DO NOT OPEN THE SEAL OF THE QUESTION BOOKLET UNTIL YOU ARE ASKED TO DO SO.

Question Booklet Series Code : **C**

Question Book Series No :

169839

Maximum marks : 150

Time Allowed : 150 minutes   Total Questions : 150

There shall be negative marking @ 0.25 mark per question for wrong / multiple answers.

Before answering any question, check the Booklet that it contains 16 pages and no page is missing, mutilated or repeated. In case of defect, get it replaced immediately.

INSTRUCTIONS FOR CANDIDATES

1. Fill in the OMR answer sheet, mentioning the Roll No. and other data as required. in the place(s) indicated therein, darken the appropriate circles in **blue or black ball point** pen only. Do not write any name / surname or put any symbol, sign, slogan, prayer or any mark or identification in the OMR answer sheet. Do not tamper with the bar-code or any other portion of the OMR answer sheet. **Any such act is liable to render the answer sheet unfit for evaluation.**

2. Correcting fluid, eraser, blade, books, textual material, script notes / loose paper, calculator, document, slide rules, log tables / electronic watches, smart watch, cell phone, pager, other electrical/ electronic devices etc, are not allowed inside the examination hall. In case the candidate is found to be in possession of any of the above, he / she shall be **expelled from the examination without any enquiry** as to whether the same was / were used by the candidate or not.

3. A machine will read the coded information furnished by you in the OMR Answer Sheet. If the information so furnished by you are incomplete or different from what you have given in the application form, **you shall be awarded Zero mark.**

4. Answer must be given by completely darkening one of the four circles / ovals representing the most appropriate answer given on the Answer Sheet corresponding to the relevant question. For Answers not shown by properly darkening **in black / blue ball point pen**, no marks shall be awarded.

5. **No Rough work should be done on the OMR Answer Sheet,** Space for rough work has been provided in the Question Booklet itself.

6. After the examination is over, candidates must ensure to fold the OMR Answer Sheet at the perforation and separate the Original Copy and Candidate's Copy of the Two Part OMR Answer Sheet in the presence of the Invigilator and handover the Original Copy to the Invigilator. The Candidate's Copy of the OMR Answer sheet may be taken by the candidate. **Failure to hand over the original copy of the OMR Answer Sheet to the Invigilator before leaving the examination hall / room shall make the candidate liable for penal action.**

7. Candidates may take with them the respective question-booklet after the examination is over.

8. Failure to comply with or violation of any of the above instructions shall be considered as adopting unfair means and action as deemed proper shall be taken.

(Turn over)

SEAL

Arithmetic

1. In a family, each daughter has the same number of brothers as she has sisters and each son has twice as many sisters as he has brothers. How many sons are there in the family ?
   - (a) 2
   - (b) 3
   - (c) 4
   - (d) 5

2. An error 2% in excess is made while measuring the side of a square. The percentage of error in the calculated area of the square is :
   - (a) 2%
   - (b) 2.02%
   - (c) 4%
   - (d) 4.04%

3. Two pipes A and B can fill a cistern in $37\frac{1}{2}$ minutes and 45 minutes respectively. Both pipes are opened. The cistern will be filled in just half an hour, if pipe B is turned off after :
   - (a) 5 min.
   - (b) 9 min.
   - (c) 10 min.
   - (d) 15 min.

4. A and B entered into partnership with capitals in the ratio 4 : 5. After 3 months, A withdrew $\frac{1}{4}$th of his capital and B withdrew $\frac{1}{5}$th of his capital. The gain at the end of 10 months was Rs. 760. A's share in this profit is :
   - (a) Rs. 330
   - (b) Rs. 360
   - (c) Rs. 380
   - (d) Rs. 430

5. Two trains, one from Howrah to Patna and the other from Patna to Howrah, start simultaneously. After they meet, the trains reach their destinations after 9 hours and 16 hours respectively. The ratio of their speeds is :
   - (a) 2 : 3
   - (b) 4 : 3
   - (c) 6 : 7
   - (d) 9 : 16

6. The effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly is :
   - (a) 6.06%
   - (b) 6.07%
   - (c) 6.08%
   - (d) 6.09%

7. The population of a town in the first year increases by 10%, in the next year it decreases by 10%. Once again in the third year it increases by 10% and in the fourth year it decreases by 10%. If the present population be 20000, then the population after four years will be :
   - (a) 16902
   - (b) 19602
   - (c) 20692
   - (d) None of these

8. Three unbiased coins are tossed. What is the probability of getting at most two heads ?
   - (a) $\frac{3}{4}$
   - (b) $\frac{1}{4}$
   - (c) $\frac{3}{8}$
   - (d) $\frac{7}{8}$

9. In 100 m race, A covers the distance in 36 seconds, B in 45 seconds and C in 48 seconds. If same speed is maintained in a race of 1600m, B will beat C in the said race of 1600m by :
   - (a) 80 m
   - (b) 75 m
   - (c) 100 m
   - (d) 85 m

10. A sum of Rs. 10000 is borrowed at 8% per annum compounded annually, which is paid back in three equal annual instalments. What is the amount of each instalment ?
    - (a) Rs. 4199.04
    - (b) Rs. 3880.34
    - (c) Rs. 3905.06
    - (d) Rs. 4180.35

11. A trader mixes 26 kg of rice at Rs. 20 per kg with 30 kg of rice of other variety at Rs. 36 per kg and sells the mixture at Rs. 30 per kg. His profit percent is :
    (a) No profit, no loss
    (b) 5%
    (c) 8%
    (d) 10%

12. A man takes twice as long to row a distance against the stream as to row the same distance in the direction of the stream. The ratio of the speed of the boat (in still water) and the stream is :
    (a) 2 : 1
    (b) 3 : 1
    (c) 3 : 2
    (d) 4 : 3

13. A scooter has 2 tyres and one Stepney (i.e. a total of 3 tyres). Each tyre can run up to a maximum of 5 km. What is the longest distance, which can be covered by the scooter ?
    (a) 5 km
    (b) 7.5 km
    (c) 10 km
    (d) None of these

14. 150 workers were engaged to finish a piece of work in a certain number of days. Four workers dropped on the second day, four more workers dropped on the third day and so on. It takes 8 more days to finish the work now. Find the number of days in which the work was completed.
    (a) 20 days
    (b) 23 days
    (c) 25 days
    (d) None of these

15. Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1 : 1 : 2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be :
    (a) Rs. 169.50
    (b) Rs. 170
    (c) Rs. 175.50
    (d) Rs. 180

Logical Reasoning

(Q16-18) In each of the following questions, there are four groups of letters. Three of these are alike in some way while one is different. Find the one which is different.

16. (a) E D C B A
    (b) O N M L K
    (c) J I H G F
    (d) X W V U Y

17. (a) AEDCB
    (b) GKJIH
    (c) MQPON
    (d) PRSTQ

18. (a) KLLM
    (b) TUUW
    (c) XYYZ
    (d) OPPQ

(Q19-21) A sales representative plans to visit each of six companies M, N, P, Q, R and S exactly once during the course of one day. She is setting up her schedule for the day according to the following conditions.
    (I) She must visit M before N and before R.
    (II) She must visit N before Q.
    (III) The third company she visits must be 'P'.

19. Which of the following could be the order in which sales representative visits the six companies ?
    (a) M, R, N, Q, P, S
    (b) M, S, P, N, R, Q
    (c) P, R, M, N, Q, S
    (d) P, S, M, R, Q, N

20. Which of the following could be true of the sales representative's schedule ?
    (a) She visits M third
    (b) She visits R sixth
    (c) She visits P first
    (d) She visits Q second

21. If the sales representative visits 'S' first, which company must she visit second ?
    (a) M
    (b) N
    (c) P
    (d) Q

(3)

(Q22-24) Select a suitable figure from the Answer Figures that would replace the question mark (?).

22.

Problem Figures :

Answer Figures :

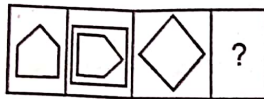(A) (B) (C) (D)   (1) (2) (3) (4)

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

23.

Problem Figures :

Answer Figures :

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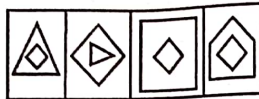
    (a)   1
    (b)   2
    (c)   3
    (d)   4

24.

Problem Figures :

Answer Figures :

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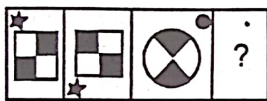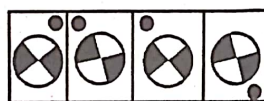
    (a)   1
    (b)   2
    (c)   3
    (d)   4

25.   A, B, C, D and E are five rivers. 'A' is smaller than B but longer than 'E'. "C" is the longest and 'D' is a little smaller than B and a little longer than A. Find the smallest river.
    (a)   A
    (b)   B
    (c)   C
    (d)   E

26.   What will come in place of question mark in the series ?
    150 152 149 153 148 154 ?
    (a) 155
    (b) 152

(c) 147
(d) 149

(Q27-29) In each question below are **given two statements** followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusion and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.
Give answer :
(a) If only conclusion I follows
(b) If only conclusion II follows
(c) If neither I nor II follows and
(d) If both I and II follow

27.   **Statements :**
No women teacher can play.
Some women teachers are athletes.
Conclusions :
I   Male athletes can play.
II   Some athletes can play.

28.   **Statements :**
All mangoes are golden in colour.
No golden-coloured things are cheap.
Conclusions :
I   All mangoes are cheap.
II   Golden-coloured mangoes are not cheap.
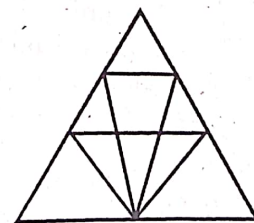
29.   **Statements :**
Some kings are queens.
All queens are beautiful.
Conclusions :
I   All kings are beautiful.
II   All queens are kings.

30.   Find the number of triangles in the given figure.

    (a)   12
    (b)   18
    (c)   22
    (d)   26

31. Rita's grades in four tests are 82, 80, 76 and 70. What grade must she get on the fifth test to raise her average to 80 ?
   (a)   86
   (b)   88
   (c)   92
   (d)   96

32. My mother is twice as old as my brother. I am five years younger than my brother but three years older than my sister. If my sister is twelve years of age, how old is my mother ?
   (a)   24
   (b)   30
   (c)   40
   (d)   50

33. In the following series, find the wrong element :
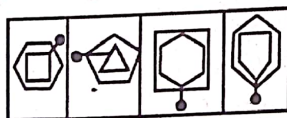   17, 36, 53, 68, 83, 92
   (a)   68
   (b)   36
   (c)   83
   (d)   92

34. Choose the alternative which closely resembles the mirror image of the given combination.

   ANS43Q12

   (a)   ANS43Q12
   (b)   S1Q£43NA
   (c)   2NA£40S1
   (d)   1SQ4£ANS

35. Choose the figure which is different from the rest.

   (1)   (2)   (3)   (4)

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

(Q36-40) Five roommates Rohan, Saleem, Tanmay, Umesh, and Vikas each do only one housekeeping task: mopping, sweeping, laundry, vacuuming, or dusting ; And only one day a week, Monday through Friday.
   (i)   Vikas does not vacuum and does not do his task on Tuesday.
   (ii)   Saleem does the dusting, and does not do it on Monday or Friday.
   (iii) The mopping is done on Thursday.
   (iv)   Tanmay does his task, which is not vacuuming, on Wednesday.
   (v)   The laundry is done on Friday, and not by Umesh.
   (vi)   Rohan does his task on Monday.

36. What task does Tanmay do on Wednesday ?
   (a)   vacuuming
   (b)   dusting
   (c)   mopping
   (d)   sweeping

37. What day does Umesh do his task ?
   (a)   Monday
   (b)   Tuesday
   (c)   Wednesday
   (d)   Thursday

38. What task does Vikas do ?
   (a)   Vacuuming
   (b)   Mopping
   (c)   Sweeping
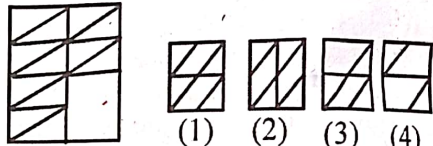   (d)   Laundry

39. What day is the vacuuming done ?
   (a)   Friday
   (b)   Monday
   (c)   Tuesday
   (d)   Wednesday

40. When does Saleem do the dusting ?
   (a)   Friday
   (b)   Monday
   (c)   Tuesday
   (d)   Wednesday

41. Five poles are fixed in a row. M is on the left of N, O is on the right of P which is on the right of N. If L is on the left of M, which pole is in the Centre ?
   (a)   L
   (b)   M
   (c)   N
   (d)   O

42. If in a clock, time is 9:30, then what time will be in its reflection in a mirror kept in front of it ?
   (a) 3:30
   (b) 2:30
   (c) 9:30
   (d) 6:15

43. From the options given below, in which option, words are arranged according to the alphabetical rule found in dictionary ?
   1. Church 2. Chance 3. Celebrity 4. Cataract 5. Cement
   (a) 4,5,3,2,1
   (b) 4,3,5,2,1
   (c) 4,3,2,5,1
   (d) 4,2,3,5,1

(Q. 44-47) The following questions are accompanied by three statements 1,2 and 3. You have to determine which statement (s) is/ are sufficient/necessary to answer the questions.

44. Find three positive consecutive even numbers :
   1. The average of four consecutive even number starting from the last of the given numbers is 17.
   2. The difference of the highest and the lowest number is 4.
   3. The sum of the squares of the three numbers is 440.
   (a) 1 alone is sufficient
   (b) 1 and 2 are sufficient
   (c) 3 is sufficient
   (d) Either 1 or 3 is sufficient

45. Rohit got 700 marks in the examination. To find out his percentage of marks which of the following information is/are necessary/ sufficient.
   1. He appeared in all the nine papers.
   2. The highest marks obtained is 90.
   3. The maximum marks for each paper is 100.
   (a) Only 1 is sufficient
   (b) Only 3 is sufficient
   (c) Only 1 and 2 together are sufficient
   (d) Only 1 and 3 together are sufficient

46. To find the length of the carpet which covers the floor of a rectangular hall, which of the following information is needed ?
   1. The length of the hall is 28m.
   2. The width of the carpet is 2.5 m.
   3. The area of the hall is 490 Sq.m.
   (a) Only 1 and 2 together are sufficient
   (b) Only 2 and 3 together are sufficient
   (c) Only 1 and 3 together are sufficient
   (d) Any two statements are sufficient

47. What is the relative speed of two trains running in opposite directions ?
   1. They take 15 seconds to cross each other.
   2. The speed of one of the trains is 60 Kmph.
   3. The total length of the trains is 360 m.
   (a) Only 1 and 2 together are sufficient
   (b) Only 2 and 3 together are sufficient
   (c) Only 1 and 3 together are sufficient
   (d) Any two statements together are necessary

48. Identify the figure that completes the pattern.

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

49. Look at this series :
   V, VIII, XI, XIV, __, XX
   What number should fill the blank ?
   (a) IX
   (b) XXIII
   (c) XV
   (d) XVII

50. Which word does NOT belong with the others ?
   (a) inch
   (b) ounce
   (c) centimeter
   (d) yard

51. Choose the set of figures which follows the given rule.

Contd.

Rule: Closed figures losing their sides and open figures gaining their sides.
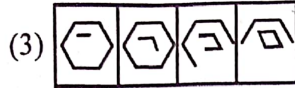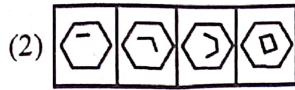
(a) 1
(b) 2
(c) 3
(d) 4

Computer and Internet Awareness

52. A _____ partitions a web browser window so that multiple web documents can be displayed simultaneously.
(a) Frame
(b) set
(c) Frameset
(d) div

53. _____ controls all the main slide control tasks for your presentation in MS PowerPoint.
(a) Task Pane
(b) Task Bar
(c) Control Panel
(d) None of these

54. What is the maximum number of columns that can be inserted in MS Word ?
(a) 55
(b) 65
(c) 50
(d) 45

55. In MS Window Help window can be opened by ?
(a) F2
(b) F9
(c) F1
(d) F11

56. What is the shortcut key for "Find and Replace" dialog box In MS WORD ?
(a) Ctrl + H
(b) Ctrl + Shift + F
(c) Ctrl + R
(d) Ctrl + F

57. What shortcut key is used to split a table in MS Word ?
(a) Ctrl + Shift + Enter
(b) Alt + Space + Enter
(c) Ctrl + Alt + Enter
(d) Alt + Shift + Enter

58. What PowerPoint feature will you use to apply motion effects to different objects of a slide ?
(a) Slide Transition
(b) Slide Design
(c) Animation Objects
(d) Animation Scheme

59. In MS Excel Long text can be broken down into many lines within a cell. You can do this through :
(a) Wrap Text in Format > Cells
(b) Justify in Edit > Cells
(c) Text Wrapping in Format > Cells
(d) All of above

60. Ctrl + D shortcut key in Excel will :
(a) Open the font dialog box
(b) Apply double underline for the active cell
(c) Fill down in the selection
(d) None of above

61. Which menu option can be used to split windows into two in Excel ?
(a) Review > Window
(b) View > Window > Split
(c) Window > Split
(d) View > Split

62. Which tool do you use to create a query object in MS-ACCESS ?
(a) Database wizard
(b) Simple filter wizard
(c) Simple query wizard
(d) Table query wizard

63. The process of division of memory spaces is called _____.
(a) Paging
(b) Segmentation

(c) Bifurcation

(d) Dynamic Division

64. OSI stands for _____.

(a) Open System Interconnection

(b) Operating System Interface

(c) Optical Service Implementation

(d) Open Service Internet

65. HTTP is _____ protocol.

(a) application layer

(b) transport layer

(c) network layer

(d) data link layer

66. Data communication system within a building or campus is _____.

(a) LAN

(b) WAN

(c) MAN

(d) PAN

67. A _____ is a device that forwards packets between networks by processing the routing information included in the packet.

(a) bridge

(b) firewall

(c) router

(d) hub

68. The "S" in HTTPS stands for :

(a) Selected

(b) Secure

(c) Software

(d) System

69. What will happen if the email does not contain the subject while sending ?

(a) Mail will not be sent

(b) Mail will be sent normally

(c) Prompt asking to send mail without subject

(d) None of these

70. In MODEMS :

(a) several digital signals are multiplexed

(b) a digital signal changes some characteristic of a carrier wave

(c) digital signal is amplified

(d) All of these

71. How many bits are there in hexadecimal code ?

(a) 16

(b) 0

(c) 2

(d) 4

72. _____ is the functional key to display save-as box.

(a) F5

(b) F6

(c) F9

(d) F12

Current Affairs

73. Who has written the book "The Light We Carry" ?

(a) Barack Obama

(b) Michelle Obama

(c) Sashi Tharoor

(d) Amitabh Ghosh

74. Who is Mohamed Irfaan Ali ?

(a) President of Guyana

(b) Prime Minister of Lebanon

(c) Foreign Minister of Turkey

(d) Home Minister of Malaysia

75. Which district got "Best District Panchayat Award" under National Panchayat Award 2023 ?

(a) Cuttack

(b) Murshidabad

(c) Ganjam

(d) Hyderabad

76. Odisha FC won Hero Super Cup in April 2023. Which team did they defeat in final ?

(a) Bengaluru FC

(b) North East United

(c) Jamshedpur FC

(d) Kerala Blasters

77. In which field has Damayanti Beshra distinguished herself ?

(a) Odishi Dance

(b) Santhali literature

(c) Odia literature

(d) Classical music

78. President of Taiwan recently visited USA, thereby upsetting China. What is the name of Taiwan President ?

(a) Tsaing-wen

(b) Ma Ying-Jeou

Scanned with OKEN Scanner

(c) Chen Shui-Ban

(d) Lee Teng-Hui

79. Who was conferred Sahitya Akademi Award for Santhali Literature for 2022 ?

(a) Shyam Sundar Besra

(b) Kali Charan Hembram

(c) Niranjan Hansdah

(d) Kajli Soren (Jagannath Soren)

80. Birthday of Netaji Subhash Chandra Bose is observed as Parakram Diwas. His Birth day falls on :

(a) 21st Jan

(b) 25th Jan

(c) 19th Jan

(d) 23rd Jan

81. As per data released by SIPRI in April 2023, what is the rank of India among countries of world in military spending ?

(a) 6th

(b) 4th

(c) 5th

(d) 8th

82. Who was sworn in as President of Bangladesh in April 2023 ?

(a) Mohamad Shahabuddin Chhupu

(b) Shirin Sharmin Chaudhary

(c) Mohamad Abdul Hamid

(d) Zilur Rehman

83. Recently 50 years of "basic structure doctrine" by Supreme Court was celebrated/ observed. In which case was this doctrine laid down 50 years ago ?

(a) Keshavananda Bharati case

(b) Golaknath case

(c) Minerva Mills case

(d) Menaka Gandhi case

84. Where was country's first water metro inaugurated recently ?

(a) Kochi

(b) Prayagraj

(c) Delhi

(d) Kolkata

85. Shri Prakash Singh Badal died on 25th April after a distinguished career in politics. How many times was he Chief Minister of Punjab ?

(a) Twice

(b) Thrice

(c) 4 times

(d) 5 times

86. Which among the following countries is not a Member of QUAD ?

(a) U.S.A.

(b) India

(c) Japan

(d) South Korea

87. Sportsmen of which among the following discipline are on protest at Jantar Mantar in April 2023 alleging sexual harassment and corruption in their federation ?

(a) Wrestling

(b) Weight lifting

(c) Gymnastics

(d) Swimming

88. 13th ICC men's Cricket World Cup (ODI) is scheduled to be held in Oct-Nov 2023 in :

(a) England

(b) Australia

(c) India

(d) South Africa

89. Per capita income growth between 2011-12 to 2022-23 for India (CAGR) was 9.4%. During same period what was per capita income growth in Odisha ?

(a) 9%

(b) 9.5%

(c) 10%

(d) 10.5%

90. During 2021-22 Indian Economy's growth rate was estimated at 8.7%. What was the growth rate of Odisha Economy during the same period ?

(a) 8.5%

(b) 9.5%

(c) 10.5%

(d) 11.5%

Data Interpretation

(Q91-94) Study the following bar chart carefully and answer the questions given below it.

Crude oil availability (India) (In million tonne)

Production ■ Imports ▥
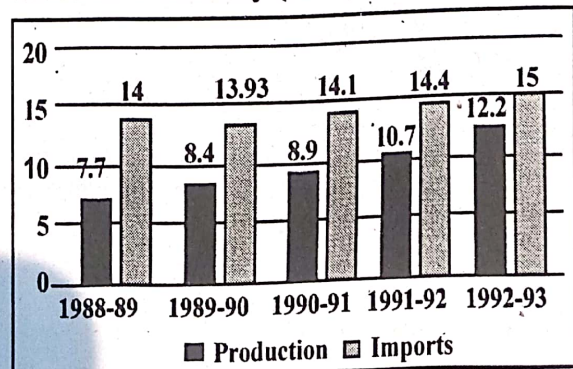
91. Crude oil production (in million tonnes) during the year 1991-92 was :
    (a) 14.4
    (b) 10.7
    (c) 14.1
    (d) 8.9

92. What was the difference in crude oil imports during 1990-91 and 1991-92 (In million tonnes) ?
    (a) 0.3
    (b) 0.2
    (c) 0.1
    (d) No difference

93. In which year, was the crude oil production roughly 80% of the imports ?
    (a) 1989-90
    (b) 1990-91
    (c) 1991-92
    (d) 1992-93

94. As compared to imports, what was the percentage of crude oil production during 1988-89 ?
    (a) 45%
    (b) 50%
    (c) 55%
    (d) 60%

(Q95-99) Study the following table carefully and answer the questions given below it.

**Sugarcane production by six major states during 1986 to 1990 (in million tonnes)**

Year / States	P	Q	R	S	T	X	TOTAL
1986	140	65	48	38	39	22	352
1987	132	63	62	56	40	23	376
1988	150	55	72	49	36	27	389
1989	168	60	45	65	43	25	406
1990	170	45	70	62	42	23	412

95. Which of the following states shows a constant fall in sugarcane production every year ?
    (a) P
    (b) Q
    (c) R
    (d) None of these

96. In which year during the given period was the percentage of state Q's share the highest in the total production ?
    (a) 1986
    (b) 1987
    (c) 1988
    (d) 1989

97. In which year does state 'P' have a share of about 35% in the total sugarcane production ?
    (a) 1986
    (b) 1987
    (c) 1988
    (d) 1989

98. In the year 1990, how many of the given states have a share of 15% or more in the total sugarcane production ?
    (a) Three
    (b) Four
    (c) Five
    (d) All

99. What was the extent of increase in sugarcane production in state 'S' from 1987 to 1990 ?
    (a) 6 million tonnes
    (b) 7 million tonnes
    (c) 10 million tonnes
    (d) 12 million tonnes

(Q100-101) Study the following bar diagram carefully and answer the questions given below it.

Loss due to strike of Textile workers in Mumbai (Rupees in Crore).
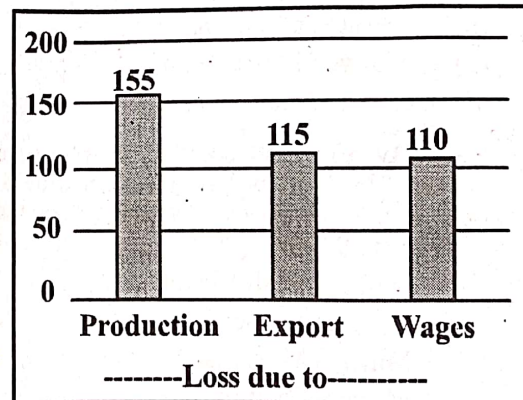
100. The ratio of losses due to production in proportion to losses due to wages is approximately equal to :
    (a) 2 : 11
    (b) 11 : 2
    (d) 7 : 5
    (d) 7 : 4

101. During the strike, the ratio of the loss in export in proportion to loss in production is :
    (a) 23 : 31
    (b) 4 : 5
    (c) 3 : 5
    (d) 12 : 11

(Q102-104) In the following table, results of two schools A and B are given. On the basis of this table, answer the following questions.

Class	School A		School B	
	Appeared in the exam	Passed	Appeared in the exam	Passed
XII	140	135	110	??
XI	160	150	??	105
X	??	160	110	80
IX	130	105??	90	340
TOTAL	630	550	430	340

102. What percentage of students passed in both the schools ?
    (a) 80.0
    (b) 83.9
    (c) 87.4
    (d) 90.0

103. The total number of students who have passed in class X in the two schools, is :
    (a) 310
    (b) 255
    (c) 240
    (d) 155

104. The average of the students who have passed in classes IX and X from school 'A' is :
    (a) 70.0
    (b) 132.5
    (c) 142.5
    (d) 155.0

(Q105-108) Study the data given below and answer the following questions.
500 delegates in an international meet were handed over cards like the following :

English	: E ☐
French	: F ☐
German	: G ☐
Asiatic Language	: A ☐

They were asked to tick the names of the languages in which they had sufficient skills. Then the cards were collected and sorted into piles with the following numbers of cards in each pile.

Languages Ticked	E	G	A	EA	EG	EF	EAF	EGF
Number of cards	165	32	15	70	81	84	41	10

There were no GA or GEA, and every card with F marked also had E.

105. How many delegates were proficient in all the four languages ?
    (a) 2
    (b) 4

(c) 1
(d) 0

106. The number of delegates proficient in both English and French is :
    (a) 95
    (b) 130
    (c) 250
    (d) 135
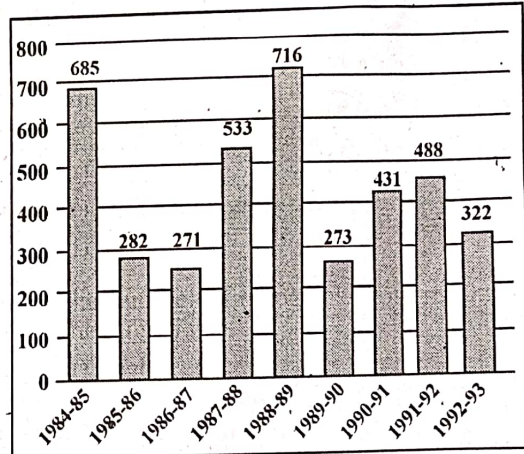
107. How many are proficient in only two languages ?
    (a) 170
    (b) 235
    (c) 250
    (d) 190

108. The number of delegates proficient in only one language is :
    (a) 453
    (b) 137
    (c) 200
    (d) 212

(Q109-111) Study the following bar diagram and answer the questions given below it.

Additional Taxation (Rupees in Crores)

109. The increase in additional taxes in 1988-89 as compared to 1984-85 is :
    (a) 5.4%
    (b) 4.5%
    (c) 95.6%
    (d) 11.2%

110. As compared to 1988-89, what was the percentage of decline in additional taxes in 1990-91 ?
    (a) 37.75%
    (b) 65.8%
    (c) 66.12%
    (d) 39.8%

111. During which year the percent increase in additional taxes compared to the previous year is highest ?
    (a) 1987-88
    (b) 1988-89
    (c) 1990-91
    (d) 1991-92

(Q112-116) The table given below shows the percentages of the total population of a state by age groups for the year 1991. Study the table and answer the questions 112 to 116 given below it.

Age Group	Percent
Up to 15	30
16 – 25	17.75
26 – 35	17.25
36 – 45	14.5
46 – 55	14.25
56 – 65	5.12
66 and above	1.13
Total	100

112. Which one among the age groups listed below accounts for the maximum population in the state ?
    (a) 16-25
    (b) 26-35
    (c) 36-45
    (d) 56-65

113. Out of every 4200 persons, the number of persons below 26 years is :
    (a) 2005 (approx)
    (b) 1760 (approx)
    (c) 1910 (approx)
    (d) 1890 (approx)

114. If, there are 200 million people below 36 years, how many million people are in the age group 56-65 (approx) ?
    (a) 30.07
    (b) 15.75
    (c) 12.75
    (d) 59.30

115. If there are 10 million people in the age group 56 and above, what is the extent of difference between the total number of people in the age group 16-25 and 46-55 ?
    (a) 6.8 million (approx)
    (b) 5.6 million (approx)
    (c) 28.4 million (approx)
    (d) 34.7 million (approx)

116. If the difference between the number of people in the age groups 46-55 and 26-35 is 11.75 million, then the total population of the state is :
    (a) 400 million (approx)
    (b) 391.67 million (approx)
    (c) 360 million (approx)
    (d) 460 million (approx)

(Q117-120) The following pie-chart shows the sources of funds to be collected by the National Highways Authority of India (NHAI) for its Phase II projects. Study the pie-chart and answers the questions 117 to 120 that follow.

Sources of funds to be arranged by NHAI for Phase II projects (in crores Rs.)
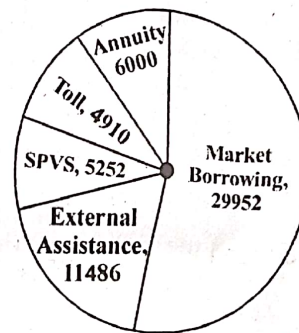
117. Near about 20% of the funds are to be arranged through :
    (a) SPVS
    (b) External Assistance
    (c) Annuity
    (d) Market Borrowing

118. If NHAI could receive a total of Rs. 9695 crores as External Assistance, by what percent (approximately) should it increase the Market Borrowing to arrange for the shortage of funds ?
    (a) 4.5%
    (b) 7.5%
    (c) 6%
    (d) 8%

119. The central angle corresponding to Market Borrowing is :
    (a) 52°
    (b) 137.8°
    (c) 187.2°
    (d) 192.4°

120. The approximate ratio of the funds to be arranged through Toll and that through Market Borrowing is (approximately) :
    (a) 2 : 9
    (b) 1 : 6
    (c) 3 : 11
    (d) 2 : 5

Arithmetic

121. Evaluate: $[(18 - 6) \div 4] + [72 - 12 \div 3$ of 2]
    (a) 768
    (b) 572
    (c) 275
    (d) 752

122. Total number of divisors of 10500 except 1 and itself is :
    (a) 48
    (b) 46
    (c) 42
    (d) None of these

123. What is the least possible number, which when divided by 2, 3, 4, 5, 6, leaves the remainders 1, 2, 3, 4, 5, respectively ?
    (a) 60
    (b) 61
    (c) 59
    (d) 69

124. The fraction equivalent of the recurring decimal 5. 8737373...... is :
    (a) $5\frac{173}{900}$
    (b) $5\frac{873}{900}$
    (c) $5\frac{173}{198}$
    (d) None of these

125. Which one is highest among the following fractions $\frac{1}{2}, \frac{2}{3}, \frac{2}{5}, \frac{4}{7}$?
    (a) $\frac{1}{2}$
    (b) $\frac{2}{5}$
    (c) $\frac{2}{3}$
    (d) $\frac{4}{7}$

126. In the below given expression, what is the value of '?'
    $(17)^{3.5} \times (17)^{?} = (17)^{8}$
    (a) 2.29
    (b) 2.75
    (c) 4.25
    (d) 4.5

127. Number of zeros at the end of the expression 10+100+1000+..........+10000000000 is :
    (a) 1
    (b) 10
    (c) 55
    (d) None of these

128. Find the unit digit of the expression 77 × 88 + 66 × 55 :
    (a) 7
    (b) 6
    (c) 5
    (d) 0

129. $\dfrac{888 \times 888 \times 888 - 222 \times 222 \times 222}{888 \times 888 + 888 \times 222 + 222 \times 222} = ?$
    (a) 1110
    (b) 666
    (c) 4
    (d) 16

130. Find the remainder when (1719 × 1721 × 1723 × 1725 × 1727) is divided by 18 :
    (a) 17
    (b) 27
    (c) 9
    (d) 15

131. The average age of Sumit's family consisting of 5 members, 3 years ago, was 35 years. One year ago, a new baby was born in the family. Three years hence, the average age of the family will be :
    (a) 36 years
    (b) $34\frac{5}{6}$ years
    (c) $35\frac{4}{5}$ years
    (d) None of these

132. A milkman has 20 litres of milk. He mixes 5 litres of water, which is freely available, in 20 litres of pure milk. If the cost of pure milk is Rs 18 per litre, then the profit of the milkman , when he sells all the mixture at cost price is :
    (a) 20%

(Turn over)

(b) 25%

(c) 5%

(d) 33.33%

133. The incomes of A, B, C are in the ratio 12 : 9 : 7 and their spending are in the ratio 15:9:8 . If A saves 25% of his income, then, what is the ratio of savings of A, B and C ?

(a) 11 : 13 : 18

(b) 15 : 18 : 11

(c) 16 : 17 : 21

(d) 13 : 16 : 11

134. Due to fall in manpower, the production in a factory decreases by 60 %. By what percent should the working hours be increased, to restore the original production in the factory ?

(a) 40%

(b) 66.66%

(c) 150%

(d) 120%

135. A man sells two wrist watches, one at a profit of 10% and the other at a loss of 10%. But the selling price of each watch is Rs 200. What is the percentage of profit or loss ?

(a) 1% profit

(b) 1% loss

(c) 2% profit

(d) 2% loss

136. Compound and Simple interest on a certain sum, at certain rate of interest,after two years is 220 and 200 respectively. What is the Principal sum ?

(a) Rs 2,200

(b) Rs 2,000

(c) Rs 500

(d) Rs 1,000

137. A is twice as good a workman as B, and therefore, able to finish a piece of work in 30 days less than B. In how many days, they can complete the whole work, working together ?

(a) 30 days

(b) 15 days

(c) 20 days

(d) 40 days

138. The distance between office and home of Uma is 80km. One day she was late by 1 hour than the normal time to leave for the office, so, she increased her speed by 4km/hr. Thus she reached to office at the normal time. What is the changed speed of Uma ?

(a) 20km/hr

(b) 16km/hr

(c) 40km/hr

(d) 10km/hr

139. Between 2'O clock and 3'O clock, at what time , the two hands of a clock coincide ?

(a) 2 : 10 : 36

(b) 2 : 10 : 45

(c) 2 : 10 : 54

(d) 2 : 10 : 56

140. Find the cost of carpeting a room , 17m long and 9 m wide, with a carpet 60cm broad at 40 paisa per metre of length.

(a) Rs 110

(b) Rs 102

(c) Rs 100

(d) Rs 112

141. If the sum of the first 14 terms of an AP is 1050 and its first term is 10, then, find the 20th term from the following ?

(a) 170

(b) 180

(c) 190

(d) 200

142. Two dice are thrown. What is the probability that the sum of numbers on the dice is a prime number ?

(a) 1/6

(b) 1/2

(c) 1/3

(d) 5/12

143. A truck driver, once in a week, leaves his house and drives to the river dock to pick up supplies. At 6:05 PM, one-fifth of the way to the dock, he passes the Temple. At 6:15 PM, one-third of the way, he passes the Dhaba. At what time does he reach the dock ?

(a) 6:50 PM

(b) 6:55 PM

(c) 7:00 PM

(d) 7:05 PM

144. Sami decided to give Kachoris to her friends on her Birthday. If she gives 3 Kachoris to each friend, one friend will get only 1 Kachori. Also, if she gives 2 Kachoris to each friends, she will be left with 13 Kachoris. How many friends are there ?

(a) 12
(b) 15
(c) 17
(d) 16

145. The calendar for the year 2007 will be the same for the year :

(a) 2014
(b) 2016
(c) 2017
(d) 2018

146. In Roman Number System, there are seven symbols which are used to represent the whole number system. The symbols and their respective values are given below.
$I=1$, $V=5$, $X=10$, $L=50$, $C=100$, $D=500$, $M=1000$; Then, the value of the numeral MCDLXIV is :

(a) 1666
(b) 664
(c) 1464
(d) 656

147. $(11^2 + 12^2 + 13^2 + ... + 20^2) = ?$

(a) 2575
(b) 2485
(c) 2395
(d) 2295

148. The price of 10 chairs is equal to that of 4 tables. The price of 15 chairs and 2 tables together is Rs. 4000. The total price of 12 chairs and 3 tables is :

(a) Rs. 3,500
(b) Rs. 3,750
(c) Rs. 3,840
(d) Rs. 3,900

149. When Rahul was born, his father was 32 years older than his brother and his mother was 25 years older than his sister. If Rahul's brother is 6 years older than him and his mother is 3 years younger than his father, how old was Rahul's sister when he was born ?

(a) 7 years
(b) 10 years
(c) 14 years
(d) 19 years

150. A bird shooter was asked how many birds he had in the bag. He replied that there were all sparrows but six, all pigeons but six, and all ducks but six. How many birds he had in the bag in all ?

(a) 9
(b) 18
(c) 27
(d) 36

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