

## NIACL/DCCB Preliminary Grand Test –NIACL/DCCB-190112

### ANSWER KEY

1.(2)	21.(2)	41.(2)	61.(1)	81.(1)
2. (4)	22.(3)	42.(1)	62.(2)	82.(5)
3. (5)	23.(1)	43.(2)	63.(4)	83.(1)
4. (1)	24.(2)	44.(4)	64.(2)	84.(5)
5. (4)	25.(3)	45.(5)	65.(1)	85.(3)
6.(3)	26.(4)	46.(2)	66.(2)	86.(5)
7. (4)	27.(3)	47.(5)	67.(4)	87.(4)
8. (5)	28.(3)	48.(4)	68.(1)	88.(2)
9. (4)	29.(1)	49.(5)	69.(3)	89.(2)
10.(3)	30.(2)	50.(1)	70.(2)	90.(5)
11.(5)	31.(3)	51.(2)	71.(3)	91.(5)
12.(1)	32.(2)	52.(1)	72.(4)	92.(5)
13.(3)	33.(5)	53.(4)	73.(3)	93.(2)
14.(4)	34.(3)	54.(3)	74.(1)	94.(1)
15.(2)	35.(4)	55.(5)	75.(2)	95.(2)
16.(3)	36.(3)	56.(1)	76.(5)	96.(2)
17.(4)	37.(2)	57.(2)	77.(4)	97.(3)
18.(1)	38.(4)	58.(1)	78.(4)	98.(5)
19.(5)	39.(1)	59.(1)	79.(3)	99.(4)
20.(3)	40.(4)	60.(2)	80.(1)	100.(2)

### HINTS & SOLUTIONS

1. (2) All (A), (B) and (C)
2. (4) Only (B) and (C)
3. (5) Technology - Reshaping the Future of Education
4. (1) Analyzing the strengths and weaknesses of a student and designing an educational syllabus accordingly
5. (4) The education system is not guided by technology and hence the pace of learning is slow
6. (3) All (A), (B) and (C)
7. (4) The meaning of the word **Paradigm (Noun)** as used in the passage is : a typical example or pattern of something.  
**Look at the sentence:**  
The war was a paradigm of the destructive side of human nature.  
Hence, the words **paradigm** and **model** are synonymous.
8. (5) The meaning of the word **Delegate (Verb)** as used in the passage is : to give part of your work, power or authority to somebody; to choose somebody to do something.  
**Look at the sentence:**  
Some managers find it difficult to delegate.  
Hence, the words **delegated** and **assigned** are synonymous.

9. (4) The meaning of the word **Inequitable (Adjective)** as used in the passage is : not fair, not the same for everyone. Hence, the words **inequitable** and **fair** are antonyms.
10. (3) The meaning of the word **Languish (Verb)** as used in the passage is : to be forced to stay somewhere or suffer something unpleasant for a long time.  
The word **Flourish (Verb)** means : to develop quickly; to grow well; thrive.  
Hence, the words **languish** and **flourish** are antonyms.
11. (5) E
12. (1) A
13. (3) C
14. (4) D
15. (2) B
16. (3) different rates of interest
17. (4) we take some
18. (1) what impact
19. (5) No correction required
20. (3) not have much good
21. (2)
22. (3)
23. (1)
24. (2)
25. (3)
26. (4) The word **Lately (Adverb)** means : recently; in the recent past.  
The word **Later** means: at a time in future.  
**Look at the sentence:**  
He had lately returned from Japan.  
We are going to England later in the year.  
Hence, **schizophrenia later in life** should be used.
27. (3) Here, preposition 'for' should follow the word, 'honour'.  
**Look at the sentence:**  
He has been honoured with a knighthood for  
↓  
title  
↓  
his scientific work.  
↓  
cause  
Hence, **for their contributions in their chosen fields** should be used.
28. (3) Here, an Adjective should be used which qualifies a Noun.  
Hence, those unfortunate (Adjective) beings (Noun) called foreigners, but ..... should be used.
29. (1) Here, He is the first film producer or He is one of the film producers ..... should be used.
30. (2) The event shows past time. Hence, yesterday, as most of them turned up (simple past) .... should be used.
31. (3) The pattern of the number series is:  
495 - 1 × 10 = 485  
485 - 2 × 10 = 465  
465 - 4 × 10 = 425  
425 - 8 × 10 = 345  
345 - 16 × 10 = 185

32. (2) The pattern of the number series is:

$$\begin{aligned} 16 + 6 &= 22 \\ 22 + 11 &= 33 \\ 33 + 16 &= 49 \\ 49 + 21 &= 70 \\ 70 + 26 &= \boxed{96} \end{aligned}$$

33. (5) The pattern of the number series is:

$$\begin{aligned} 32 + 2^2 &= 36 \\ 36 + 4^2 &= 52 \\ 52 + 6^2 &= 88 \\ 88 + 8^2 &= 152 \\ 152 + 10^2 &= \boxed{252} \end{aligned}$$

34. (3) The pattern of the number series is:

$$\begin{aligned} 17 + 272 &= 289 \\ 289 + 136 &= 425 \\ 425 + 68 &= 493 \\ 493 + 34 &= 527 \\ 527 + 17 &= \boxed{544} \end{aligned}$$

35. (4) The pattern of the number series is:

$$\begin{aligned} 13 + 1 \times 14 &= 27 \\ 27 + 2 \times 14 &= 55 \\ 55 + 3 \times 14 &= 97 \\ 97 + 4 \times 14 &= 153 \\ 153 + 5 \times 14 &= \boxed{223} \end{aligned}$$

36. (3) Required average

$$\begin{aligned} &= \frac{1}{3} \left( 66000 \times \frac{35}{100} + 54000 \times \frac{25}{100} + 16000 \times \frac{12.5}{100} \right) \\ &= \frac{1}{3} (23100 + 13500 + 2000) = 12867 \end{aligned}$$

37. (2) Number of obese men in the year 2009

$$\begin{aligned} &= 78000 \times \frac{37.5}{100} = 29250 \\ \text{Number of normal men} &= (78000 - 29250) = 48750 \\ \therefore \text{Required percentage} &= \frac{29250}{48750} \times 100 = 60 \end{aligned}$$

38. (4) Required ratio

$$\begin{aligned} &= 60000 \times \frac{20}{100} : 70000 \times \frac{27.5}{100} \\ &= 12000 : 19250 = 48 : 77 \end{aligned}$$

39. (1) Number of obese women and obese children in 2006

$$\begin{aligned} &= \frac{60000 \times 20}{100} + \frac{12000 \times 25}{100} \\ &= 12000 + 3000 = 15000 \end{aligned}$$

Number of obese men in 2006

$$= \frac{63000 \times 32.5}{100} = 20475$$

Required difference = 20475 - 15000 = 5475

40. (4) Required number of children not suffering from obesity

$$\begin{aligned} &= \frac{15000 \times 85}{100} + \frac{21000 \times 90}{100} \\ &= 12750 + 18900 = 31650 \end{aligned}$$

41. (2) Required average

$$= \frac{120}{6} = 20 \text{ thousand}$$

42. (1) Required per cent

$$\begin{aligned} &= \frac{20 - 15}{15} \times 100 \\ &= \frac{100}{3} = 33\frac{1}{3}\% \end{aligned}$$

43. (2) Required average

$$\begin{aligned} &= \frac{13 + 27 + 12}{3} \\ &= \frac{52}{3} = 17\frac{1}{3} \text{ thousands} \end{aligned}$$

44. (4) Required ratio = 15 : 18 = 5 : 6

45. (5) Required ratio = 18 : 27 = 2 : 3

46. (2) From statement II,

$$\begin{aligned} M_1 D_1 &= M_2 D_2 \\ \Rightarrow 8 \times 12 &= 5 \times D_2 \\ \Rightarrow D_2 &= \frac{8 \times 12}{5} = \frac{96}{5} \\ &= 19\frac{1}{5} \text{ days} \end{aligned}$$

47. (5) From statement II,

If the present age of Shyam be x years then

Ram's present age = (x + 7) years

From statement I,

$$\frac{x+7}{x} = \frac{4}{3}$$

$$\Rightarrow 4x = 3x + 21$$

$$\Rightarrow x = 21$$

$\therefore$  Shyam's age after 6 years = 21 + 6 = 27 years

48. (4) Data from both the statements are inadequate.

49. (5) From statements I and II, Simple interest

$$\begin{aligned} &= ₹ \left( \frac{5000 \times 3 \times 5}{100} + \frac{5000 \times 3 \times 8}{100} \right) \\ &= ₹. (750 + 1200) = ₹. 1950 \end{aligned}$$

50. (1) From statement I,

Required C.P.

$$\begin{aligned} &= ₹. (4 \times 85 + 3 \times 50) \\ &= ₹. (340 + 150) = ₹. 490 \end{aligned}$$

51. (2)

52. (1)

53. (4)

54. (3)

55. (5)

56. (1) Total number of balls in the bag = 7 + 8 + 6 = 21

Total possible outcomes = Selection of 2 balls out of 21 balls.

$$= {}^{21}C_2 = \frac{21 \times 20}{1 \times 2} = 210$$

Favourable outcomes = Selection of 2 balls out of 7 red balls + selection of 2 balls out of 8 yellow balls =

$$\begin{aligned} &{}^7C_2 + {}^8C_2 \\ &= \frac{7 \times 6}{1 \times 2} + \frac{8 \times 7}{1 \times 2} \\ &= 21 + 28 = 49 \end{aligned}$$

$$\therefore \text{Required probability} = \frac{49}{210} = \frac{7}{30}$$

57. (2) Let the number of girls in the class be x.

Total weight of boys = 24x kg

Total weight of girls = (24x - 90) kg.

According to the question,

$$\frac{24x + 24x - 90}{24 + x} = 25$$

$$\Rightarrow 48x - 90 = 25 \times 24 + 25x$$

$$\Rightarrow 48x - 25x = 600 + 90$$

$$\Rightarrow 23x = 690$$

$$\Rightarrow x = \frac{690}{23} = 30$$

58. (1) 8 years hence,  
 Rashi's age = x years  
 $\therefore$  Trisha's age = 2x years  
 $\therefore$  Rashi's present age = (x - 8) years  
 Trisha's present age = (2x - 8) years  
 According to the question,  
 $x - 8 + 6 = 2x - 8 - 7$   
 $\Rightarrow x - 2 = 2x - 15$   
 $\Rightarrow 2x - x = 15 - 2$   
 $\Rightarrow x = 13$   
 $\therefore$  Required ratio = (x - 8 + 4) : (2x - 8 + 3)  
 = (x - 4) : (2x - 5)  
 = (13 - 4) : (26 - 5) = 9 : 21  
 = 3 : 7

59. (1) C.P. of shoe-rack.  
 = Rs. x (let)  
 $\therefore$  C.P. of cupboard = Rs. 3x  
 C.P. of table = Rs. (3x - 2000)  
 S.P. of shoe-rack.  
 = Rs.  $\left(\frac{118x}{100}\right)$   
 S.P. of cup board  
 = Rs.  $\left(\frac{3x \times 9}{100}\right) = ₹\left(\frac{270x}{100}\right)$   
 S.P. of table  
 = ₹  $\left(\frac{270x}{100} + 1400\right)$   
 According to the question.  
 $\frac{118x}{100} + \frac{270x}{100} + \frac{270x}{100} + 1400$   
 $= (x + 3x + 3x - 2000) \times \frac{102.2}{100}$   
 $\Rightarrow 118x + 270x + 270x + 140000$   
 $= 7x \times 102.2 - 2000 \times 102.2$   
 $\Rightarrow 658x + 140000$   
 $= 715.4x - 204400$   
 $\Rightarrow 715.4x - 658x$   
 $= 140000 + 204400$   
 $\Rightarrow 57.4x = 344400$   
 $\Rightarrow x = \frac{344400}{57.4} = ₹6000$

60. (2) Let the required amount be Rs. (6300+x).  
 S.I. =  $\frac{\text{Principal} \times \text{Rate} \times \text{Time}}{100}$   
 $\therefore \left[ (6300+x) \times \frac{16}{100} \times 3 \right] - \left[ 6300 \times \frac{14}{100} \times 3 \right] = 618$   
 $\Rightarrow \frac{4(6300+x)}{25} - 882 = 206$   
 $\Rightarrow \frac{4(6300+x)}{25} = 1088$   
 $\Rightarrow 6300 + x = 1088 \times \frac{25}{4}$   
 $= 272 \times 25$   
 $\Rightarrow 6300 + x = \text{Rs. } 6800$

61. (1) There are 10 balls in the bag.

Total possible outcomes  
 = Selection of 2 balls out of 10 balls  
 $= {}^{10}C_2 = \frac{10 \times 9}{1 \times 2} = 45$   
 Total favourable outcomes  
 = Selection of 2 balls out of 6 red balls + selection of 2 balls out of 4 yellow balls  
 $= {}^6C_2 + {}^4C_2$   
 $= \frac{6 \times 5}{1 \times 2} + \frac{4 \times 3}{1 \times 2}$   
 $= 15 + 6 = 21$   
 $\therefore$  Required probability  
 $= \frac{21}{45} = \frac{7}{15}$

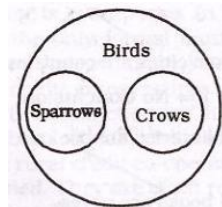
62. (2) Match I : Match II = 5 : 4  
 Match II : Match III = 2 : 1 = 4 : 2  
 Match I : Match II : Match III = 5 : 4 : 2  
 According to the question,  
 $5x - 2x = 48$   
 $\Rightarrow 3x = 48$   
 $\Rightarrow x = \frac{48}{3} = 16$

Total runs scored in three matches  
 = 5x + 4x + 2x  
 = 11x = 11  $\times$  16 = 176  
 $\therefore$  Required average =  $\frac{176}{3}$

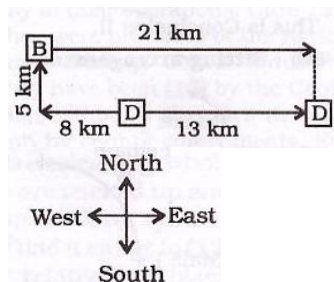
= 58  $\frac{2}{3}$   
 63. (4)  $\frac{515 \times 22}{100} - 43 = \frac{?}{5.5}$   
 $\Rightarrow 113 - 43 = \frac{?}{5.5}$   
 $\therefore ? = 70 \times 5.5 = 385$

$\therefore$  Required answer = 375  
 64. (2)  $? = \frac{1600 \times 200}{50} - 1400 + 3900 = 6400 - 1400 + 3900 = 8900$   
 $\therefore$  Required answer = 9000  
 65. (1)  $? = 4434 - 2212 - 1134 + 3377 = 4465$   
 $\therefore$  Required answer = 4466

66. (2) Sparrows and Crows are birds. But sparrow is different from crow.

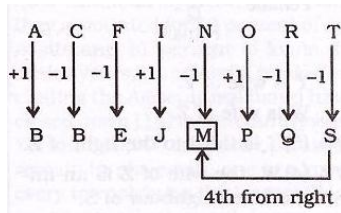


67. (4)



Grand Test – NIACL/DCCB-190112

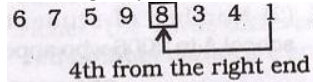
68. (1)



69. (3) The soldiers who constitute the force fighting on land are called Army.

Similarly, Navy is related to water.

70. (2) According to question



71. (3)

72. (4)

73. (3)

74. (1)

75. (2)

(76 – 77):

© ⇒ ≤	§ ⇒ ≥	@ ⇒ =
★ ⇒ <	% ⇒ >	

76. (5) D @ M ⇒ D = M

M § B ⇒ M ≥ B

B ★ R ⇒ B < R

R % T ⇒ R < T

Therefore, D = M ≥ B < R > T

**Conclusions :**

I. B ★ D ⇒ B < D : Not True

II. B @ D ⇒ B = D : Not True

B is either smaller than or equal to D. Therefore, either I or II is true.

III. T ★ M ⇒ T < M: Not True

77. (4) W © F ⇒ W ≤ F

F @ D ⇒ F = D

D ★ K ⇒ D < K

K § J ⇒ K ≥ J

Therefore, W ≤ F ⇒ D < K ≥ J

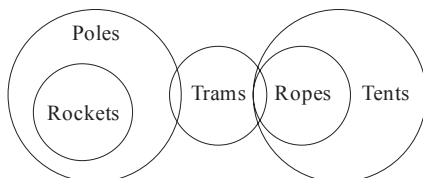
**Conclusions :**

I. K % W ⇒ K > W : True

II. D § W ⇒ D ≥ W: True

III. F ★ K ⇒ F < K: True

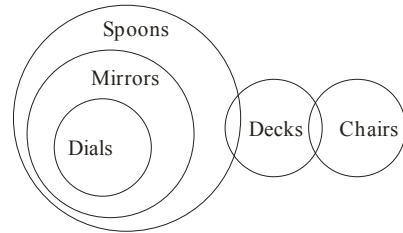
78. (4)



I. ✓ II. ✗ III. ✗ IV. ✓

Only I and IV follows.

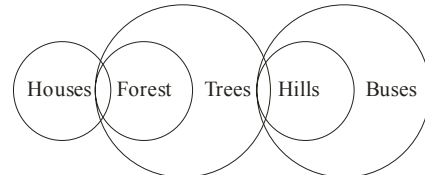
79. (3)



I. ✗ II. ✓ III. ✗ IV. ✗

Only (II) follows.

80. (1)



I. ✓ II. ✓ III. ✗ IV. ✗

Only I and II follows.

81-85.

Student	Class	Favourite Subject
A	VII	Marathi
B	VI	Geography
C	VI	Economics
D	VIII	Chemistry
E	VII	Biology
F	VI	Physics
G	VII	Mathematics
H	VIII	English

81. (1)

H likes English.

82. (5)

G's favourite subject is Mathematics.

83. (1)

C's favourite subject is Economics.

84. (5)

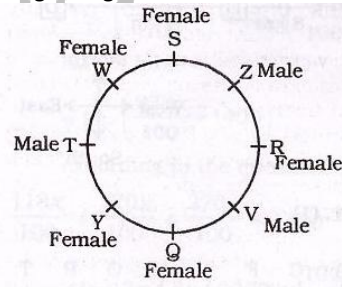
None is correct.

85. (3)

A, E and G study in Standard VIII.

86-90.

**Sitting arrangement**



Y is wife of V.

W is wife of Z.

86. (5)

T is third to the right of Z.

87. (4)

W, the wife of Z is an immediate neighbour of S.

88. (2)

Y is the wife of V.

89. (2)

V, a male is to the immediate left of R and Z, a male is to the immediate right of R.

90. (5)

All the statements are true.

91. (5)

Both the assumptions are implicit in the statement. If it is recommended to check financial status of client, it implies that it is possible to assess the financial status of client.

92. (5)

Both the assumptions are implicit in the statement.

93. (2)

Only assumption II is implicit in the statement.

## Grand Test – NIACL/DCCB-190112



94. (1) Only assumption I is implicit in the statement.  
95. (2) The statement compares the duration of journey.  
Therefore, assumption I is not implicit in the statement.  
Clearly, assumption II is implicit in the statement.

96 – 100.

Candidate	Conditions						
	(i)	(ii) (or) (A)	(iii)	(iv) or (B)	(v)		
Archit	✓	✓	-	✓	✓	-	✓
Ankida	✓	✗	✗	✓	✓	-	✓
Subodh	✓	✓	-	✓	✓	✓	✓
Nisha	✓	-	✓	✓	✓	-	✓
Shreyas	✓	✓	-	✓	✓	-	✓

96. (2) Archit Pradhan satisfies all the conditions. Therefore, he can be selected.  
97. (3) Ankida Bhave does not satisfy condition (ii) or (A). Therefore, she cannot be selected.  
98. (5) Subodh Saxena satisfies condition (1), (ii), (iii), (B) and (v). Therefore, his case would be referred to CGM-Marketing.  
99. (4) Nisha Awasthi satisfies conditions (i), (A), (iii), (iv) and (v). Therefore, her case would be referred to GM-Marketing.  
100. (2) Shreyas Ingle satisfies all the conditions. Therefore, he can be selected.

