(b)	I	II	III	IV
(c)	IV	III	I	II
(d)	II	I	IV	III

7. What does the 'net worth' of a company signifies?

(a) Total assets
(b) Total assets – Total liabilities
(c) Total Fixed Assets – Current assets
(d) Total assets – Total outside liabilities

8. 'A' and 'B' who are partners share profits in the ratio of 7:3, 'C' is admitted as a new partner. 'A' surrenders 1/7 of his share and 'B' surrenders 1/3 of his share in favor of 'C'. The new profit sharing ratio will be

(a) 3:1:1
(b) 4:1:1
(c) 3:2:2
(d) None of the above

9. X, Y and Z have been sharing profit and loss in the ratio of 3:2:1. Z retires. His share is taken over by X and Y in the ratio of 2:1. The new profit sharing ratio will be

(a) 3:2
(b) 1:1
(c) 11:7
(d) 2:1

10. As per SEBI guidelines, the amount of premium on issue of shares is decided by -

(a) Company law Board
(b) Board of directors
(c) Registrar of companies
(d) Shareholders

11. A company forfeited 700 shares of Rs. 10 each, on which Rs. 5 per share were paid. Of these, 200 shares were reissued at Rs. 9 per share. Amount from share forfeited to capital reserve account will be transferred

(a) Rs. 800
(b) Rs. 200
(c) Rs. 3500
(d) Rs. 2500

12. Match the items of List – I with those of List – II and choose the correct code :

List – I	List – II
A. Provision for taxation	i. Current Assets
B. Live-stock	ii. Unsecured loans
C. Sundry Debtors	iii. Fixed Assets
D. Interest accrued on unsecured loans	iv. Provisions

Codes :

	A	B	C	D
(a)	ii	i	iii	iv
(b)	iv	iii	i	ii
(c)	iii	ii	i	iv
(d)	iv	iii	ii	i

13. Intrinsic value of a share is given by
    (a) Total net assets/No. of shares
    (b) Total assets/No. of shares
    (c) Share capital/No. of shares
    (d) Market capitalisation/No. of shares

14. The basic difference between a static budget and flexible budget is that:

    (a) A flexible budget considers only variable costs but a static budget considers all costs

    (b) Flexible budgets allow management latitude in meeting goals, whereas static budget is based on fixed standards

    (c) A flexible budget is applicable for a single department only but a static budget for entire production facility

    (d) A flexible budget can be prepared for any production level within a relevant range but a static budget is based on one specific level of production

15. Profit volume ratio of an enterprise is 40%. To offset 10% decrease in selling price, how much sales must be increased?

    (a) 10%
    (b) 20%
    (c) 25%
    (d) 40%

16. The components of consolidated financial statements includes
    I. Consolidated balance sheet
    II. Consolidated statement of profit and loss
    III. Notes and other statements and explanatory material forming part of financial statements.
    IV. Balance sheet
    V. Cash flow statement

Identify the correct code
    (a) I,II and III
    (b) I,II
    (c) I,II and V
    (d) I,II,III and V

17. Profit volume ratio can be improved by:
    (a) Reducing variable cost
    (b) Reducing the selling price
    (c) Increasing the fixed cost
    (d) Increasing the key factor

18. Expenditure incurred by a publisher for acquiring copyright is a _____
    (a) Deferred revenue expenditure
    (b) Capital expenditure
    (c) Revenue expenditure
    (d) Assets

19. If profits are 25% of selling price, what is the percentage of profit to cost?
    (a) 20%
    (b) 25%
    (c) 30%
    (d) 33.33%

20. Given that current liabilities are at Rs. 300,000, current ratio is 3:1 and quick ratio is 1:1, the value of stock will be:
    (a) Rs. 600,000
    (b) Rs. 1,600,000
    (c) Rs. 900,000
    (d) Rs. 12, 00,000

21. Pointing towards a woman in picture, Sarita said "She is mother of Neha whose father is my son". How is Sarita related to the woman in the picture?
    (a) Mother in law
    (b) Cousin
    (c) Mother
    (d) Grandmother

22. A student attempts an examination of X number of questions. He answers 15 correctly out of first 20 questions and of the remaining questions, he answers 1/3 correctly. If all the questions have the same credit and the student gets 50 % marks, then find X.
    (a) 25
    (b) 50
    (c) 70
    (d) Can't be calculated

23. ASSERTION (A): Glass tumbler breaks in winter when hot water is poured into it.
    REASON (R): When hot water is poured, the outer surface of glass expands.
    (a) Both A and R are correct and R is correct explanation of A
    (b) Both A and R are correct and R is not correct explanation of A
    (c) A is true but R is false
    (d) A is false but R is true

24. Which is the smallest fraction 6/11, 13/18, 15/22, 19/36, 5/6?
    (a) 6/11
    (b) 13/18
    (c) 15/22
    (d) 19/36

25. The percentage increase in area of rectangle, if each of its side is increased by 30% is
    (a) 90%
    (b) 69%
    (c) 60%
    (d) 30%

26. A boat whose speed is 15 km/hr in still water goes 30 km downstream and comes back in total of 4 hr 30 min. The speed of stream is
    (a) 4 km/hr
    (b) 5 km/hr
    (c) 6 km/hr
    (d) 7 km/hr

27. If a flash light flashes every 10 seconds, how many times will it flash in ¾ of an hour?
    (a) 270
    (b) 271
    (c) 272
    (d) 273

28. In how many ways can the letters of word KEYBOARD be arranged in such a way that vowels always remain together?
    (a) 4320
    (b) 4330
    (c) 720
    (d) 2156

29. Five persons fire bullets at a target at an interval of 6, 7, 8, 9 and 12 seconds respectively. The number of times they would fire the bullets together at the target in an hour is
    (a) 6
    (b) 7
    (c) 8
    (d) 9

30. Four persons A, B, C and D have a total of ₹ 100. A and B have in total as much money as C and D have in total, but A has more money than B; and C has only half the money that D has. A has in fact ₹ 5 more than D has. Who has the maximum amount of money?
    (a) A
    (b) B
    (c) C
    (d) D

31. In a garrison, there was food for 100 soldiers for one month. After 10 days, 100 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?
    (a) 25 days
    (b) 20 days
    (c) 15 days
    (d) 10 days

32. If POND is coded as RSTL, how is HEAR written in that code?
    (a) GHIJ
    (b) GHIZ
    (c) JIGZ
    (d) JCLZ

Directions: (Question Nos. 33 to 37) Study the following information carefully to answer the given questions : Madan and Rohit are in the same team of hockey. Parth defeated Rohit in badminton but lost to Sachin in tennis. Nitin teams with Sagar in football and with Sachin in hockey. Rohit defeated Sachin in chess. Those who play cricket do not play badminton, volleyball or tennis. Madan and Parth are in opposite teams of basketball. Nitin represents his state in cricket while Sagar does so at the district level. Boys who play chess do not play football, basketball or volleyball. Madan and Parth are together in the volleyball team. Boys who play football also play hockey.

33. Name the boys who do not play football.
    (a) Sachin, Nitin
    (b) Rohit, Sagar
    (c) Rohit, Sachin
    (d) Rohit, Nitin

34. Who plays both hockey and tennis?
    (a) Sachin
    (b) Rohit
    (c) Nitin
    (d) Parth

35. Which is the most popular game with this group?
    (a) Cricket
    (b) Hockey
    (c) Football
    (d) Badminton

36. Who plays the largest number of games?
    (a) Sagar
    (b) Rohit
    (c) Parth
    (d) Nitin

37. Which boy plays both badminton and hockey?

(a) Sachin
(b) Rohit
(c) Nitin
(d) Parth

38. Kunal walks 10 km towards North. From there, he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point?

(a) 5 km West
(b) 5 km North-east
(c) 7 km East
(d) 7 km West

39. In a row of boys, A is fifteenth from the left and B is fourth from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th
(b) 10^{th}
(c) 12^{th}
(d) 13^{th}

40. If '–' stands for 'division', '+' for 'multiplication', '÷' for 'subtraction' and 'x' for 'addition', then which one of the following equations is correct?

(a) 4 x 5 + 9 – 3 ÷ 4 = 15
(b) 4 x 5 x 9 + 3 ÷ 4 = 11
(c) 4 – 5 ÷ 9 x 3 – 4 = 17
(d) 4 ÷ 5 + 9 – 3 + 4 = 18

41. Who is considered as father of local self-government in India?

(a) Lord Mayo
(b) Lord Ripon
(c) Lord Montague
(d) Lord Morley

42. The battle of Mudki was fought between the forces of

(a) Sikhs and Mughals
(b) Maharaja Ranjit Singh and Afghans
(c) East India Company and Sikhs
(d) None of the above

43. Bhagat Singh and his friends decided to take revenge from the person who had lathi charged Lala Lajpat Rai. Who was he?

(a) James A. Scott
(b) John P. Saunders
(c) Reginald Dyer
(d) None of the above

44. Who among the following architects designed Chandigarh?

(a) Le Corbusier
(b) Pierre Jeanneret
(c) John Lockwood Kipling
(d) Edwin Lutyens

45. Rajkumari coaching scheme is named after

(a) Mohinder Kaur
(b) Amrita Shergill
(c) Sophia Duleep Singh
(d) Amrit Kaur

46. Which one of the following river is not west flowing river?

(a) Bhadra
(b) Purna
(c) Ulhas
(d) Yeleru

47. Hpungan Pass lying at an altitude of 3072 m is an important link between which of the following countries?

(a)India and Bangladesh
(b)India and Myanmar
(c)India and Nepal
(d)India and China

48. Match the following;

International Boundary	**Countries**
A. Rad Cliffe line	1.France-Germany
B. McMahon line	2.India-China
C. Durand line	3.India-Pakistan
D. Siegfried line	4.Pakistan-Afganistan

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

49. When was the National Monetisation Pipeline launched?
(a) June, 2021
(b) July, 2021
(c) August, 2021
(d) September, 2021

50. Which of the following state is bound by Bay of Bengal in the east and state of Karnataka in the west?
(a) Telangana
(b) Orissa
(c) Tamil Nadu
(d) Andhra Pradesh

51. The largest glacier in the world is the

(a) Siachen glacier
(b) Eismeer glacier
(c) Lambert fisher glacier
(d) Petermanns glacier

52. With reference to Agni-IV Missile, which of the following statements is/are correct?
1) It is a surface-to-surface missile.
2) It is fuelled by liquid propellant only
3) It can deliver one-tonne nuclear warheads about 7500 km away.
Select the correct answer using the codes given below

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

53. "Project Loon" is associated with

(a) Waste management technology
(b) Wireless communication Technology
(c) Solar power Technology
(d) Water conservation Technology

54. The concept of vaccination was first developed by
(a) Louis Pasteur
(b) Edward Jenner
(c) Carl Landsteiner
(d) Joseph Miester

55. World's first Wood Satellite WISA Woodsat was launched by

(a) Finland
(b) China
(c) Russia
(d) New Zealand

56. Consider the following statements:

1) Food Safety and Standards Authority of India (FSSAI) restricted the permissible amount of industrial Trans Fatty Acid (TFA) in food products to 3 per cent from January 01, 2022
2) The permissible amount of industrial Trans Fatty Acid (TFA) in food products till 2021 was 5 percent as per Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2021
3) Industrial Trans Fatty Acids, a sub category of unsaturated fatty acids, are processed artificially via a method known as hydrogenation
4) Trans fats are associated with increased risk of heart attacks and death from coronary heart disease

Which of the statements given above is/are correct?

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

57. Consider the following statements:

1) Bharat Dynamics Limited (BDL) was given the deal for supplying MILAN-2T anti tank guided missiles by Ministry of Defense recently
2) The headquarters of Bharat Dynamics Limited is located in Visakhapatnam, Andhra Pradesh
3) Commodore Siddharth Mishra (Retd) is the current Chairman and Managing Director of Bharat Dynamics Limited

Which of the above statement/s is correct?

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

58. Consider the following statements:

1) ICC Men's T20 World Cup 2021 was held in India as BCCI hosted the event
2) Australia won the T20 World Cup title by defeating New Zealand in the final by 8 wickets

Which of the above statements are correct?

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

59. Which of the following cities has been adjudged as the cleanest city of India for the fifth consecutive year under Swachh Survekshan Awards, 2021?

(a) Surat
(b) Vijayawada
(c) Chandigarh
(d) Indore

60. Consider the following statements:

1) The Chief Economic Advisor (CEA) heads the Economic Division under the Department of Economic Affairs (DEA)
2) The Economic Division examines domestic and international economic trends
3) The Office of the Economic Advisor (OEA) is an attached office of the Ministry of Finance
4) The Chief Economic Advisor (CEA) reports directly to the Ministry of Commerce & Industry

Which of the statements given above are correct?

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

61. $\lim_{x \to 1} \frac{1}{1 - x}$ is equal to

(a) 0
(b) ∞
(c) –∞
(d) does not exist

62. The positive numbers whose sum is 20 and their product is maximum are

(a) 5, 15
(b) 8, 12
(c) 10, 10
(d) 9, 11

63. The order of the differential equation $\left[1 + \left(\frac{d^3y}{dx^3}\right)^2\right]^{4/3} = \frac{d^2y}{dx^2}$ is given by

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

64. $\int \frac{e^{\tan^{-1}x}}{1+x^2}dx$ is equal to

(a) $\tan^{-1}x + c$

(b) $e^{\tan^{-1}x} + c$

(c) $\sec^{-1}x + c$

(d) None of these

65. The series $1 + \frac{3}{2!} + \frac{5}{3!} + \frac{7}{4!} + \ldots$ is

(a) convergent

(b) divergent

(c) not convergent

(d) None of these

66. If $A = \begin{bmatrix} 0 & 1 \\ 0 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$ then AB is

(a) unit matrix

(b) $\begin{bmatrix} 1 & 1 \\ 0 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 0 & 0 \\ 1 & 1 \end{bmatrix}$

(d) Null matrix

67. If A is a square matrix of order 3×3, then the order of A^7 is

(a) 7×7

(b) 3×3

(c) 21×21

(d) Not defined

68. If the line $2x + ky = 1$ and $3y - x = 3$ are perpendicular then the value of *k* is

(a) $\frac{1}{2}$

(b) $\frac{2}{3}$

(c) $\frac{3}{2}$

(d) $\frac{1}{6}$

69. The centre and radius of the circle represented by the equation $x^2 + y^2 + 4x - 4y - 1 = 0$ are

(a) (2, –2) and 3

(b) (2, –2) and $\sqrt{7}$

(c) (–2, 2) and 3

(d) (2, –2) and $\sqrt{7}$

70. The sum of the series $\frac{2}{\pi} - \frac{4}{\pi^2} + \frac{8}{\pi^3} -$ ---- is

(a) $\frac{2}{\pi+2}$

(b) $\frac{2}{\pi-2}$

(c) $\frac{1}{\pi+2}$

(d) $\frac{1}{\pi-2}$

71. Which one of the following is correct?

(a) Curvature of a straight line is infinite

(b) The radius of curvature of a straight line is zero

(c) The curvature of a circle is constant

(d) The radius and radius of curvature of a circle are reciprocal

72. If the resultant of two perpendicular forces P and Q makes an angle 60^0 with P, then

(a) P = $\sqrt{3}$ Q

(b) Q = $\sqrt{3}$ P

(c) P = $\sqrt{2}$ Q

(d) Q = $\sqrt{2}$ P

73. Angular velocity of rotation of the earth about its axis is

(a) π/12 radian/hour

(b) π/6 radian/hour

(c) π/18 radian/hour

(d) π/24 radian/hour

74. Which of the following polynomial has zeros −4 and 5i

(a) $x^3-4x^2+25x-100$

(b) $x^3+4x^2+25x+100$

(c) $x^3+4x^2-25x-100$

(d) $x^3-4x^2-25x+100$

75. For the roots α,β of the polynomial $ax^2+bx+c=0$, where a, b, c ∈ R and a, b > 0, c < 0, the maximum value of $\frac{\alpha}{\beta}+\frac{\beta}{\alpha}$ is

(a) 1
(b) 2
(c) –1
(d) –2

76. If a straight line makes an angle of $\frac{\pi}{4}$ with the X and the Y -axis, then what angle does it make with the Z-axis?

(a) $\frac{\pi}{4}$

(b) $\frac{\pi}{2}$

(c) $\frac{\pi}{3}$

(d) $\frac{\pi}{6}$

77. Evaluate $\left(\sqrt{3}+i\right)^{2019}$

(a) $2019i$

(b) $-2019i$

(c) $2^{2019}i$

(d) $-2^{2019}i$

78. The radius and centre of the circle, which is described on the line joining the points (1, 2) and (2, 1) as diameter, are

(a) $\sqrt{2}$, (1/2, 1/2)

(b) $\frac{\sqrt{2}}{2}$, (3/2, 3/2)

(c) $\frac{\sqrt{2}}{2}$, $(-3/2, -3/2)$

(d) 2, $(-1/2, -1/2)$

79. A person X speaks truth 4 out of 5 times. A die is thrown. He reports that there is a six. What is the chance that there actually was a six?

(a) 4/5
(b) 4/9
(c) 1/2
(d) 1/4

80. What is the expectation of the number on a throw of a single dice?

(a) 3
(b) 6
(c) 7/2
(d) 7

81. When a good is taxed, tax burden mainly falls on consumers if:
(a) Tax is levied on consumers
(b) Tax is levied on producers
(c) Supply is inelastic, and demand is elastic
(d) Supply is elastic, and demand is inelastic

82. The Golden Rule of level of capital is that level of capital per worker which maximizes:
(a) Consumption
(b) Savings
(c) Investment
(d) Output

83. The first ministerial conference of WTO of 1996 was organised in:
(a) Geneva, Switzerland
(b) Singapore
(c) Seattle, USA
(d) Cancun, Mexico

84. Which of the following is not a tool of the monetary policy in India?
(a) Liquidity Adjustment Facility
(b) Marginal Standing Facility

(c) Market Stabilization Scheme
(d) External Commercial Borrowings

85. The Foreign Exchange Management Act (FEMA) was enacted in the year
(a) 2000
(b) 1999
(c) 1998
(d) 2001

86. Structural transformation of an economy is about
(a) Changing social conditions
(b) Shifting labour from low productivity sectors to high productivity sectors
(c) Changing structure of industries
(d) All of above

87. Laissez Faire is an economic policy propounded by
(a) Paul Sweezy
(b)Nicholas Kaldor
(c) Adam Smith
(d) Raghurajan

88. NNP (Net National Product) equals
(a) GNP - depreciation
(b) GNP – indirect taxes
(c) Consumer expenditure on durable goods
(d) Indirect business tax

89. The term 'Smart Money' is used for-
(a) Credit Card
(b) Internet Banking
(c) Cash with Bank
(d) Cash with Public

90. For how many years, Central government is supposed to compensate the loss of State governments due to GST?
(a) 3 years
(b) 4 years
(c) 5 years
(d) No compensation

91. At present, the base year for calculating Wholesale Price Index is -
(a) 2000-01
(b) 2002-03

(c) 2011-12
(d) 2005-06

92. What is full form of IHDI developed by UNDP?
(a) Indian Human Development Index
(b) Inequality Adjusted Human Development Index
(c) International Human Development Index
(d) Inequality of Human Development Index

93. Which among the following is not an Indirect Tax?
(a) Service Tax
(b) Custom Duty
(c) Excise Duty
(d) Corporation Tax

94. Mutual Funds are regulated in India by which among the following?
(a) SEBI
(b) RBI
(c) RBI and SEBI both
(d) Stock Exchanges

95. MUDRA (Micro Units Development Refinance Agency) Banks will
(a) Provide finance to other banks and Micro Finance Institutions (MFIs), who in turn will do the lending activities
(b) Primarily lend to SC/ST enterprises
(c) Set up a branch in every district of the country by 2019 in order to promote financial inclusion
(d) Primarily lend to enterprises being run by women

96. In the least square linear trend equation $Y = a + bX$, if b is positive, it indicates:
(a) Declining trend
(b) Rising trend
(c) No trend at all
(d) All of these

97. Cost of a firm's self-owned and self-employed resources are called:
(a) Real cost
(b) Implicit cost
(c) Explicit cost
(d) Opportunity cost

98. Stagflation occurs when
(a) Price level increases and real GDP decreases
(b) Price level decreases and real GDP increases

(c) Price level and real GDP decrease at the same time
(d) Price level and real GDP increase at the same time

99. If the elasticity of demand for imports is less than unity, then the value of:
(a) Exports will increase
(b) Imports will decrease
(c) Exports will decrease
(d) Imports will increase

100. Which of the following is NOT an item on capital account?
(a) Receipt of loan
(b) Payment of loan
(c) Payment of reciprocal amount of loan
(d) Interest and dividend

101. The geometric mean of 8, 9 and 24 is

(a) 4
(b) 9
(c) 12
(d) 24

102. The empirical relationship among AM, GM and HM is:

(a) $GM = (AM \times HM)^2$
(b) $(GM)^2 = AM \times HM$
(c) $(GM)^2 = (AM \times HM)^2$
(d) $GM = (AM)^2 \times (HM)^2$

103. Upper limit of class interval is considered for calculating

(a) Less than cumulative frequency
(b) More than cumulative frequency
(c) Quartile
(d) Median

104. The variance of *n* natural numbers is:

(a) $\frac{1}{6}\left(n^2-1\right)$

(b) $\frac{1}{6}\left(n^2+1\right)$

(c) $\frac{1}{12}\left(n^2-1\right)$

(d) $\frac{1}{12}\left(n^2+1\right)$

105. A graph plotted with the help of cumulative frequencies is called as

(a) Ogive
(b) Histogram
(c) Pie
(d) Bar diagram

106. As the number of observations and classes increase, the shape of the frequency polygon

(a) Remains unchanged
(b) Tend to become jumbled
(c) Tend to become smooth
(d) Tend to become straight

107. For a group of 100 candidates, the mean was found to be 40. Later on it was discovered that a value 45 was misread as 54. The correct mean is:

(a) 40.50
(b) 39.85
(c) 39.80
(d) 39.91

108. The mean of the distribution is 23, median is 24, and the mode is 25.5. It is most likely that this distribution is:

(a) Positively skewed
(b) Symmetrical
(c) Asymmetrical
(d) Negatively skewed

109. If a constant value 5 is subtracted from each observation of a set, the variance is:

(a) Reduced by 5
(b) Reduced by 25
(c) Unaltered
(d) Increased by 25

110. Which of the following statements about the correlation coefficient are true?

I. The correlation coefficient and the slope of the regression line may have opposite signs
II. A correlation of 1 indicates a perfect cause-and-effect relationship between the variables
III. Correlations of +0.87 and −0.87 indicate the same degree of clustering around the regression line

(a) I only
(b) II only
(c) III only
(d) I and II only

111. If Coefficient of variation is 75% and standard deviation is 15, then mean is

(a) 10
(b) 20
(c) 30
(d) 40

112. Regression coefficient is independent of the change of

(a) Scale
(b) Origin
(c) Number of observation
(d) Neither scale nor origin

113. Median can be determined graphically with the help of

(a) Line diagram
(b) Bar diagram
(c) Histogram
(d) Ogive

114. The harmonic mean of 3, 6 and 10 is:

(a) 5.0
(b) 6.5
(c) 6.33
(d) 4.5

115. The coefficient of quartile deviation is

(a) $\frac{Q_3 + Q_1}{Q_3 - Q_1}$

(b) $\frac{Q_3 - Q_1}{Q_3 + Q_1}$

(c) $\frac{Q_3 + Q_2}{Q_3 - Q_2}$

(d) $\frac{Q_2 + Q_1}{Q_2 - Q_1}$

116. Formula of mode for grouped data is

(a) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 + l_1)$

(b) $l_1 + \frac{f_1 + f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

(c) $l_1 - \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

(d) $l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times (l_2 - l_1)$

117. Weighted mean can be obtained with

(a) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 + n_2 + ... + n_k}$

(b) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 + X_2 + ... + X_k}$

(c) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{n_1 - n_2 - ... - n_k}$

(d) $weighted\ mean = \frac{n_1X_1 + n_2X_2 + ... + n_kX_k}{X_1 - X_2 - ... - X_k}$

118. The mean difference between 9 paired observations is 15.0 and the standard deviation of difference is 5.0. The value of statistic is:

(a) 27
(b) 9
(c) 3
(d) Zero

119. A coin is tossed six times. The probability of obtaining heads and tails alternatively is:

(a) 1/2
(b) 1/8
(c) 1/32
(d) 1/64

120. If the group indices are 80, 120 and 125 and their respective group weights are 60, 20 and 20, the consumer price index is:

(a) 108.33
(b) 97.00
(c) 98.49
(d) 104.66

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Space for Rough Work