Previous Paper (Solved)

DMRC—Customer Relation Assistant (CRA) Online Exam, 2017*

PAPER-I

1. What was the top priority in the First Five Year Plan in India?
   A. Ports B. Steel plants
   C. Agriculture D. Industries

2. Where is Bandipur National Park located?
   A. Bengaluru B. Kochi
   C. Chennai D. Mysore

3. Which article of the Indian constitution provides the procedure for removing the Vice-President?
   A. Article 56 B. Article 60
   C. Article 77 D. Article 67

4. Where is National Meat and Poultry Processing Center located in India?
   A. Mumbai B. New Delhi
   C. Kochi D. Bengaluru

5. Who appoints the Municipal commissioners in India?
   A. Governor
   B. President of India
   C. State Government
   D. Chief Justice of High Court

6. Under whose reign did the Khilafat movement start in India?
   A. Lord Chelmsford B. Lord Curzon
   C. Lord Dalhousie D. Lord Mountbatten

7. Who founded the Saluva dynasty?
   A. Dindima B. Abhinava Bhoja
   C. Devaraya D. Narsimha

8. The Judicial capital of Andaman & Nicobar Islands is:
   A. Guwahati B. Kolkata
   C. Port Blair D. Itanagar

9. Which Indian has won a Silver Medal at the Olympics in 2004?
   A. Karnam Malleswari
   B. Leander Paes
   C. Rajyavardhan Singh Rathore
   D. Vijender Singh

10. The national game of Bhutan is:
    A. Archery B. Badminton
    C. Basketball D. Football

11. Which ISRO spacecraft completed one year life around the Red planet in September 2015?
    A. MAVEN
    B. Araine-2
    C. Mars Orbiter Mission
    D. Chandrayaan

12. Who is the present Union Minister of Consumer Affairs in the cabinet of Narendra Modi?
    A. Anant Kumar
    B. Nitin Gadkari
    C. Ramvilas Pashwan
    D. Venkaiah Naidu

13. "Get Set Play" is the motto for which of the following games held in 2015?
    A. National Games of India
    B. Asian Games
    C. Indian Super League
    D. Commonwealth Games

14. Virbhadra Singh is the present Chief Minister of which state?
    A. Himachal Pradesh
    B. Uttarakhand
    C. Haryana
    D. Punjab

* *Online Exam held on 22-02-2017*

15. Which team bagged the highest number of Medals at the 35th National Games of India?
A. Haryana B. Services
C. Maharashtra D. Kerala

16. Who is the present Governor of the state of Assam?
A. Banwarilal Purohit
B. Jyoti Prasad Rajkhowa
C. Padmanabha Balakrishna Acharya
D. V. Shanmuganathan

17. What is the ranking of India in the Global Innovation Index (GII) in 2015?
A. 100th B. 51st
C. 81st D. 72nd

18. Which of the following research institutes in India has recently developed a medicine to treat Keratitis?
A. NIN B. AIIMS
C. CCMB D. ICMR

19. How many countries participated at the Commonwealth Games in 2014?
A. 81 B. 61
C. 91 D. 71

20. The scheme launched by the Union Government of India to provide online LPG connections is:
A. BHIM B. SAHAJ
C. SARAL D. DIGI DHAN

21. Which of the following monitors displays only one colour against a contrasting background usually black?
A. Gray scale B. Monochrome
C. Colour D. CRT

22. Which among the following technologies is used by cable television systems to send data over?
A. DSL connection B. Coaxial cable
C. Antennae D. ISP

23. Which of the following is not a service provided by the internet?
A. E-mail
B. Internet service providing
C. Instant messaging
D. Chat

24. The amount of data a disk of a computer can store is known as:
A. Usage B. Thickness
C. Density D. Storage

25. Which of the following networks includes many nodes and one or more servers which control user access to the network's resources?
A. Distributed
B. Peer-to-Peer
C. Server-based
D. Client/Server

26. Which of the following codes provides up to four bytes, *i.e.*, 32 bits to represent each letter, number or symbol?
A. ASCII B. Extended ASCII
C. Unicode D. EBCDIC

27. Which of the following keys in Windows programs is used to cancel a command before it executes?
A. Alt B. Ctrl
C. Shift D. Esc

28. Which of the following software license types allows the source code to be available to users in editable format?
A. Shareware B. Commercial
C. Open-source D. Freeware

29. Which of the following is an example of a single tasking operating system?
A. MS-DOS B. MS -WINDOWS
C. LINUX D. UNIX

30. Among IBM compatible computers, how many keys does the most common keyboard layout of IBM enhanced keyboard have?
A. 106 B. 102
C. 100 D. 101

31. Which Vitamin is chemically known as Ascorbic acid?
A. Vitamin K B. Vitamin C
C. Vitamin E D. Vitamin D

32. Which substance among the following is not a polymer?
A. Polythene B. Starch
C. Urea D. Cellulose

33. Which one of the following compounds is used as washing soda?
A. Calcium Carbonate
B. Sodium Sulphate
C. Calcium Sulphate
D. Sodium Carbonate

34. The blood-sucking animals are called:
A. Omnivorous B. Carnivorous
C. Herbivorous D. Sanguivorous

35. The substance which has less density in solid state than in liquid state is:
A. Turpentine B. Benzene
C. Vegetable oil D. Water

36. A conflict, on the other hand, can also become a/an _____.
A. Opportunity B. Ego clash
C. Controversy D. Misunderstanding

37. **Assertion (A) :** Trust Leads to high level of affective commitment
Reason (R) : Affective commitment leads to Trust
A. Both A and R are false
B. A is true and R is not a correct explanation for A
C. A is true and R is the correct explanation for A
D. Both A and R are true

38. Which of these does not fall under ethical code?
A. Respect for colleagues
B. Legality
C. Competence
D. Lifestyle

39. A corporate company makes donations to charitable institutions, builds recreational facilities for employees and their families, supports educational institutions, art and other activities. In CSR, this dimension is known as _____ .
A. Ethical responsibility
B. Philanthropic responsibility
C. Legal responsibility
D. Economic responsibility

40. Mr. Shonail is known in his company for being Unethical in the communication. Which of these statements does not hold correct with Shonail's attitude referring to the above statement?
A. The advertisements he approves use visual images that conceal the truth
B. He keeps the proprietary information confidential
C. He suppresses the information that the public needs
D. He inflates claims about his team's commitment

41. Complete the following with the appropriate answer:
7 : 88 :: 6 : ?
A. 34 B. 85
C. 37 D. 76

42. Lasya and Chinari are sisters, Bharath is Lasya's only son, Renuka is a daughter of Chinari, then who is Bharath to Renuka?
A. Cousin B. Mother
C. Niece D. Sister in law

43. If "GYRATE" is coded as "TEGYRA", then what is the code for "GUZZLE"?
A. ZLEZUG B. LEGZZU
C. LEGUZZ D. GUZZEL

44. Pick the odd one out from the following:
(64, 83), (36, 49), (4, 25), (9, 100), (121, 144), ?
A. (64, 83) B. (9, 100)
C. (121, 144) D. (4, 25)

45. If "HOLDER" is coded as "REDLOH", then what would be the code for "INVEST"?
A. TSEVNI B. TSENVI
C. HSDIW D. INERU

46. Rashmi is Shran's wife. Shanmukh is Shran's only son. Chandu is Shanmukh's only sister, then who is Chandu to Rashmi.
A. Mother B. Daughter
C. Sister D. Aunty

47. Complete the following:
34 : 67 : : 42 : ?
A. 11 B. 74
C. 91 D. 83

48. Pointing to a photograph Divya says "she is my husband's mother's only daughter", then who is she to Divya?
A. Mother in law B. Sister in law
C. Daughter in law D. Sister

49. Complete the given Analogy:
Lemon : Vitamin C :: Green Leaves : ____?
A. Potassium B. Vitamin D
C. Iron D. Sodium

50. Solve the puzzle given below:

A. 0 B. 4
C. 2 D. 5

51. Pick the odd one out from the following:
17, 13, 63, 23, 71
A. 71 B. 63
C. 13 D. 17

52. In a coded language "INTRODUCE" is coded as "873214695", then what would be the coded for "INDUCE"?
A. 873695 B. 956378
C. 874695 D. 874996

53. If in a coded language "LAPSE" is "MBQTF", then what is "LANK"?
A. MBOL B. MBLO
C. MNAL D. MSOA

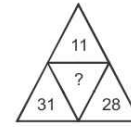
54. Complete the following Analogy:
Yamini Krishnamurthy : Bharatanatyam : : Pandit Birju Maharaj : ?
A. Kathakali B. Kathak
C. Bharatanatyam D. Kuchupudi

55. Insert the suitable answer in the place of the question mark.

7	?	26
4	8	14
3	6	12

A. 17 B. 14
C. 9 D. 3

56. What best suits the question mark in the given triangle?



A. 70 B. 49
C. 60 D. 39

57. If in a coded language "HORSE" is 23154, then what is "ROSE"?
A. 3154 B. 1345
C. 1354 D. 2421

58. Complete the following analogy with a suitable option:
Curb : Spur :: Revere : _____ ?
A. Pout B. Flout
C. Tout D. Shout

59. Which number should replace the question mark?

A. 21 B. 15
C. 9 D. 18

60. If in a coded language "LACTEAL" is "MBDUFBM", then what is "LOCK"?
A. MPDL B. MKWQ
C. MCOL D. LSOW

61. Look at the following series and find the next number :
7, 13, 25, 49, 97, _ ?
A. 193
B. 210
C. 127
D. 182

62. Insert the suitable number in the place of the question mark.

24	87	63
6	40	34
?	39	32

A. 11 B. 29
C. 1 D. 7

63. Complete the following Analogy:
28 : 4 :: 56 : ?
A. 29 B. 1
C. 11 D. 8

64. In a coded language "INDICATOR" is coded as 345321678, then what would be the code for "CARTOON"?
A. 2168477 B. 2186774
C. 3121211 D. 2168774

65. Complete the following:
36 : 6 : : 24 : ?
A. 9 B. 4
C. 3 D. 30

66. Look at the following series and find the next number:
6, 15, 42, 123, ?
A. 366 B. 12
C. 246 D. 369

67. Which word will appear first in the dictionary?
A. Canvas B. Catch
C. Catalogue D. Catapult

68. Look at the following series and find the next number:
39, 32 26, 21, 17, __ ?
A. 20 B. 28
C. 17 D. 14

69. Complete the following analogy:
Ostrich : Humming bird :: Femur : ____ ?
A. Humerus B. Ulna
C. Ossicles D. Radius

70. Moksha is on 134° anticlock wise from "North". If she wants to move towards "East" in the same direction, how many degrees does she need to turn?
A. 135° B. 180°
C. 270° D. 225°

71. Roja is facing a lake in a park which is on the "Northwest" corner. She turned 270° in the clock wise direction to go to a stall over there. Which side is Roja probably facing now?
A. North B. South
C. South West D. South East

72. In a code language, A = 4, B = 8, C = 12, D = 16, R = 72, T = 80, then what would be the code for "BIKE"?
A. 8, 40, 44, 10 B. 8, 36, 44, 20
C. 8, 36, 20, 44 D. 36, 40, 24, 90

73. Insert the suitable number in the place of the question mark.

16	32	2
?	24	6
31	93	3

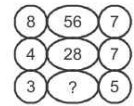
A. 11 B. 6
C. 4 D. 21

74. Complete the following:
36 : 58 :: 19 : _____ ?
A. 1 B. 41
C. 134 D. 34

75. Find the Odd one out:
A. Nanda Devi
B. Kangchenjunga
C. Jongsong Peak
D. Kirat Chuli

76. If in a coded language "KALI" is "MCNK", then what is "MILE"?
A. LIKM B. ELIM
C. OKNG D. OQNG

77. Insert the suitable number in the place of the question mark.



A. 35 B. 15
C. 8 D. 19

78. Sai and Vansi are brothers, Rama and Deepa are sisters. Lakshmi and Kusuma are sisters, Vansi is Lakshmi's son. Rama is Kusuma's daughter. Then who is Sai to Deepa?
A. Grand mother B. Cousin
C. Mother D. Aunty

79. Insert the suitable answer in the place of the question mark.

22	11	2
36	9	4
28	?	7

A. 21 B. 3
C. 9 D. 4

80. Look at the following series and find the next number:
7, 8, 10, 14, __ ?
A. 23 B. 14
C. 22 D. 20

81. Find the average of the first 20 multiples of 7.
A. 72.5 B. 71.5
C. 73.5 D. 70.5

82. What per cent of ₹ 3050 is ₹ 1725.5?
A. 56% B. 59.46%
C. 58.45% D. 56.57%

83. A boy goes to his school from his house at a speed of 5 km/hr and returns at a speed of 3 km/hr. If he takes 6 hours in going and coming, the distance between his house and school is:
A. 11.25 km B. 11.5 km
C. 11.75 km D. 11 km

84. If α, β are the roots of $ax^2 + bx + c = 0$, then $\frac{\alpha^2}{\beta} + \frac{\beta^2}{\alpha} =$ _____.
A. $\frac{3abc - b^2}{a^2c}$ B. $\frac{b^2 - 2ac}{ac}$
C. $\frac{b^2 - 2ac}{c^2}$ D. $\frac{3abc - b^2}{a^2}$

85. In a college, the ratio of the number of boys to girls 8 : 5. If there are 160 girls, what is the total number of students in the college?
A. 420 B. 416
C. 418 D. 419

86. ₹ 1350 was divided among A, B, C so that A : B = 4 : 5 and B : C = 10 : 7, then C gets:
A. ₹ 380 B. ₹ 450
C. ₹ 350 D. ₹ 378

87. A man can complete a journey in 13 hours. He travels first one fourth of the journey at the rate of 24 kmph and remaining at the rate of 32 kmph. Find the total length of journey:
A. 384 km B. 375 km
C. 394 km D. 374 km

88. Mr. Mittal purchased two steel factories, one in India and other one in Malaysia for a total of ₹ 72 crores. Later on he sold the Indian factory at 10% profit and the Malaysian factory at 24% profit. Thus he gained a total profit of 19%. The selling price of the Indian factory (in ₹) is:
A. 45.5 crores B. 8.55 crores
C. 52.5 crores D. 52.2 crores

89. A sum of money lent at compound interest for 2 years at 20% per annum would fetch ₹ 482 more. If the interest was payable half-yearly than if it was payable annually. What is the sum?
A. ₹ 23000 B. ₹ 20000
C. ₹ 24000 D. ₹ 22000

90. The sum of two numbers is 1500 and their L.C.M. is 16379. The two numbers are:
A. 1469, 31
B. 1489, 11
C. 1423, 73
D. 1479, 21

91. Find the number of factors of 7056.
A. 35 B. 40
C. 45 D. 30

92. Find the sum of the first 10 natural numbers.
A. 45 B. 75
C. 65 D. 55

93. A and B can do a piece of work in 18 days. B and C can do it in 24 days. A and C can do it in 36 days. In how many days will A, B and C finish it, working together?
A. 16 days B. 18 days
C. 12 days D. 14 days

94. 16 men complete a work in 20 days. After they have worked for 12 days, 8 more men join them. How many days will they take to complete the remaining work?
A. 14/3 days B. 8/3 days
C. 16/3 days D. 6 days

95. Find the greatest number that will divide 23, 71 and 141 so as to leave the same remainder in each case:
A. 3 B. 2
C. 6 D. 4

96. What is the sum of factors of 19600?
A. 5428 B. 54777
C. 33667 D. 44667

97. If α, β are the roots of $3x^2 - 5x + 7 = 0$, then $\alpha^3 + \beta^3 =$ _____ .
A. $\frac{190}{27}$ B. $\frac{-90}{27}$
C. $\frac{90}{27}$ D. $\frac{-190}{27}$

98. The ratio of the 7^{th} to the 3^{rd} terms of an A.P. is 12 : 5. What is the ratio of the 13^{th} to 14^{th} term?
A. 84 : 83 B. 90 : 97
C. 90 : 27 D. 15 : 16

99. 125 oranges are bought at the rate of ₹ 500 and sold at the rate of ₹ 60 per dozen. What is the percentage of profit or loss?
A. 25% loss B. 35% gain
C. 35% loss D. 25% gain

100. The simple interest on ₹ 10 for 4 months at the rate of 3 paise per rupee per month is:
A. ₹ 1.20 B. ₹ 1.60
C. ₹ 1.80 D. ₹ 1.40

101. A discount of 15% on one article is the same as discount of 20% on another article. What will be the cost of the two articles?
A. ₹ 80, ₹ 70 B. ₹ 90, ₹ 70
C. ₹ 80, ₹ 60 D. ₹ 90, ₹ 60

102. The L.C.M. of two numbers is 120. The numbers are in the ratio 4 : 5. The sum of the numbers is:
A. 54 B. 52
C. 56 D. 58

103. Two men start together to walk to a certain destination, one at 5 km/hr and another at 8 km/hr. The latter arrives one hour before the former. The distance is:
A. 13.33 km B. 13 km
C. 13.75 km D. 13.5 km

104. The average of all even numbers up to 86 is:
A. 45 B. 46
C. 44 D. 42

105. X can do $\frac{1}{2}$ of a work in 8 days. Y can do 30% of the same work in 50 days and Z can do $\frac{1}{4}$ of the same work in 20 days. Who will complete the work last?
A. X and Y B. Z
C. X D. Y

106. $\sqrt{\frac{1+\sin\theta}{1-\sin\theta}}$ is equal to:
A. $\sec\theta + \tan\theta$ B. $\sec 2\theta + \tan 2\theta$
C. $\sec 2\theta - \tan 2\theta$ D. $\sec\theta - \tan\theta$

107. Two numbers are in the ratio 7 : 9. If 11 is subtracted from each, the new numbers are in the ratio 3 : 1. What is the smaller number?
A. 5.7 B. 7.7
C. 6.7 D. 5

108. If the difference between the roots of $x^2 - px + q = 0$ is 2, then the relation between p and q is:
A. $p^2 = (q + 1)$ B. $p^2 = 4(q + 1)$
C. $p = 4(q + 1)$ D. $p = 4(q + 1)^2$

109. The average age of 25 students of a class is 20 years. Out of these, the average age of 10 students is 17 years and that of the other 14 students is 20 years. What is the age of the 25th student?
A. 65 years B. 55 years
C. 50 years D. 60 years

110. A can finish a work in 24 days and B can do the same work in 20 days. B worked for 15 days and left the job. In how many days can A alone finish the remaining work?

A. 10 B. $8\frac{1}{2}$

C. 6 D. 8

111. If A is in fourth quadrant and $\cos A = \frac{5}{13}$, then find the value of $\frac{13 \sin A + 5 \sec A}{5 \tan A + 6 \operatorname{cosec} A}$.

A. $\frac{2}{37}$ B. $\frac{-3}{37}$

C. $\frac{-4}{37}$ D. $\frac{-2}{37}$

112. In my pocket I have ₹ 25 consisting of only the denominations of 20 paise and 50 paise. There are total 80 coins in my pocket. The number of coins of the denomination of 50 paise is:

A. 30 B. 20

C. 25 D. 15

113. The sum of three consecutive terms in a G.P. is 42 and their product is 512. Find the largest of these numbers:

A. 32 B. 8

C. 16 D. 30

114. The effective annual rate of interest corresponding to a nominal rate of 12% per annum payable half yearly is:

A. 12%

B. 12.6%

C. 13.36%

D. 12.36%

115. A fruit seller sells mangoes at the rate of ₹ 12 per kg and thereby loses 25%. At what price per kg should he have sold then to make a profit of 10%?

A. ₹ 17.8 B. ₹ 17.50

C. ₹ 17 D. ₹ 17.60

116. Two objects are located on the same side of a tower. Observed from the top of the tower, their angles of depression are 45° and 60°. If the height of the tower is 150 m, the distance between the objects is:

A. 90 m B. 86.7 m

C. 63.4 m D. 769.9 m

117. By selling 50 lemons for ₹ 60, a man loses 10%. How many should he sell for ₹ 20 to gain 20% in the transaction:

A. 13 B. 12

C. 13.5 D. 12.5

118. One of the two buses completes a journey of 340 km in $8\frac{1}{2}$ hours and the other a journey of 500 km in 10 hours. What is the ratio of their average speeds?

A. 2 : 3 B. 4 : 5

C. 5 : 4 D. 3 : 2

119. The product of two numbers is 4096 and their H.C.F. is 16. How many such number pairs are possible?

A. 2 B. 4

C. 3 D. 1

120. The angle of elevation of a ladder leaning against a wall is 45° and the foot of the ladder is 8 m away from the wall. What is the length of the ladder?

A. 12.31 m B. 11.31 m

C. 12 m D. 11 m

ANSWERS

1	2	3	4	5	6	7	8	9	10
C	D	D	B	C	A	D	B	C	A
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
C	C	A	A	B	A	C	C	D	B

21	22	23	24	25	26	27	28	29	30
B	B	B	C	C	C	D	C	A	C
31	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
B	C	D	D	D	A	B	D	B	B
41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**
D	A	C	A	A	B	D	B	C	B
51	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
B	C	A	B	B	A	C	B	C	A
61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
A	D	D	B	B	A	A	D	C	A
71	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
C	B	C	B	A	C	B	B	D	C
81	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
C	D	A	A	B	D	A	D	B	B
91	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**100**
C	D	A	C	B	B	D	B	D	A
101	**102**	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**
C	A	A	C	D	A	B	B	C	C
111	**112**	**113**	**114**	**115**	**116**	**117**	**118**	**119**	**120**
D	A	A	D	D	C	D	B	D	B

EXPLANATORY ANSWERS

41. $7 : 88 :: 6 : x$

$\Rightarrow \quad 88 \times 6 = 7 \times x$

$\Rightarrow \quad 528 = 7x$

$\Rightarrow \quad x = \dfrac{528}{7} = 75.42$

$\cong 76$ (approx.)

44. (64, 83), (36, 49), (4, 25), (9, 100), (121, 144)

$(6^2, 7^2), (2^2, 5^2), (3^2, 10^2), (11^2, 12^2)$

Clearly, odd one is (64, 83).

47. $34 : 67 :: 42 : x$

$\Rightarrow \quad 67 \times 42 = 2814$

$34 \times 83 = 2822$ (approx.)

Hence, option (D) is correct.

51. 17, 13, 63, 23, 71

17, 13, 23, 71 are prime numbers but 63 is composite number.

Hence, 63 is odd one.

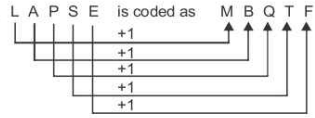
52. I N T R O D U C E is coded as

8 7 3 2 1 4 6 9 5

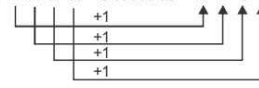
then, I N D U C E is coded as

8 7 4 6 9 5

53. L A P S E is coded as M B Q T F



Then, L A N K is coded as M B O L



55.

7	?	26
4	8	14
3	6	12

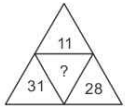
$4 + 3 = 7$

$8 + 6 = 14$

$14 + 12 = 26$

Hence, 14 will come at the place of question mark.

56.



$11 + 28 + 31 = 70$

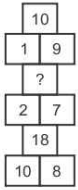
Hence, 70 will come at the place of question mark.

57.

H O R S E is coded as
↓ ↓ ↓ ↓ ↓
2 3 1 5 4

Then, R O S E is coded as
↓ ↓ ↓ ↓
1 3 5 4

59.



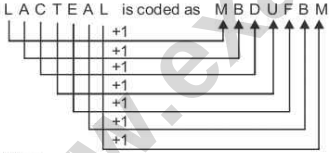
$10 + 8 = 18$

$2 + 7 = 9$

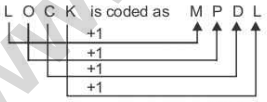
$1 + 9 = 10$

Hence, 9 will come at the place of question mark.

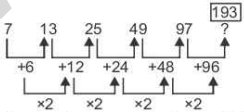
60.



Then,



61.



Hence, the next number = 193.

62.

24	87	63
6	40	34
?	39	32

$24 + 63 = 87$

$6 + 34 = 40$

$x + 32 = 39$

$\Rightarrow \quad x = 39 - 32 = 7$

Hence, 7 will come at the place of question mark.

63. 28 : 4 : : 56 : ?

$4 \times 56 = 28 \times x$

$\Rightarrow \quad x = \frac{4 \times 56}{28} = 8$

Hence, 8 will come at the place of question mark.

64.

I N D I C A T O R is coded as
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
3 4 5 3 2 1 6 7 8

Then, C A R T O O N is coded as
↓ ↓ ↓ ↓ ↓ ↓ ↓
2 1 8 6 7 7 4

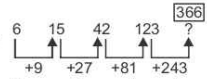
65. 36 : 6 : : 24 : ?

$36 \times x = 6 \times 24$

$\Rightarrow \quad x = \frac{6 \times 24}{36} = 4$

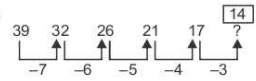
Hence, 4 will come at the place of question mark.

66.



Hence, the next number of the series is 366.

68.



Hence, the next number of the series is 14.

72. A = 4, B = 8, C = 12, D = 16, R = 72, T = 80

Hence, Code of B I K E will be
↓ ↓ ↓ ↓
8 36 44 20

73.

16	32	2
?	24	6
31	93	3

$32 \div 2 = 16$

$24 \div 6 = 4$

$93 \div 3 = 31$

Hence, 4 will come at the place of question mark.

74. 36 : 58 : : 19 : ?

36 : 58 : : 19 : 41

76. K A L I is coded as M C N K

+2 +2 +2 +2

then,

M I L E is coded as O K N G

+2 +2 +2 +2

77.

8	56	7
4	28	7
3	?	5

$8 \times 7 = 56$

$4 \times 7 = 28$

$3 \times 5 = 15$

Hence, 15 will come at the place of question mark.

79.

22	11	2
36	9	4
28	?	7

$22 \div 2 = 11$

$36 \div 4 = 9$

$28 \div 7 = 4$

Hence, 4 will come at the place of question mark.

80. 7 8 10 14 22 ?

+1 +2 +4 +8

Hence, 22 will come at the place of question mark.

81. $7 + 14 + 21 + 28 + \ldots\ldots + 140$

$= 7\,(1 + 2 + 3 + 4 + \ldots\ldots + 20)$

$$= 7 \times \frac{20 \times 21}{2} = 1470$$

$$\text{Required average} = \frac{1470}{20} = 73.5.$$

82. $x\%$ of $3050 = 1725.5$

$$\Rightarrow \quad \frac{x}{100} \times 3050 = 1725.5$$

$$\Rightarrow \quad 305x = 17255$$

$$\Rightarrow \quad x = \frac{17255}{305} = \frac{3451}{61}$$

$$= 56.57\%.$$

83. Let distance between school and house $= x$ km

$$\frac{x}{3} + \frac{x}{5} = 6$$

$$\Rightarrow \quad \frac{5x + 3x}{15} = 6$$

$$\Rightarrow \quad 8x = 90$$

$$\Rightarrow \quad x = \frac{90}{8} = \frac{45}{4} = 11.25$$

Hence, the distance between school and house $= 11.25$ km.

84. $\because$ α, β are the roots of the equation

$$ax^2 + bx + c = 0$$

$$\therefore \quad \alpha + \beta = -\frac{b}{a} \text{ and } \alpha\beta = \frac{c}{a}$$

$$\frac{\alpha^2}{\beta} + \frac{\beta^2}{\alpha} = \frac{\alpha^3 + \beta^3}{\alpha\beta}$$

$$= \frac{(\alpha + \beta)^3 - 3\alpha\beta(\alpha + \beta)}{\alpha\beta}$$

$$= \frac{\left(-\frac{b}{a}\right)^3 - 3\frac{c}{a}\left(-\frac{b}{a}\right)}{\frac{c}{a}} = \frac{\frac{-b^3}{a^3} + \frac{3bc}{a^2}}{\frac{c}{a}}$$

$$= \left(\frac{-b^3 + 3abc}{a^3}\right) \times \frac{a}{c} = \frac{3abc - b^3}{a^2 c}.$$

85. Let no. of boys = $8x$ and no. of girls = $5x$

$$5x = 160$$

$$\Rightarrow \quad x = \frac{160}{5} = 32$$

$\therefore$ No. of boys = $32 \times 8 = 256$

Hence, total no. of students

$= 256 + 160 = 416.$

86. $\because$ A : B = 4 : 5

B : C = 10 : 7

$\therefore$ A : B : C = $4 \times 10 : 5 \times 10 : 5 \times 7$

$= 40 : 50 : 35$

$= 8 : 10 : 7$

$$\text{C's share} = \frac{7}{25} \times 1350$$

$= 7 \times 54 = ₹\ 378.$

87. Let total length of journey = x km

$$\frac{x}{4 \times 24} + \frac{3x}{4 \times 32} = 13$$

$$\Rightarrow \quad \frac{x}{96} + \frac{3x}{128} = 13$$

$$\Rightarrow \quad \frac{4x + 9x}{384} = 13$$

$$\Rightarrow \quad 13x = 384 \times 13$$

$$\Rightarrow \quad x = \frac{384 \times 13}{13} = 384$$

Hence, the total length of the journey

$= 384$ km.

90. Let one number = x

$\therefore$ other number = $1500 - x$

$$\Rightarrow \quad x(1500 - x) = 16379$$

$$\Rightarrow \quad 1500x - x^2 = 16379$$

$$\Rightarrow \quad x^2 - 1500x + 16379 = 0$$

$$\Rightarrow x^2 - 11x - 1489x + 16379 = 0$$

$$\Rightarrow \quad x(x - 11) - 1489(x - 11) = 0$$

$$\Rightarrow \quad (x - 11)(x - 1489) = 0$$

$$\Rightarrow \quad x = 11 \text{ or } 1489$$

$\therefore$ Numbers are 11 and 1489.

92. First ten natural numbers are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Sum

$= 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10$

$$= \frac{10 \times 11}{2} = 55$$

Hence, sum of first ten natural numbers are 55.

93. (A + B)'s 1 day work = $\frac{1}{18}$

(B + C)'s 1 day work = $\frac{1}{24}$

(C + A)'s 1 day work = $\frac{1}{36}$

2(A + B + C)'s 1 day work

$$= \frac{1}{18} + \frac{1}{24} + \frac{1}{36}$$

$$= \frac{4 + 3 + 2}{72} = \frac{9}{72}$$

(A + B + C)'s 1 day work

$$= \frac{9}{72 \times 2} = \frac{1}{16}$$

Hence, (A + B + C) can do whole work in 16 days.

94. $16 + 8 = 24$ men

$20 - 12 = 8$ days

$\because$ 16 men can do a work in 8 days

$\therefore$ 24 men can do the same work in

$$\frac{16 \times 8}{24} \text{ days} = \frac{16}{3} \text{ days}$$

95. $71 - 23 = 48$

$141 - 71 = 70$

H.C.F. of 48 and 70 = 2

Hence, required greatest number = 2.

97. $\because$ α, β are the roots of the equation

$$3x^2 - 5x + 7 = 0$$

$$\alpha + \beta = \frac{-b}{a} = \frac{5}{3}$$

$$\alpha \times \beta = \frac{c}{a} = \frac{7}{3}$$

$$\alpha^3 + \beta^3 = (\alpha+\beta)^3 - 3\alpha\beta.(\alpha+\beta)$$

$$= \left(\frac{5}{3}\right)^3 - 3\left(\frac{7}{3}\right)\left(\frac{5}{3}\right)$$

$$= \frac{125}{27} - \frac{35}{3}$$

$$= \frac{125-315}{27}$$

$$= \frac{-190}{27}.$$

98. Let first term of A.P. = a and common difference = d

$$a + 6d = 12$$
$$a + 2d = 5$$
$$\underline{\quad - \quad - \quad}$$
$$4d = 7$$

$$\Rightarrow \quad d = \frac{7}{4}$$

$$a = 5 - 2d$$

$$= 5 - 2\times\frac{7}{4} = \frac{6}{4} = \frac{3}{2}$$

$$\frac{a+12d}{a+13d} = \frac{\frac{3}{2}+12\times\frac{7}{4}}{\frac{3}{2}+13\times\frac{7}{4}}$$

$$= \frac{\frac{3}{2}+\frac{84}{4}}{\frac{3}{2}+\frac{91}{4}} = \frac{\frac{90}{4}}{\frac{97}{4}}$$

$$= \frac{90}{97}$$

$\therefore$ $a + 12d : a + 13d = 90 : 97$

Hence, ratio of 13th to 14th term $= 90 : 97$.

101. 15% of x = 20% of y

$$\Rightarrow \quad \frac{15}{100}x = \frac{20}{100}y$$

$$\Rightarrow \quad 3x = 4y$$

$$\Rightarrow \quad x = \frac{4}{3}y \qquad [\text{Put } y = 60]$$

$$x = \frac{4}{3}\times 60 = 80$$

$\therefore$ Cost of two articles are ₹ 80, ₹ 60.

102. Let Numbers are $4x$ and $5x$

L.C.M. of $4x$ and $5x$ = $20x$

According to the question,

$$20x = 120$$

$$\Rightarrow \quad x = 6$$

$\therefore$ Numbers are 24 and 30

Sum of the numbers = 24 + 30 = 54.

103. Let the distance = x km

$$\frac{x}{5} - \frac{x}{8} = 1$$

$$\Rightarrow \quad \frac{8x-5x}{40} = 1$$

$$\Rightarrow \quad 3x = 40$$

$$\Rightarrow \quad x = \frac{40}{3} = 13.33$$

Hence, required distance = 13.33 km.

104. $2 + 4 + 6 + 8 + \ldots\ldots\ldots + 86$

$= 2\,[1 + 2 + 3 + 4 + \ldots\ldots\ldots + 43]$

$$= 2\left[\frac{43\times 44}{2}\right] = 43\times 44 = 1872$$

Required average = $\frac{1872}{43} = 44.$

105. X can do whole work in $2 \times 8 = 16$ days

Y can do whole work = $\frac{10\times 50}{3}$ days

$$= \frac{500}{3} = 166\frac{2}{3} \text{ days}$$

Z can do whole work = $4 \times 20 = 80$ days

Hence, Y will complete the work last.

106. $\sqrt{\frac{1+\sin\theta}{1-\sin\theta}} \times \sqrt{\frac{1+\sin\theta}{1+\sin\theta}} = \frac{1+\sin\theta}{\cos\theta}$

$= \frac{1}{\cos\theta} + \frac{\sin\theta}{\cos\theta}$

$= \sec\theta + \tan\theta.$

107. Let numbers are $7x$ and $9x$

$$\frac{7x-11}{9x-11} = \frac{3}{1}$$

$\Rightarrow \quad 27x - 33 = 7x - 11$

$\Rightarrow \quad 20x = 22 \Rightarrow x = \frac{11}{10} = 1.1$

$7x = 7 \times 1.1 = 7.7$

Hence, smaller number = 7.7.

108. $x^2 - px + d = 0$

Let α, β are the roots of the equation

$\therefore \quad \alpha + \beta = p$ and $\alpha \times \beta = q$

$\alpha - \beta = 2$ (given)

$\because \quad (\alpha - \beta)^2 = (\alpha + \beta)^2 - 4\alpha\beta$

$\Rightarrow \quad (2)^2 = p^2 - 4q$

$\Rightarrow \quad p^2 = 4 + 4d = 4(1 + q)$

Hence, $p^2 = 4(q + 1)$.

109. Total age of 25 students

$= 25 \times 20 = 500$ years

Total age of 10 students

$= 10 \times 17 = 170$ years

Total age of 14 students

$= 14 \times 20 = 280$ years

$\therefore$ Age of 25th student

$= 500 - (170 + 280)$

$= 500 - 450 = 50$ years

110. A's 1 day work $= \frac{1}{24}$

B's 1 day work $= \frac{1}{20}$

B's 15 days work $= \frac{1}{20} \times 15 = \frac{3}{4}$

Remaining work $= 1 - \frac{3}{4} = \frac{1}{4}$

$\frac{1}{24}$ A alone can do a work in 1 day

$\frac{1}{4}$ A alone can do this work in

$24 \times \frac{1}{4} = 6$ days.

111. $\because \quad \cos A = \frac{5}{13} = \frac{b}{h}$

$\therefore \quad \sin A = \frac{p}{h} = \frac{-12}{13}$

[$\because$ A is in fourth quadrant]

$\sec A = \frac{h}{b} = \frac{13}{5}$

$\tan A = \frac{p}{b} = \frac{-12}{5}$

$\operatorname{cosec} A = \frac{h}{p} = \frac{-13}{12}$

$$\frac{13\sin A + 5\sec A}{5\tan A + 6\operatorname{cosec} A} = \frac{13\times\left(\frac{-12}{13}\right) + 5\left(\frac{13}{5}\right)}{5\left(\frac{-12}{5}\right) + 6\left(\frac{-13}{12}\right)}$$

$$= \frac{-12+13}{-12-\frac{13}{2}} = \frac{1}{\frac{-37}{2}}$$

$$= \frac{-2}{37}.$$

112. $20x + 50y = 2500$

$\Rightarrow \quad 2x + 5y = 250 \quad ...(i)$

$x + y = 80$

$\Rightarrow \quad 2x + 2y = 160 \quad ...(ii)$

$2x + 5y = 250$

$2x + 2y = 160$

$- \quad - \quad -$

$3y = 90 \Rightarrow y = 30$

Hence, number of 50 paise coins = 30.

113. a, ar and ar^2 are in G.P.

$a \times ar \times ar^2 = 512$

$\Rightarrow \quad a^3r^3 = 512$

$\Rightarrow \quad (ar)^3 = (8)^3$

$\Rightarrow \quad ar = 8$

$\Rightarrow \quad a = \frac{8}{r}$

Now, $\quad a + ar + ar^2 = 42$

$\Rightarrow \quad a + 8 + 8r = 42$

$\Rightarrow \quad \frac{8}{r} + 8r = 34$

$\Rightarrow \quad 8r^2 + 8 = 34r$

$\Rightarrow \quad 8r^2 - 34r + 8 = 0$

$\Rightarrow \quad 8r^2 - 32r - 2r + 8 = 0$

$\Rightarrow \quad 8r(r - 4) - 2(r - 4) = 0$

$\Rightarrow \quad (r - 4)(8r - 2) = 0$

$\Rightarrow \quad r = 4 \text{ or } r = \frac{1}{4}$

$\therefore \quad a = \frac{8}{4} = 2$

$ar^2 = 2(4)^2$

$= 2 \times 16 = 32$

Hence, largest of these numbers = 32.

115. Cost price of the mangoes per kg

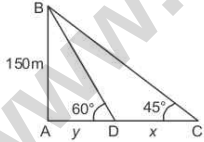
$$= 12 \times \frac{100}{75} = ₹\ 16$$

Selling price of the mangoes per kg

$$= 16 \times \frac{110}{100} = \frac{176}{10} = 17.60$$

Hence, the fruit seller should sell the mangoes ₹ 17.60 per kg.

116.



In ΔABC, $\quad \tan 45° = \frac{150}{x+y}$

$\Rightarrow \quad 1 = \frac{150}{x+y}$

$\Rightarrow \quad x + y = 150$

In ΔABD, $\quad \tan 60° = \frac{150}{y}$

$\Rightarrow \quad \sqrt{3} = \frac{150}{y}$

$\Rightarrow \quad y = \frac{150}{\sqrt{3}}$

$\Rightarrow \quad y = \frac{150}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = 50\sqrt{3}$

$\therefore \quad x = 150 - 50\sqrt{3}$

$= 150 - 50 \times 1.732$

$= 150 - 86.6 = 63.4$

Hence, the distance between objects = 63.4 m.

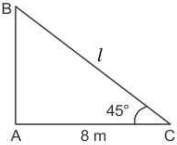
118. Speed of first bus $= \frac{340 \times 2}{17} = 40$ km/hr

Speed of 2nd bus $= \frac{500}{10} = 50$ km/hr

Ratio of their average speeds

$$= \frac{40}{50} = 4 : 5.$$

120.



In ΔABC, $\quad \cos 45° = \frac{8}{l}$

$\Rightarrow \quad \frac{1}{\sqrt{2}} = \frac{8}{l}$

$\Rightarrow \quad l = 8\sqrt{2}$

$= 8 \times 1.414 = 11.312$

$= 11.31$

Hence, the length of the ladder = 11.31 m.

PAPER-II

GENERAL ENGLISH

Directions (Qs. No. 1-5): *Read the following passage carefully and answer the questions that follow:*

All human bodies convey messages. A tattooed body is a peculiarly talkative one as it emanates a distinctive sign of expression. The selection of figures or designs for body tattooing is a significant one. Religious signs like the Godly figures, political ideologues including Che Guevara, movie stars. etc. stand witness to the old school of tattooing. On the other hand, the weird new figures used for tattooing give more opportunities to analyze the complexities of an innovative cultural construction. This context of tattoos - much like an individual's selection of dress, glitterati, hairstyle, etc. - operates as tools of new cultural constructions.

Unlike clothing, tattoos are perpetual and permanent. They are carved in the body forever with highly toxic chemical concoctions. One can change his sense of style, but his tattoo remains constant except he can add newer figures in the body, not in the already tattooed area. These facts lead the group - the tattooed bodies - to form a common platform of gathering with the ideology of the carnivalesque. The contemporary explosion which happened in the field of the social media and the vast scope offered in accessing both the personal and public spaces from anywhere in the world help in the explosion of these cultural equations. There may be Gods and angels in the making by whom this carnivalesque culture will bloom fully in the near future.

Tattoos, obviously, are attempts of culture constructions through the body carnivalesque. The news items which celebrate the people with 90% of body tattooing are steps to consummate the expectation and desire of a new culture. How the future and prospect of such an endeavor will turn out can be predicted only by the unpredictable moves of time.

1. Which of the following does not represent the old school of tattooing?
A. godly figures B. political leaders
C. alien figures D. movie icons

2. How does a tattooed body become peculiarly talkative?
A. by contributing a clear sign of evolution
B. by exposing a clear sign of evaluation
C. by producing a clear sign of expression
D. by creating a clear sign of emotion

3. Which word has been used in the second paragraph, meaning 'poisonous'?
A. Concoction B. Carnivalesque
C. Toxic D. Perpetual

4. The new cultural equations are popularied by _____ .
A. social media
B. personal interactions
C. public space
D. scientific explosions

5. By which method, do tattoos directly attempt to construct new cultures?
A. new gods and angels
B. body carnivalesque
C. news items
D. chemical concoctions

6. Which of the following is a Negative Adverb?
A. rather B. barely
C. certainly D. quite

7. Correct the sentence:
They told me that they may have finished it
A. They said to me that they may had finished that
B. They told me that they might have finished that
C. They told me that they might had finished that
D. They said to me that they should have finished that

8. How will you transform the sentence 'Mohan gave a clever reply' with an appropriate adverb?
A. Mohan replied cleverly
B. Mohan is clever
C. Mohan's replies are clever
D. Mohan replied with cleverness

9. Brussels ___ enjoys the status of the cultural capital of Europe.
A. no longer B. little more
C. any longer D. anymore

10. Rewrite the sentence into passive voice:
The jury is considering the case seriously.
A. The case is considered seriously by the jury
B. The case is being considered seriously by the jury
C. The case was considered seriously by the jury
D. The case is to be considered seriously by the jury

11. Which of the following is in the passive form?
A. She has been accused of forgery.
B. She had accused of forgery
C. She accused of forgery
D. She has accused of forgery.

12. Which of the following is a CORRECTLY ordered phrase?
A. A metallic little white cover
B. A little white metallic cover
C. A white little metallic cover
D. A white metallic little cover

13. Of in 'He is a man of word' is an example of Preposition of _____ .
A. place B. position
C. reason D. manner

14. Jabir has _____ M.A. in Communication from _____ European university.
A. an, a B. a, a
C. an, an D. a, an

15. Pick out the Possessive Pronoun from the following.
A. himself B. either
C. yours D. somebody

16. Change into Direct Speech:

The teacher instructed the class leader to tell the students that they should not use red pens.
A. The teacher said, "Class Leader, tell the students that they shall not use red pens."
B. The teacher said, "Class Leader, tell the students that they cannot use red pens."
C. The teacher instructed, "Class Leader, tell the students that they could not use red pens."
D. The teacher said, "You should not use red pens."

17. _____ is an example of Adverb of Time.
A. Ever B. Everywhere
C. Hence D. Certainly

18. Karthika exclaimed _____ .
A. That would have been a very terrific kick.
B. That was a very terrific kick.
C. That is a very terrific kick.
D. That had been a terrific kick.

19. Choose the meaning of the word 'affectation':
A. Pretense B. Affection
C. Pretension D. Discussion

20. Supply an appropriate preposition:

They saw an aeroplane flying _____ their cottage.
A. above B. on
C. with D. at

21. Identify the Adverbial clause in the sentence:

'The king and his retinue played the hunting game in the thick forest after midnight'.
A. after midnight
B. in the thick forest after midnight
C. the king and his retinue
D. in the thick forest

22. Pick out the grammatically CORRECT sentence:
A. The children were addicted at music
B. The children were addicted to music
C. The children were addicted on music
D. The children were addicted with music.

23. Which of the following is CORRECT?
A. Amir warned her not to repeat that again
B. Amir warned her do not repeat that again
C. Amir warned her she did not repeat that again
D. Amir warned her she does not repeat that again

24. _____ that India will be self-reliant soon.
A. It was expected
B. It has expected
C. It will be expected
D. It is expected

25. _____ is an example of a Proper Noun.
A. India B. Nation
C. Lake D. Globe

26. Which of the following is related to 'hilarious'?
A. Nonsense B. Merry
C. Hellish D. Humbug

27. 'Inaudible' doesn't mean:
A. loud B. quiet
C. muffled D. faint

28. The king jumped _____ his horse and rode _____ .
A. to, of B. upon, of
C. on, of D. upon, off

29. A 'worthy' man is:
A. Naughty
B. Nonsensical
C. Noble
D. Notorious

30. Write the synonym for the word 'grim'.
A. Sinister B. Sensuous
C. Sensible D. Selective

31. Choose the opposite of the word 'tender':
A. harsh B. warm
C. sensitive D. gentle

32. Pick out the grammatically CORRECT sentence:
A. Soman should have doing it, no doubt!
B. Soman have been done it, no doubt!
C. Soman should have done it, no doubt!
D. Soman should be done it, no doubt!

33. Pick out the word opposite to 'optimistic':
A. persuasive B. proactive
C. patriotic D. pessimistic

34. Write the antonym for the word 'incorrigible':
A. courageous B. manageable
C. corroborative D. malicious

35. A lazy cat is NOT:
A. inactive B. relaxed
C. vigorous D. idle

36. 'Decapitate' is same as:
A. deprecate B. considerate
C. invest D. behead

37. Each _____ a torch.
A. has B. were having
C. have D. are having

38. Pick out the word similar in meaning to 'compassionate':
A. stoic
B. sympathetic
C. stylistic
D. systematic

39. Which of the following is NOT an adverb?
A. Well
B. Creatively
C. Greedy
D. Rarely

40. Rewrite the sentence into active voice:

She had been appointed by the company as the in-charge to look after the issues.
A. The company had appointed her as the in-charge to look after the issues.
B. The company appointed her as the in-charge to look after the issues.
C. The company was appointed her as the in-charge to look after the issues.
D. The company has appointed her as the in-charge to look after the issues.

41. Rewrite the sentence:
Did the cry scare the children?
A. Had the children scared by the cry?
B. Were the children scared by the cry?
C. Were the children scary and crying?
D. Was the cry scared the children?

42. Fill in the blanks with appropriate prepositions:
_____ being a doctor, Anusha is good at music and has been living _____ a club.
A. Besides, beside B. Besides, besides
C. Beside, besides D. Beside, beside

43. The word 'tomorrow' changes to _____ in Indirect Speech.
A. the next day B. the day to come
C. that day D. the future day

44. He was the only son of the old woman who fell _____the river.
A. into B. of
C. from D. with

45. George _____ for Dubai tomorrow evening.
A. will have been leaving
B. had been leaving
C. is leaving
D. has been leaving

46. "They were being disturbed by him."
Choose the Active Voice of the sentence.
A. He was disturbing them
B. He disturbs them
C. He disturbed them
D. He was disturbed by them

47. 'Futile' can be replaced by:
A. fruitless B. fantastic
C. frequent D. funny

48. Change into Indirect Speech:
Preethi asked Smitha, "Why do you always talk to him like this?"
A. Preethi asked Smitha why she had always talked to him like that.
B. Preethi asked Smitha why she always talked to him like that.
C. Preethi asked Smitha why had she always talked to him like that
D. Preethi asked Smitha that why did she always talk to him like that.

49. The members of the committee _____ to the proposal.
A. was consented B. have consented
C. has consented D. had been consented

50. I could see a boat _____ the bridge.
A. onto B. in
C. below D. into

51. Let's go home, _____ ?
A. will we?
B. shall we?
C. wont' we?
D. won't you?

52. Change to Indirect Speech:
"When will we get the trophy that we find missing?"
A. When would they get the trophy that they found missing
B. When they would get the trophy that they find missing
C. When will they get the trophy that they found missing
D. When they would get the trophy that they found missing

53. If 'Slow' is 'Fast', 'Vivid' is _____ .
A. Vague B. Vain
C. Vast D. Various

54. *Incompetent* is related to *Efficient* in the same way as *Intolerance* is to _____ .
A. narrowness B. endurance
C. unforgiving D. addiction

55. 'Abrupt' CANNOT be replaced by:
A. sudden B. quick
C. hasty D. moderate

56. A lion who is powerless is:
A. influential B. incapable
C. impressive D. institutional

57. The passive expression of the sentence 'Ashiyan won the match after a tough fight' is:
A. The match had won by Ashiyan after a tough fight
B. The match won by Ashiyan was after a tough fight
C. The match was won by Ashiyan after a tough fight
D. The match was being won by Ashiyan after a tough fight

58. Which of the following is NOT a preposition?
A. across B. very
C. in front of D. beside

59. Fill in the blank by using an adverb from the given options:
The postman _____ argued that the address was wrong.
A. slow B. unbelievable
C. repeated D. strongly

60. Alex asked the stranger whether _____.
A. he could have his cell phone number
B. he can have his cell phone number
C. could he have his cell phone number
D. he will have his cell phone number

ANSWERS

1	2	3	4	5	6	7	8	9	10
C	C	C	A	B	B	B	A	A	B
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
A	B	D	A	C	B	A	B	C	A
21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
B	B	A	D	A	B	A	D	C	A
31	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
A	C	D	B	C	D	A	B	C	A
41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**
B	A	A	A	C	A	A	B	B	C
51	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
B	B	A	B	D	B	C	B	B	A

DMRC—Customer Relation Assistant (CRA) Exam, 2015

PAPER-I

1. Recently four mathematicians were awarded fields medal, 2014. Who among the following is not the one who was awarded the fields medal 2014?
A. Manjul Bhargava
B. Martin Hairer
C. Maryam Mirzakhani
D. Richard Borcherds

2. What is 'ZMapp' which was in news recently:
A. Map of Mars taken by NASA
B. Experimental drug
C. A mapping software
D. Mathematical formula to solve geometry

3. Recently outstanding Parliamentarian awards were conferred by the President of India on 12th Aug, 2014. Name the Parliamentarian who is not amongst them?
A. Arun Jaitley
B. Sharad Yadav
C. Shusma Swaraj
D. Karan Singh

4. This is an instrument that is a set of sensors and is capable of providing measurements of temperature, wind speed and direction, pressure, relative humidity and dust size & shape on Mars:
A. RIMFAX B. SHERLOC
C. MEDA D. MOXIE

5. In which sport India bagged highest number of gold at 2014 Common Wealth Games, Glasgow?
A. Wrestling B. Shooting
C. Weight lifting D. Badminton

6. Recently which organisation issued draft guidelines for setting up and operating a trade receivables discounting system in order to facilitate financing to MSMEs (Micro Small and Medium Enterprise)
A. Reserve Bank of India
B. Security & Exchange Board of India
C. NSIC
D. MCX

7. The theme of 6th BRICS summit held in Frotaleza, Brazil recently was:
A. Whole world; One Family
B. Economic Growth; Happy Living
C. Exclusive Development; Resources Harnessing
D. Inclusive Growth; Sustainable solutions

8. Union Ministry of Environment and Forests, notified "Bor wild life sanctuary" as tiger reserve. This tiger reserve is situated in the state of:
A. Rajasthan B. Madhya Pradesh
C. Maharastra D. Gujarat

9. 'Bluetooth' which is common in mobile phones gets its name from:
A. Danish 10th Century King
B. U.K. Software Company
C. Greek Goddess
D. Sony

10. Parliament has recently cleared a constitution amendment bill that facilitate setting up of a commission for appointment of judges. Before being sent it to the president for his assent, this bill needs to be ratified by:

A. 75% of the state legislatures
B. 50% of the state legislatures
C. 66.67% of the state legislatures
D. No ratification required by state legislatures

11. INS KOLKATA (D63) recently Commissioned was constructed at:
A. Hoogly Dock and Port Engineers Ltd.
B. Cochin Shipyard Ltd.
C. Hindustan Shipyard Ltd.
D. Mazgaon Dock Limited

12. Which strait separates Europe from Africa?
A. Mallaica B. Gibralter
C. Berring D. Palk

13. The most common cause of death in road accident is due to:
A. Severe injury
B. Loss of oxygen supply caused by blocked airway
C. Bleeding (Severe hemorrhage)
D. None of these

14. Which of the following was described by Dr. B.R. Ambedkar the 'Hearth and Soul' of the constitution?
A. Right to equality
B. Preamble
C. Right to constitutional remedies
D. Right to freedom of Religion

15. The 'Pulitzer Prize' is associated with:
A. Environmental protections
B. Civil Aviation
C. Journalism
D. Health Research

16. The layer of the atmosphere which provides ideal flying conditions for large jet Aero plane:
A. Ionosphere B. Exosphere
C. Troposphere D. Stratosphere

17. The concept of welfare state is included in the constitution of India in the:
A. Fundamental Rights
B. Fundamental Duties
C. Preamble
D. Directive Principles

18. Electrostatic precipitator is used to control?
A. Air Pollution B. Solid Waste
C. Noise Pollution D. Gas Pollution

19. The 'Red-Ribbon' Express was launched in India on:
A. World Environment Day
B. World Hepatitis Day
C. World Diabetes Day
D. World AIDS Day

20. The first Rajiv Gandhi Khel Ratna award was given to:
A. Vishwanathan Anand
B. Geet Sethi
C. Karnam Malleswari
D. Leander Paes

21. Who is the author of the book 'Imaging India':
A. Nandan Nilekani
B. Chetan Bhagat
C. Natwar Singh
D. Khuswant Singh

22. Panel of Vice Chairman consists of a penal of ..... members of Rajya Sabha nominated by the chairman. Anyone of whom may preside over the house in the absence of chairman and the deputy chairman when so requested by the chairman:
A. 3 B. 4
C. 6 D. 7

23. The latitude difference between India & Pakistan for their Standard time is:
A. 7° B. 7.5°
C. 8° D. 8.5°

24. Who among the following introduced the permanent Settlement of Bengal:
A. Warren Hastings
B. Lord Willam Bentinck
C. Lord Cornwallis
D. Lord Dalhousie

25. In case of reflection it is well known that when a mirror turned through an angle the reflected ray turns through:
A. Same angle B. Twice the angle
C. Thrice the angle D. Half the angle

26. When Alexander invaded India, who were the ruler of Magadh:
A. Shishunagas B. Nandas
C. Mauryas D. None of these

27. A stone lying at the bottom of a pond appears to be at a higher point than it actually is due to the phenomena of:
A. Diffraction of light
B. Scattering of light
C. Reflection of light
D. Refraction of light

28. Which of the following may be used by the Reserve Bank of India as a tool to draining out excess money from the system:
A. Increasing Cash Reserve Ratio
B. Increasing Reverse Repo rate
C. Reduction in Repo rate
D. Both (A) & (B)

29. Mullaperiyar dam is in the state of ..... and there is a interstate dispute between ..... for this.
A. Kerala, Kerala and Tamilnadu
B. Kerala, Kerala and Karnataka
C. Karnataka, Karnataka and Kerala
D. Tamilnadu, Tamilnadu and Kerala

30. Which Country has for the first time connected its European and Asian sides by opening a railway tunnel under Bosporus Strait that connects black sea to the sea of Marmara:
A. Turkey B. Bulgaria
C. Georgia D. Romania

31. A LAN card is also known as a:
A. ASIC B. BUS
C. NIC D. MMX

32. Auxiliary memory is also called:
A. Secondary memory
B. Primary memory
C. Cache memory
D. None of these

33. Which of the following in an internal command is DOS:
A. Sort B. More
C. Ren D. Tree

34. A UPS:
A. Increases the storage capacity of a computer system
B. Increases the process speed
C. Provides backup power in the event of a power cut
D. None of these

35. A group of 4 bits is called:
A. Byte B. Nibble
C. Word D. None of these

36. Output at Break Even point is that output at which producer is able to:
A. Recover only operating cost
B. Earn a normal profit
C. Wipe out earlier losses
D. Recover total costs

37. Which of the following is the highest mountain peak in South India:
A. Anai Mudi B. Doda Beta
C. Mahendragiri D. Dhupgarh

38. Which soil is more suitable for crops like cashew nut?
A. Red laterite soil B. Black soil
C. Alluvial soil D. Arid soil

39. Who has the right under the constitution to seek opinion of the Supreme Court on question of law?
A. President of India
B. Prime Minister of India
C. Speaker of the Lok sabha
D. All of these

40. The capital of world youngest nation South Sudan is:
A. Juba B. Rumbek
C. Malakal D. Wau

41. There are two examination halls—M and N. If 10 students are sent from M to N, the number of students in both the halls is same. If 20 students are sent from N to M, the number of students in M become twice the number of students in N. The number of students in M and N respectively is:
A. 90, 70 B. 80, 60
C. 100, 80 D. 120, 80

42. In the year 2000 a businessman started his business with ₹ 25,00,000. He spends ₹ 50,000 at the end of year 2005 and 2010. His total amount doubles in every five years. His amount in the year 2020 will be:
A. ₹ 48,50,000 B. ₹ 1,30,00,000
C. ₹ 1,94,00,000 D. None of these

43. If the duty on an article is reduced by 40% of its present rate, by how much percent must the consumption increase in order that the revenue remains unaltered?
A. $60\frac{2}{3}\%$ B. $64\frac{2}{3}\%$
C. $66\frac{2}{3}\%$ D. None of these

44. An article cost ₹ 80 to the vendor. If he marks the article for 50% more than the cost price and sells it 25% less than the marked price. What is his gain percentage?
A. 25% B. $21\frac{1}{4}\%$
C. $12\frac{1}{2}\%$ D. $15\frac{1}{2}\%$

45. $100 \times 10 - 100 + 2000 \div 100 = ?$
A. 840 B. 920
C. 760 D. None of these

46. Among the following numbers
$6\sqrt{12}$, $3\sqrt{4}$, $4\sqrt{5}$, $\sqrt{3}$, the least one is:
A. $6\sqrt{12}$ B. $3\sqrt{4}$
C. $4\sqrt{5}$ D. $\sqrt{3}$

47. An empty tank is connected with pipes A, B and C. A and B are inlet pipes and they fill the tank in 6 hours and 8 hours respectively, while C is an outlet pipe and it empties the completely filled tank in 5 hours. Find the time in which the tank will be completely filled if all the pipes are opened together.
A. $10\frac{9}{11}$ hours B. $9\frac{9}{11}$ hours
C. $10\frac{10}{11}$ hours D. $9\frac{10}{11}$ hours

48. Two vessels A and B contain acid and water mixed in the ratio 2 : 3 and 4 : 3. In what ratio must these mixtures be mixed to form a new mixture containing half acid and half water?
A. 7 : 5 B. 5 : 7
C. 3 : 5 D. None of these

49. A person sold an article at 20% profit on the selling price. Afterwards, when the cost price reduced by 10%, then he also reduced the selling price by 10%. This percentage of profit on cost price will be:
A. 25% B. 22%
C. 21.5% D. 20%

50. If the radius of a right circular cylinder is decreased by 50% and its height is increased by 60%, its volume will be decreased by:
A. 30% B. 40%
C. 60% D. 70%

51. A pole 18 m high casts a shadow 9.6 m long. What is the distance of the top of the pole from the far end of the shadow?
A. 20.4 m B. 20.5 m
C. 20.6 m D. None of these

52. 24 men can complete a work in 16 days. 32 women can complete the same work in 24 days. 16 men and 16 women worked for 12 days. How many more men are required to complete the remaining work in 2 days?
A. 24 B. 36
C. 32 D. None of these

53. The areas of two circular fields are in the ratio 16 : 49. If the radius of the latter is 14 m, then what is the radius of the former?
A. 10 m B. 8 m
C. 12 m D. 16 m

54. Two trains start simultaneously from Kanpur and Agra towards each other with speeds of 70 km/hr and 90 km/hr respectively. When they met each other it was observed that one of them had covered 350 km more than the other. Find distance between Kanpur and Agra?
A. 2400 km B. 2550 km
C. 2700 km D. 2800 km

55. The perimeter of a rhombus is 40 cm and the measure of an angle is 60°, then the area of it is :

A. $100\sqrt{3}$ cm^2 B. $75\sqrt{3}$ cm^2

C. $180\sqrt{3}$ cm^2 D. $50\sqrt{3}$ cm^2

56. The average age of 45 persons is decreased by 1/9 year when one of them having 60 years is replaced by a new comer. Then the age of the new comer is:

A. 48 years B. 50 years

C. 55 years D. 46 years

57. When the price of cloth was increased by 25%, then the quantity of cloth sold decreased by 20%. What was the effect on the gross receipt?

A. 5% increase B. 8% increase

C. 20% decrease D. None of these

58. Pipe 'A' can fill a tank in 10 hours and pipe 'B' can fill the same tank in 12 hours. Both the pipes are opened to fill the tank and after 3 hours pipe 'A' is closed. Pipe 'B' will fill the remaining part of the tank in:

A. 5 hours 36 minutes

B. 5 hours 24 minutes

C. 5 hours 39 minutes

D. 5 hours 48 minutes

59. Anil sells a table to Kamal at a profit of 10% and Kamal sells it to Rajat at a profit of 12%. If Rajat pays ₹ 246.40 for it, then how much had Anil paid for it?

A. ₹ 220 B. ₹ 215

C. ₹ 200 D. ₹ 233

60. 10 sheep and 5 goats were bought for ₹ 6000. If the average price of a sheep is ₹ 450, find the average price of goat:

A. ₹ 370 B. ₹ 355

C. ₹ 325 D. ₹ 300

61. Daisy purchased 6 mangoes, 10 oranges and 5 apples for a certain amount. With 40% less amount Anuj could purchase 3 mangoes, 5 oranges and 4 apples. What percentage of the total amount did Daisy spend on apples?

A. 25% B. 28%

C. 33.33% D. None of these

62. It takes 8 people working at equal rates to finish a work in 96 days. How long will 6 workers take for the same work?

A. 124 days B. 125 days

C. 128 days D. 122 days

63. A bag contains rupee, 50 paise, 25 paise and 10 paise coins in the proportion 1 : 3 : 5 : 7. If the total amount is ₹ 22.25, find the number of coins of each kind :

A. ₹ 1, 5; 50 paise 25; 25 paise, 15; 10 paise, 25

B. ₹ 1, 5; 50 paise 15; 25 paise, 25; 10 paise, 35

C. ₹ 1, 5; 50 paise 25; 25 paise, 15; 10 paise, 35

D. ₹ 1, 5; 50 paise 25; 25 paise, 25; 10 paise, 25

64. If $(9/7)^3 \times (49/81)^{2x-6} = (7/9)^9$, then the value of x is:

A. 12 B. 6

C. 8 D. None of these

65. A bag contains 19 red balls, 37 blue balls and 27 green balls. If a ball is picked up from this bag at random, what is the probability of picking a blue ball?

A. 36/87 B. 37/83

C. 38/83 D. None of these

66. If the volume of a sphere is divided by its surface area, result obtained is 27 cm. The radius of the sphere is:

A. 81 cm B. 72 cm

C. 48 cm D. None of these

67. A number x is mistakenly divided by 10 instead of being multiplied by 10, what is the percentage error in the result?

A. 89% B. 99%

C. 79% D. None of these

68. In a class of 20 students in an examination in Mathematics 2 students scored 100 marks each, 3 got zero each and the average of the rest was 40. What is the average of the whole class?

A. 32 marks B. 40 marks
C. 48 marks D. None of these

69. Number of diagonals in a 30 sided convex polygon will be:
A. 405 B. 955
C. 818 D. 378

70. The value of $\sqrt{a\sqrt{a\sqrt{a.....\infty}}}$ is:
A. 1 B. a
C. a^2 D. ∞

71. Two perpendicular cross roads of equal width run through the middle of a rectangular field of length 80 meter and breadth 60 meter. If the area of the cross roads is 675 m^2, what is the width of the road:
A. 6 meters B. 5 meters
C. 9 meters D. None of these

72. A solid piece of iron is in the form of a cuboid of dimensions (49 cm × 33 cm × 24 cm) is melted and moulded to form a solid sphere. The radius of the sphere is:
A. 19 cm B. 21 cm
C. 23 cm D. 25 cm

73. If the price of oranges was less by 40%, one could buy 32 more for ₹ 120. The price presently is:
A. ₹ 3.00 B. ₹ 2.00
C. ₹ 1.50 D. ₹ 2.50

74. The hypotenuse of an isoceles right angled triangle is q. If we describe equilateral triangles (outwards) on all its 3 sides., then the total area of the re-entrant hexagon thus obtained is:
A. $q^2\left(\sqrt{3}+2\right)$ B. $\frac{q^2\left(2\sqrt{3}+1\right)}{4}$
C. $\frac{q^2\left(4\sqrt{3}-1\right)}{4}$ D. None of these

75. If PQR are three consecutive odd numbers and four times the first is 3 more than thrice the third, the third number is:
A. 15 B. 17
C. 19 D. None of these

76. 13 chairs and 5 tables were bought for ₹ 8280. If the average cost of the table will be ₹ 1227, what is the average cost of a chair?
A. ₹ 175 B. ₹ 165
C. ₹ 2145 D. None of these

77. If by selling 110 apples, the cost price of 120 apples is realised. The gain % is?
A. $11\frac{1}{9}\%$ B. $9\frac{1}{9}\%$
C. $10\frac{10}{11}\%$ D. $9\frac{1}{11}\%$

78. Pujara has a certain average of runs for his 8 matches in Border Gavaskar Trophy. In the ninth match he scores 100 runs and thereby increases his average by 9 runs. His new average of runs is:
A. 20 B. 24
C. 28 D. 32

79. Simplify:
$2^{65} \times 2^{70} - 2^{97} \times 2^{38}$
A. 1 B. 0
C. –1 D. 2

80. What value will you obtain if 25% of 2340 is subtracted from 4/9 of square of 36?
A. 9 B. –9
C. 6 D. None of these

Directions (Q. No. 81 & 82): *Study the following information and answer the given question.*

Point N is 10 metres to the south of M. Point O is 3 metres to the east of N. Point P is 5 metres to the south of O. Point Q is 6 metres to the west of P. Point R is 10 metres to the north of Q. Point S is 6 metres to the east of R. Point T is 5 metres to the north of S.

81. Which of the following represents the direction of point O with respect to point R?
A. South - West
B. South - East
C. North - East
D. North - West

82. How far and in which direction is point M from point T?
A. 3 metres - East
B. 5 metres - East
C. 3 metres - West
D. 5 metres - West

Directions (Q. No. 83 & 84): *Kanti walks 20 metres north, she turns right and walks 30 m, then she turns right and walks 35 metres, then she turns left and walks 15 metres, then she turns left and walks 15 m, she again turns left and walks 15 metres.*

83. How far Kanti is from her starting point?
A. 40 metres B. 45 metres
C. 50 metres D. 25 metres

84. Which direction is Kanti facing now?
A. East B. North
C. West D. South

Directions (Q. No. 85 to 87): *Two ants are climbing a slippery wall. At time=0, both are at the bottom of the wall. Ants A climbs at the rate of 3 inches a minute. Ants B climbs at the rate of 4 inches a minute. Due to the slippery wall, however, Ant A slips back 1 inch for every 2 inches climbed and Ant B 1.5 inches for every 2 inches. More over Ant A takes a rest of 1 minute after every 2 minutes and Ant B a rest of 1 minute after every 3 minutes. Assume that slipping occurs continuously when climbing.*

85. At what height do the two ants meet each other:
A. Do not meet B. 3 inches
C. 5 inches D. 12 inches

86. What is the widest gap achieved between the ants, within the first 10 minutes:
A. 2 inches B. 3 inches
C. 2.5 inches D. 1.5 inches

87. What is the average speed of ant A for the first 9 minutes:
A. 1.75 inch/min.
B. 1 inch/min.
C. 0.75 inch/min.
D. 2 inch/min.

Directions (Q. No. 88 & 89): *Study the information below and select appropriate answers.*

A four inch side cube is cut at each inch to form 1″ × 1″ × 1″ cubes. The 4″ side cube is coloured blue on all surfaces.

88. How many cubes have exactly three surface coloured:
A. 4 B. 8
C. 6 D. NIL

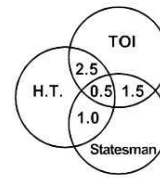
89. How many cubes have no colours on any side:
A. 8 B. 16
C. 32 D. 56

90. If A = 1, FAT = 27 then FAINT = ?
A. 44 B. 42
C. 41 D. 50

Directions (Q. No. 91 & 92): *The Venn diagram given below shows the estimated readership of 3 daily newspapers (H.T, TOI & Statesman) in Delhi. The total readership and advertising cost for each of these papers is as below:*

Newspaper	Readership (Lakhs)	Advertising Cost (₹ per sq cm)
H.T.	8.7	6000
TOI	9.1	6500
Statesman	5.6	5000

The total population of the city is approximately 14 million. The common readership (in lakhs) indicated in the Venn diagram



91. The number of people (in lakhs) who read at least one newspaper is:
A. 4.7 B. 23.4
C. 17.4 D. None of these

92. The number of people (in lakhs) who read only one newspaper is:
A. 23.4 B. 17.4
C. 11.9 D. None of these

Directions (Q. No. 93 to 96): *Ten persons, namely Amit, Bhargav, Charlie, Celina, Ehshan, Fatima, Gautam, Himesh, Indira and Jojo, go for a movie and they all sit in a single row of seats numbered 1 to 10. There are three couples in the group. Each couple has only one child. The child always sits next to its mother and a family always sits together. Celina, Fatima, Indira and Jojo are females while the others are males.*

1. Ehshan sits on seat number 6, which is immediately next to Charlie's mother's seat.
2. Jojo sits on a seat whose number is both a perfect square and perfect cube.
3. Himesh is Indira's father and they both sit on prime-numbered seats.
4. Amit the bachelor sits next to Bhargav.
5. The children are Charlie, Indira and Ehshan.

93. Who is Charlie's mother?
A. Celina
B. Indira
C. Either Celina or Fatima
D. Jojo

94. Who is Ehshan's mother, if the person sitting two places away from the person sitting immediately next to Charlie is Celina?
A. Indira B. Fatima
C. Jojo D. None of these

95. What is Gautam's seat number?
A. 1 B. 2
C. 4 D. None of these

96. Who is sitting immediately right of Amit?
A. Bhargav B. Jojo
C. Ehshan D. Nobody

97. Amit is older than Babloo but younger than chintoo. Dinesh is younger than Esha but older than Amit. If Chintoo is younger than Dinesh, then who is the oldest of all?
A. Amit B. Chintoo
C. Dinesh D. Esha

98. Five persons are standing in a queue. One of the two persons at the extreme end is a professor and the other is a businessman. An advocate is standing to the right of the student. An author is to the left of the businessman. The student is standing between the professor and the advocate. Counting from the left the author is at which place:
A. 1st B. 2nd
C. 3rd D. 4th

Directions: *A word has been coded but no specific code is indicated. Use your logic to pick the coded word which represents the given word the best.*

99. AGGRAVATE:
A. 1 4 4 5 1 6 1 7 8
B. 1 4 4 4 5 2 2 7 8
C. 1 9 2 2 2 7 1 5 6
D. 1 7 2 5 5 5 2 1 1

100. If in a code language 'MUSIC' is written as 'XVQYW' and 'USAGE' is written as 'VQZIF', then how can 'MAGIC' be written in that code:
A. XZIWY B. XZWIY
C. XZIYW D. XZYIW

101. If 'MEDICAL' is written as 'DEMILAC' how is 'SUBJECT' written is that code?
A. BUSJETC
B. BUSTCTE
C. BUSJTCE
D. BUJSCTE

102. If the second day of a month is Friday, which of the following would be the last day of the next month which has 31 days?
A. Monday B. Tuesday
C. Friday D. Data inadequate

103. Complete the following series

1331, _____, 3375, 4913, _____, 9261

A. 2197, 6859 B. 2197, 6589
C. 2179, 6589 D. 2917, 6958

104. Complete the following series.

A 1000, E 512, I 216, M 64, ?

A. Q 8 B. Q 18
C. S 88 D. P 8

105. If '+' means '–', '–' means '×', '×' means '÷' and '÷' means '+', then $2 \div 6 \times 6 \div 2 = ?$

A. 0 B. 4
C. 5 D. 10

106. If 'yellow' is called white, 'white' is called pink, 'pink' is called red, 'red' is called black, 'black' is called green, 'green' is called orange, then what is the colour of coal?

A. Red B. Orange
C. Green D. Black

107. If 16⊕ 27 = 43 and 23 ⊕ 39 = 56 then what will be the value of 25 ⊕ 48 = ?

A. 53 B. 55
C. 67 D. 77

108. Which one of the given responses would be a meaningful order of the following:

1. Stem 2. Flower
3. Root 4. Fruits
5. Leaves

A. 3, 5, 1, 2, 4 B. 3, 2, 5, 1, 4
C. 3, 1, 5, 2, 4 D. 3, 1, 2, 5, 4

109. Kavita is the mother-in-law of Beena, who is the sister-in-law of Ashish. Dinesh is the father of Sanjay, the only brother of Ashish. How is Kavita related to Sanjay?

A. Mother-in-law B. Wife
C. Sister D. Mother

110. 'C' is a place which is located 2 km away in the north-west direction from the capital Z. R is another place that is located 2 km away in the south-west direction from 'C'. 'M' is another place and that is located 2 km away in the north-west direction from 'R'. 'T' is yet another place that is located 2 km away in the south-west direction from 'M'. In which direction is 'T' located in relation to 'Z'?

A. South-West B. West
C. North D. None of these

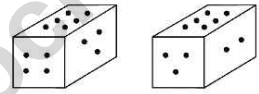
111. In a row of girls Deepti is 18th from the left and Namita is 12th from right. If Namita shifts five places towards right, then the position of Deepti is immediately right to Namita. How many girls are there in the row?

A. 20 girls B. 22 girls
C. 23 girls D. 25 girls

112. Pick the odd one out.

A. Hear B. Smell
C. Taste D. Talk

113. Given two positions of the dice as being.



When 4 is at the top which number is at the bottom:

A. 5 B. 2
C. 1 D. 3

Directions: *In the following question select the choice of letters which completes the first word and begins the second. The letters in the bracket end the first word and begin the second.*

114. OPTI (.....) RLY:

A. CALL B. MISE
C. MIST D. UMUM

115. A tired lady slept at 07:45 PM. If she rose at 12 noon, for how many hours did she sleep?

A. 12 hours 15 minutes
B. 4 hours 15 minutes
C. 6 hours 45 minutes
D. 16 hours 15 minutes

116. Find the odd one out from the given alternatives:

A. School - Peon
B. Dance - Dancer
C. Art - Artist
D. Song - Singer

117. In a group of 36 persons, a total of 16 take cold drink while 9 take only cold drink not green coconut drink. How many persons in this group take only green coconut drink but not cold drink. (Every person take drink either cold drink or green coconut or both):
A. 27 B. 25
C. 20 D. 22

118. Vasant says, "I have as many sisters as brother". Vaishali say, "Each of us sisters has only half as many sisters as brothers". Assuming that Vasant and Vaishali are brother and sister, how many brothers and sisters are there in the family?
A. 8 brothers and 6 sisters
B. 6 brothers and 5 sisters
C. 5 brothers and 4 sisters
D. 4 brothers and 3 sisters

119. If 'A ₹ B' means 'A is the father of B', 'A @ B' means 'A is the mother of B', 'A ! B' means 'A is the wife of B', then which of the following means 'T is the grandmother of U'?
A. T @ R ₹ *y* ! U
B. T @ S ₹ U ! *y*
C. T @ R ! S ! U
D. None of these

120. Three views of a cube following a particular motion are given below:

What is the letter opposite to A?
A. M B. P
C. B D. H

ANSWERS

1	2	3	4	5	6	7	8	9	10
D	B	C	C	A	A	D	C	A	B
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
D	B	B	C	C	D	D	A	D	A
21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
A	C	B	C	B	B	D	D	A	A
31	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
C	A	C	C	B	D	A	A	A	A
41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**
C	C	C	C	B	C	C	B	A	C
51	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
A	A	B	D	D	C	D	B	C	D
61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
C	C	B	B	B	A	B	B	A	B
71	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
B	B	D	B	C	B	D	C	B	B
81	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
B	C	B	B	B	C	B	B	A	D
91	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**100**
C	C	C	B	C	D	D	D	A	C
101	**102**	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**
C	D	A	A	C	C	C	C	D	B
111	**112**	**113**	**114**	**115**	**116**	**117**	**118**	**119**	**120**
C	D	B	B	D	A	C	D	B	D

EXPLANATORY ANSWERS

41. Let no. of student in examination hall M = x and no. of student in examination hall N = y.

According to the question,

$$x - 10 = y + 10$$

$$\Rightarrow \quad x - y = 20 \qquad ...(i)$$

Again $x + 20 = 2(y - 20)$

$$\Rightarrow \quad x + 20 = 2y - 40$$

$$\Rightarrow \quad x - 2y = -60 \qquad ...(ii)$$

Solving equation (i) and (ii)

$x = 100$ and $y = 80$

Hence, in examination hall M no. of students = 100

and in examination hall N no. of students = 80

42. His amount in 2005

$= (2500000 - 50000) \times 2$

$= 2450000 \times 2 = 4900000$

In the year 2010, his amount

$= (4900000 - 50000) \times 2$

$= 4850000 \times 2 = 9700000$

In the year 2020 his amount will be

$= 9700000 \times 2$

$= ₹\ 19400000.$

43. Let the present cost price of the article = ₹ 100

New cost cause of 40% less

= 40 % of 100 – 100

= 100 – 40 = ₹ 60

When new cost ₹ 60, then old cost = 100

New cost ₹ 1, then old cost = $\frac{100}{60} = \frac{5}{3}$

Increase $= \frac{5}{3} - 1 = \frac{2}{3}$

% increase $= \frac{2}{3} \times 100 = \frac{200}{3}\% = 66\frac{2}{3}\%$

44. Cost price of the article = ₹ 80

Marked price $= ₹\ 80 + \frac{50}{100} \times 80 = ₹\ 120$

Selling price $= 120 - \frac{25}{100} \times 120 = ₹\ 90$

Profit = 90 – 80 = ₹ 10

Profit % $= \frac{10}{80} \times 100 = \frac{25}{2} = 12\frac{1}{2}\%$

45. $100 \times 10 - 100 + 2000 \div 100$

$= 1000 - 100 + 20$

$= 1020 - 100 = 920$

46. $6\sqrt{12},\ 3\sqrt{4},\ 4\sqrt{5},\ \sqrt{3}$

LCM of 6, 3, 4 and 2 = 12

$6\sqrt{12} = \sqrt[6\times2]{12^2} = \sqrt[12]{144}$

$3\sqrt{4} = \sqrt[3\times4]{4^4} = \sqrt[12]{256}$

$4\sqrt{5} = \sqrt[4\times3]{5^3} = \sqrt[12]{125}$

$\sqrt{3} = \sqrt[2\times6]{3^6} = \sqrt[12]{729}$

Clearly $\sqrt[4]{5}$ is the smallest.

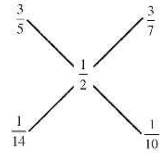
47. Part fill in 1 hour by three pipes A, B, C

$$= \frac{1}{6} + \frac{1}{8} - \frac{1}{5} = \frac{20 + 15 - 24}{120} = \frac{11}{120}$$

Hence, time taken by tank to fill full

$$= \frac{120}{11} = 10\frac{10}{11} \text{ hrs.}$$

48. According to Alligation



From these mixture a new mixture 10 : 14 will be ratio of 5 : 7.

50. Volume of cylinder $= \pi r^2 h$

$$r - \frac{50}{100}r = r - \frac{r}{2} = \frac{r}{2}$$

$$h + \frac{60}{100}h = h + \frac{3h}{5} = \frac{8h}{5}$$

Volume of cylinder $= \pi\left(\frac{r}{2}\right)^2\left(\frac{8h}{5}\right) = \frac{2\pi}{5}r^2h$

Volume decrease $= \pi r^2 h - \frac{2}{5}\pi r^2 h = \frac{3\pi r^2 h}{5}$

% volume decrease $= \frac{3\pi r^2 h}{5\pi r^2 h} \times 100 = 60\%$.

51. The distance of shadow from top to bottom of the pole

$$= \sqrt{(18)^2 + (9.6)^2} = \sqrt{324 + 92.16}$$

$$= \sqrt{416.16} = 20.4 \text{ m.}$$

52. 1 man's 1 day work $= \frac{1}{24 \times 16}$ part

1 woman's 1 day work $= \frac{1}{24 \times 32}$ part

12 day's work $= 12\left(\frac{16}{24 \times 16} + \frac{16}{24 \times 32}\right)$

$$= 12\left(\frac{2+1}{24 \times 32}\right) \times 16 = \frac{3}{4}$$

Remaining work $= 1 - \frac{3}{4} = \frac{1}{4}$

16 men + 16 women's two days work

$$= 2\left(\frac{16}{24 \times 32} + \frac{16}{24 \times 16}\right) = \frac{2 \times 3 \times 16}{24 \times 32} = \frac{1}{8}$$

Remaining work $= \frac{1}{4} - \frac{1}{8} = \frac{1}{8}$

$\frac{1}{24 \times 16}$ part in 1 day

1 man works $\frac{1}{8}$ part in two days

$$= 24 \times 16 \times \frac{1}{8} \times \frac{1}{2} \text{ men}$$

$= 24$ men

Hence, the remaining work done in 2 days, required no. of men = 24.

53. $\frac{\pi r_1^2}{\pi r_2^2} = \frac{16}{49}$

$$\frac{r_1^2}{14 \times 14} = \frac{16}{49}$$

$$r_1^2 = \frac{16 \times 14 \times 14}{49} = 16 \times 2 \times 2$$

$$\therefore \ r_1 = \sqrt{16 \times 4} = 8$$

Hence, the radius of first field = 8 m.

54. Here,

$S_1 = 90$ km/hr

$S_2 = 70$ km/hr

and $x = 350$ km

Distance between Kanpur and Agra

$$= \left(\frac{S_1 + S_2}{S_1 - S_2}\right)x \text{ km} = \left(\frac{90+70}{90-70}\right) \times 350 \text{ km}$$

$$= \frac{160}{20} \times 350 = 2800 \text{ km.}$$

55. Side of the rhombus $= \frac{40}{4} = 10$ m.

In ΔABO,

$$\sin 60° = \frac{OA}{AB}$$

$$\Rightarrow \frac{\sqrt{3}}{2} = \frac{OA}{AB} = \frac{OA}{10}$$

$$\therefore \ OA = 5\sqrt{3} \text{ cm}$$

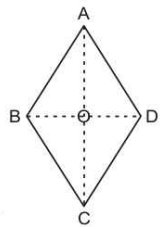
$$AC = 10\sqrt{3} \text{ cm}$$

$$OB^2 = (10)^2 - (5\sqrt{3})^2$$

$$= 100 - 75 = 25$$

$$\therefore \ OB = 5 \text{ cm}$$

$$BD = 5 \times 2 = 10 \text{ cm}$$



Area of rhombus $= \frac{1}{2} \times d_1 \times d_2$

$$= \frac{1}{2} \times 10\sqrt{3} \times 10$$

$$= 50\sqrt{3} \text{ cm}^2.$$

56. Let average age of 45 persons = x years

Total age of 45 persons = $45x$ years

According to the question,

Average of 44 persons + one new man

$= \left(x - \frac{1}{9}\right)$

Total age of 44 persons + one new man

$= 45\left(x - \frac{1}{9}\right) = 45x - 5$

Clearly 5 years less in sum of ages of 45 persons.

Hence, the age of new man $60 - 5 = 55$ years.

57. Let cost of cloths = ₹ 100

and number of selling cloths = 100

Amount received from selling = 100×100 = ₹ 10000

According to the question,

As cost of cloth increase 25% then new value of cloths will be = ₹ 125

No. of selling cloth decrease in 20% = 80

Amount received from selling cloth

$= 125 \times 80$ = ₹ 10000

Since amount is equal in both condition

Hence, no effect on receiving amount.

58. Part fill in 1 hour by (A + B)

$$= \left(\frac{1}{10} + \frac{1}{12}\right) = \frac{6+5}{60} = \frac{11}{60}$$

$\therefore$ Part fill in 3 hours by (A + B) pipes.

$$= \frac{11}{60} \times 3 = \frac{11}{20}$$

Remaining part of tank = $1 - \frac{11}{20} = \frac{9}{20}$

$\because$ Pipe B fill in 12 hours.

$\frac{9}{20}$ part will fill in $= \frac{9}{20} \times 12$ hrs.

$$= \frac{27}{5} = 5\frac{2}{5} \text{ hrs.}$$

$$= 5 \text{ hrs.} \frac{2}{5} \times 60 \text{ minutes}$$

$$= 5 \text{ hrs. } 24 \text{ minutes.}$$

59. Let CP of table = ₹ 100 (for Anil)

CP of Kamal = $100 + \frac{10}{100} \times 100$ = ₹ 110

CP of of Rajat = $110 + \frac{12}{100} \times 110$

$= 110 + 13.2$ = ₹ 123.2

When SP is ₹ 123.2 then C.P. = ₹ 100

When SP = ₹ 246.40 then, CP

$$= \frac{100}{123.2} \times 246.4 = ₹\ 200$$

Hence, CP of Anil = ₹ 200.

60. CP of 10 Sheeps = 450×10 = ₹ 4500

CP of 5 Goats = $6000 - 4500$ = ₹ 1500

Average price of Goat $= \frac{1500}{5}$ = ₹ 300.

62. 8 men can do a work in 96 days

1 man can do same work in 8×96 days.

6 men can do the same work in $\frac{8 \times 96}{6} = 128$ days.

63. Ratio of 100 paise, 50 paise, 25 paise and 10 paise of coins 1 : 3 : 5 : 7

Ratio of amount of 100 paise, 50 paise, 25 paise and 10 paise coins

100×1 : 50×3 : 25×5 : 10×7

or 20 : 30 : 25 : 14

Sum of proportion = 20 + 30 + 25 + 14 = 89

Value of 100 paise coins

$= \frac{20}{89} \times 2225 = 500$ paise = ₹ 5

Value of 50 paise coins $= \frac{30}{89} \times 2225 = 750$ paise = ₹ 7.5

Value of 25 paise coins $= \frac{25}{89} \times 2225 = 625$ paise = ₹ 6.25

Value of 10 paise coins $= \frac{14}{89} \times 2225 = 350$ paise = ₹ 3.5

Hence, no. of coins of each type

₹ 1, 5; 50 paise, 15; 25 paise, 25; 10 paise, 35

64. $\left(\frac{9}{7}\right)^3 \times \left[\left(\frac{7}{9}\right)^2\right]^{2x-6} = \left(\frac{7}{9}\right)^9$

$\Rightarrow \frac{9^3}{7^3} \times \frac{7^{4x-12}}{9^{4x-12}} = \left(\frac{7}{9}\right)^9$

$\Rightarrow \frac{(7)^{4x-15}}{(9)^{4x-15}} = \left(\frac{7}{9}\right)^9$

$\Rightarrow \left(\frac{7}{9}\right)^{4x-15} = \left(\frac{7}{9}\right)^9$

$\Rightarrow 4x - 15 = 9$

$\Rightarrow 4x = 24$

$\Rightarrow x = 6$

65. Probability of blue ball $= \frac{37}{19+37+27} = \frac{37}{83}$

66. $\frac{\frac{4}{3}\pi r^3}{4\pi r^2} = 27$

$\Rightarrow r = 81$

$\Rightarrow r = 81$ cm.

68. Total marks of 2 students = 100 + 100 = 200
Total marks of 3 students = 3(0) = 0
Total marks of 15 students = 40 × 15 = 600
Total marks of 20 students = 200 + 600 = 800

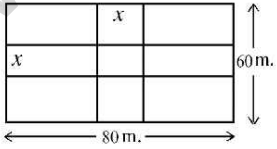
Average of class $= \frac{800}{20} = 40$

69. Number of diagonals of n sided polygon $= \frac{n(n-3)}{2}$

No. of diagonals in 30 sided polygon $= \frac{30(30-3)}{2} = 15 \times 27 = 405$

71. Length of rectangular field = 80 m. and breadth = 60 m.

Let breadth of the road = x m.



$\because$ Area of the path $= x(l + b - x)$

$\Rightarrow 675 = x(80 + 60 - x)$

$\Rightarrow 675 = x(140 - x)$

$\Rightarrow 675 = 140x - x^2$

$\Rightarrow x^2 - 140x + 675 = 0$

$\Rightarrow x^2 - 135x - 5x + 675 = 0$

$\Rightarrow x(x - 135) - 5(x - 135) = 0$

$\Rightarrow x(x - 135)(x - 5) = 0$

$x = 135$, या $x = 5$

Hence, breadth of the road will be 5 m.

75. Let three consecutive odd numbers are x, $x + 2$ and $x + 4$

According to the question,

$4x = 3(x + 4) + 3$

$\Rightarrow 4x = 3x + 12 + 3$

$\Rightarrow x = 15$

3rd number $x + 4 = 15 + 4 = 19$

76. Cost of 5 tables = 5 × 1227 = ₹ 6135
Cost of 13 chairs = 8280 − 6135 = 2145

Average cost of chair $= \frac{2145}{13} =$ ₹ 165

75. 120 − 110 = 10

Profit % $= \frac{10}{110} \times 100 = \frac{100}{11} = 9\frac{1}{11}\%$

78. Let average run of a batsman of first eight matches = x

$\frac{8x+100}{9} = x + 9$

$\Rightarrow 8x + 100 = 9x + 81$

$\Rightarrow x = 100 - 81 = 19$

Hence, the new run rate of that batsman
= 19 + 9 = 28

79. $2^{65} \times 2^{70} - 2^{97} \times 2^{38}$
$= 2^{65+70} - 2^{97+38}$
$= 2^{135} - 2^{135} = 0$

80. $1296 \times \frac{4}{9} - 2340 \times \frac{25}{100} = 144 \times 4 - 585$
$= 576 - 585 = -9$

PAPER-II

GENERAL ENGLISH

Directions (Question No. 1 to 7): *The passage given below is followed by some questions. Each some question has four alternative answers, out of which only one is correct. Write the serial number of correct answer (A), (B), (C) and (D) in the answer-sheet.*

I read the other day some verses written by an eminent painter which were original and not conventional. The soul always hears an admonition in such lines, let the subject be what it may. The sentiment they instill is of more value than any thought they may contain. To believe your own thought, to believe that what is true for you in you in your private heart is true for all men - that is genius. Speak your latent conviction and it shall be the universal sense; for the inmost in due time becomes the outmost, and our first thought is rendered back to us by the trumpets of the last judgment. Familiar as the voice of the mind is to each, the highest merit we inscribe to Moses, Plato and Milton is that they set at naught books and traditions, and spoke not what men wanted, but what they thought. A man should learn to detect and watch that gleam of light which flashes across his mind from within, more than the luster of the firmament of bards and sages. Yet he dismisses without notice his thought, because it is his. In every work of genius we recognize our own rejected thoughts; they come back to us with a certain alienated majesty. Great works of art have no more affecting lesson for us than this. They teach us to abide by our spontaneous impression with good-humored inflexibility than most when the whole cry of voices is on the other side. Else tomorrow a stranger will say with masterly good sense precisely what we have thought and felt all the time, and we shall be forced to take with shame our own opinion from others.

1. What is 'genius'?
- A. One who is learned
- B. One who trusts his thought
- C. One who invents something
- D. One who writes poetry

2. What is meant by 'Last judgment'?
- A. Final disposal of a case
- B. Judgment of the Supreme Court
- C. Judgment of people
- D. Judgment of God

3. Why do we ascribe the highest merit to Moses?
- A. Because he relied on his own thought
- B. Because he was a prophet
- C. Because he was a poet
- D. Because he was very brave

4. Why is the word 'they' underlined in 'what they thought'?
- A. For the sake of importance
- B. For the sake of clarity
- C. For the sake of emphasis
- D. For the sake of variety

5. What do we recognize in works of genius?
- A. Great thoughts
- B. Felicity of expression
- C. Originality
- D. Our own rejected thoughts

6. What is the greatest lesson that the great works of art impart?
- A. That we should study the classics
- B. That we should learn to express effectively
- C. That we should abide by our own impressions
- D. That we should develop a new style

7. When is it necessary to stick to our spontaneous impressions?
- A. When nobody supports them
- B. When majority of people oppose them
- C. When they appear to be irrational
- D. When they are likely to make us unpopular.

8. Identify the incorrect sentence:
A. All that glitters is not gold.
B. All the boys were present.
C. All this money are useless for me.
D. Neither of them knows the answer.

9. Identify the incorrect sentence:
A. The number of students is very small.
B. A number of books are missing.
C. Ram, as well as his ten friends, is going.
D. Many a man were drowned in the sea.

10. Identify the incorrect sentence:
A. Vermin destroy our property and carry disease.
B. India won by an innings and three runs.
C. His means is small, but he has incurred no debt.
D. The clergy are in the church.

11. Identify the correct sentence:
A. It is a three-years degree course.
B. Each student must bring their books.
C. I have ten dozens of shoes.
D. The collector and the District Magistrate is on leave.

12. Identify the correct sentence:
A. It is an one-rupee note.
B. Higher we go, cooler we feel.
C. It is me who caught the thief.
D. The house is built of brick.

13. Identify the correct sentence:
A. There is lots of book.
B. Forty miles are a good distance.
C. He is taking a bath.
D. He is used to work hard.

14. Identify the incorrect plural:
A. Passers-by B. Lookers-on
C. Man-servants D. Sons-in-law

15. Fill in the blank using the correct tense:
By next July we ..... here for fours years.
A. Shall have been living
B. Shall live
C. Used to live
D. Shall be living

16. Fill in the blank using the correct tense:
When Shivansh came to the school in 1996, Mr. Rakesh ..... there for seven years.
A. Has already been teaching
B. Had already been teaching
C. Has already teaching
D. Will have already been teaching

17. Four sentences have been given. You have to count the number of adverbs used in these sentences:
Rekha runs quickly. Manoj reads quite clearly. This is a very sweet mango. Evidently the figures are incorrect.
A. 5 B. 6
C. 3 D. 4

18. Some words are used sometimes as adjectives, sometimes as adverbs. Four sentences have been given where in three sentences are containing words being used as adjectives and one sentence contains word being used as adverb. Identify the odd one:
A. Every little difficulty ruffles his temper.
B. He is little known outside India.
C. There is much truth in what he says.
D. Are you an early riser?

19. Select the word that is most similar in meaning to the word in Capital letters:
KNAVE
A. Novice B. Dishonest
C. Disciplined D. Traditional

20. Select the word that is most similar in meaning to the word in Capital letters:
OBSCURE
A. Famous B. Well Known
C. Unknown D. Prevalent

21. Choose the exact meaning of the idioms/phrases from the given alternatives:
Duck in a thunderstorm
A. Distressed B. Peaceful
C. Entrapped D. Timid

22. Select the word that is most similar in meaning to the word in Capital letters:
SUPERANNUATED
A. Experienced B. Accepted
C. Retired D. Gentle

23. Choose the exact meaning of the idioms/ phrases from the given alternatives:
FABIAN POLICY
A. Dictatorial policy
B. Democratic policy
C. Market Policy
D. Policy of using gradual reforms

24. Choose the exact meaning of the idioms/ phrases from the given alternatives:
TO KICK THE BUCKET
A. To start an account
B. To start a sea journey
C. To die
D. To start agricultural activity

25. Choose the correct preposition to fill in the gap:
Ram lives ..... 45 Tilak Street.
A. in B. at
C. with D. for

26. Choose the correct preposition to fill in the gap:
The income derived ..... the ownership of land is commonly called rent.
A. By B. From
C. With D. In

27. Choose the correct preposition to fill in the gap:
Ambition does not always conduce ..... ultimate happiness.
A. by B. to
C. with D. from

28. Choose the correct preposition to fill in the gap:
All his life he laboured ..... the good of humanity. He is labouring ..... a misapprehension. He laboured ..... his dictionary for twelve years.
A. For, With, Over B. For, Under, At
C. At, With, Over D. At, Under, Over

29. Choose the correct preposition to fill in the gap
I have no prejudice ..... foreigners.
A. for B. against
C. to D. with

30. Choose the correct preposition to fill in the gap
He is descended ..... a noble family.
A. Of B. From
C. By D. With

31. The same word is used as different parts of speech. In the given sentences, the word "above" has been used as different parts of speech. Point out the incorrectly matched pair:
A. The heavens are above ..... Adverb
B. The moral law is above Civil ..... Preposition
C. Analyse the above sentence ..... Conjunction
D. Our blessings come from above ..... Noun

32. Rewrite the following sentence so as to get rid of the word "too" without changing the meaning of the sentence:
He drove too fast for the police to catch.
A. He drove so fast that the police could not catch him.
B. He drove so fast but the police could catch him.
C. He drove very fast that the police can not catch him.
D. He drove so fast that the police is not able to catch him.

33. Two or more simple sentences have been given. Combine two or more simple sentences into a single complex sentence.
The cottager and his wife had a hen. The hen laid an egg everyday. The egg was golden.
A. The cottager and his wife had a hen which laid a golden egg everyday.
B. The cottager and his wife had a hen laying a golden egg everyday.
C. The cottager and his wife had a hen that laid a golden egg everyday.
D. The cottager and his wife with a hen laying a golden egg everyday.

34. Change the following sentence into correct passive voice:
They ought not to blame others.

A. Others ought not to be blamed by them.
B. Others should not blame them.
C. Others should not be blamed by them.
D. Others ought not be blamed by them.

35. Change the following sentence into correct passive voice:
They had already tasted victory.
A. Victory had been tasted already by them.
B. Victory had already been tasted by them.
C. Victory had been tasted by them already.
D. Already victory had been tasted by them.

36. Change the following sentence into correct passive voice:
Are they flying kites?
A. Are kites being flown by them?
B. Are kites flown by them?
C. Have kites being flown by them?
D. Are kites being flew by them?

37. Change the following sentence into Indirect speech:
He said, "Be quiet and listen to my word".
A. He requested them that they keep quiet and listen to his word.
B. He requested them to maintain quiet and listen to his word.
C. He urged them to be quiet and listen to his word.
D. He said to them to keep quiet and listen to his word.

38. Choose the appropriate word/ group of words to fill the gap making the sentence meaningful
Ram ..... many prizes at the school sports.
A. Got through B. Bore away
C. Brought up D. Broke off

39. Select the antonym of the word given in capital letter:
TERSE:
A. Diffuse B. Thin
C. Intolerable D. Agitated

40. Select the antonym of the word given in capital letter:
MEEK:
A. Arrogant B. Retrogress
C. Healthy D. Unnatural

41. In the following questions, pick out the correct meanings of the following idioms and phrases:
Through thick and thin
A. Big and small
B. Large object
C. Under all conditions
D. Thin and fat

42. Choose the correct antonyms of the word given in capital letter:
HEIR:
A. Follower B. Antagonist
C. Ancestor D. Friend

43. Choose the correct option out of the four choices given below:
He scoffed ..... the idea of revolution.
A. With B. At
C. To D. By

44. In each of the following groups of words, only one word is correctly spelt. Select the word with correct spelling.
A. inflameable B. inflammable
C. inflamible D. inflammabil

45. In each of the following groups of words, only one word is correctly spelt. Select the word with correct spelling.
A. gratutious B. gratutous
C. gratuitous D. greatutous

46. In each of the following groups of words, only one word is correctly spelt. Select the word with correct spelling.
A. intermittent
B. intermitent
C. intermetent
D. interrmittent

47. Combine the following sentence by using an Adverb Clause.
Do not run fast, you will be tired.
A. You will be tired by running fast.
B. If you run fast, you will be tired.
C. By running fast you will be tired.
D. Running fast will affect you getting tired.

48. Combine the following sentence by using an Adverb Clause.
He worked hard. He failed in the examination.
A. He failed because he worked hard.
B. He worked hard but he failed.
C. Although he worked hard, he failed.
D. He worked hard and he failed.

49. Combine the following sentence by using an Adverb Clause.
The robbers had run away. The police arrived.
A. The police arrived and the robbers ran away.
B. When the police arrived, the robbers had run away.
C. The robbers ran away at the arrival of the police.
D. Arriving the police the robbers ran away.

50. The plural of the word "cloth" which means "kinds or pieces of cloth"
A. Cloths B. Clothes
C. Cloath D. Clothee

51. Some nouns have two meanings in the singular but only one in the plural. Identify among choices the noun which have two meanings in singular but one in plural:
A. Pain B. People
C. Spectacle D. Custom

52. Find out what kind of coordinating conjunctions have been used in the following sentence:
Either he is mad or he feigns madness.
A. Cumulative or Copulative
B. Adversative
C. Disjunctive or alternative
D. Illative

53. Certain collective nouns, though singular in form are always used as plurals. Three of the following choices are such collective nouns while one is not. Find the one which is not?
A. Cattle B. Vermin
C. Trout D. Gentry

54. Fill in the gap correctly:
The shirt cost me _____.
A. Five thousand rupee
B. Five Thousands rupee
C. Five Thousand rupees
D. Five Thousands rupees

55. Fill the correct article.
Ramesh's father is __ M.P and Suresh's father is __ Member of Legislative Assembly:
A. A, An B. An, An
C. An, A D. An, The

56. Choose the correct passive voice of the sentence given in the question.
Deepa swept the floor yesterday:
A. The floor is swept by Deepa yesterday.
B. The floor was swept by Deepa yesterday.
C. The floor had been swept by Deepa yesterday.
D. The floor was being swept by Deepa yesterday

57. Choose the correct preposition and fill in blanks.
The old man may not live ..... the winter:
A. Through B. In
C. Until D. Upto

58. Fill up the correct options.
..... did he enter the room than he shut the door:
A. Hardly B. As Soon As
C. No Sooner D. When

59. Each of the following idioms/phrases is followed by four alternative meanings of which only one is correct.
Choose the correct one.
The casting vote of the chairman clinched the issue.
A. Closed B. Decided
C. Finished D. Started

60. Each of the following idioms/phrases is followed by four alternative meanings of which only one is correct.
Choose the correct one.
I was totally put out by his brazen manners.
A. Removed from the place
B. Condemned
C. Ashamed
D. Upset

ANSWERS

1	2	3	4	5	6	7	8	9	10
B	D	A	C	D	C	A	C	D	C
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
D	D	A	C	A	B	A	B	A	C
21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
A	C	D	C	B	B	B	B	B	B
31	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
C	A	A	A	B	A	C	B	A	A
41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**
C	C	B	B	C	A	B	C	B	A
51	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
B	C	C	C	C	B	A	C	B	D