RACE

DCCB Preliminary Grand Test –DCCB-190116

ANSWER KEY

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

HINTS & SOLUTIONS

1. (5) **Hone (Verb)** = to develop and improve something, especially a skill, over a period of time; sharpen.
Look at the sentences:
It was a finely honed piece of writing.
She honed her debating skills at college.

2. (2)
3. (1)
4. (1)
5. (2)

6. (5) **Break into** = to be successful when you get involved in something
Tricky = difficult to deal with
Look at the sentence:
The company is having difficulty breaking into new markets.

7. (1)

8. (5) **Purely (Adverb)** = entirely; only, completely.
Partly (Adverb) = to some ex-tent; not completely.
Look at the sentences:
The charity is run on a purely voluntary basis.
He was only partly responsible for the accident.

9. (5) **Honour (Verb)** = to do what you have agreed or promised to do.
Settle (Verb) = to pay the money that you owe.
Look at the sentences:
I have every intention of honouring our contract.
The insurance company is refusing to settle her claim.

10. (5) **Weighty (Adjective)** = important and serious ; heavy.
Slight (Adjective) = very small.

11. (2) Here, simple past i.e., ... the actress created a fluffy (= like fluff) ...... should be used.

12. (4) Infinitive $\Rightarrow$ to + V_1
Hence, ...to explore the outdoors ....should be used

13. (3) Here, and is superfluous.

14. (5)

15. (2) Here, Gerund i.e., of resolving the issue .... should be used.

16. (1)
17. (5)
18. (3)
19. (4)
20. (2)
21. (5) abuse
22. (4) breach
23. (3) range
24. (3) indiscipline
25. (2) under

26. (1) The event shows past time Hence simple past or 'passed a bill that proposed' will be a correct usage.

27. (5) No correction required

28. (3) In comparison between two things, comparative Degree is used. Use of double comparatives is not proper. Hence, 'as a healthier option' should be used.

29. (4) For living beings Relative Pronoun 'who' is used. Hence, who were earlier unaware will be a correct usage.

30. (2) The event shows past time. Hence 'while most industries were' should be used.

31. (2) Series is $+11^2, +10^2, +9^2, +8^2, +7^2$

32. (1) Series is +880, +440, +220, +110, +55,

33. (3) Series is $+3^3, +4^3, +5^3, +6^3, +7^3$, ...

34. (4) Series is
13 + 23 =36
36 + 34 = 70
70 + 47 = 117
117 + 62 = 179
179 + 79 = 258
Difference of
23 + 11=34, 34 + 13 = 47,
47 + 15 = 62, 62 + 17 = 79

35. (5) Series is +551, +1102 ,+1653, +2204 ,+2755,

36. (4) Quicker approach

Let the present ages of Anubha and her mother be x and 2x years respectively.
After 6 years,

$\dfrac{x+6}{2x+6} = \dfrac{11}{20}$

$\Rightarrow$ 22x + 66 = 20x + 120

$\Rightarrow$ 2x = 120 - 66 = 54

$\Rightarrow$ x = $\dfrac{54}{2}$ = 27

$\therefore$ Required ratio

= (x - 9) : (2x - 9)

= 18 : (54 - 9) = 2 : 5

37. (4) Quicker approach

$Pr\,incipal = \dfrac{SI \times 100}{Time \times Rate}$

$= \dfrac{8730 \times 100}{3 \times 6} = Rs.48500$

$\therefore CI = P\left[\left(1 + \dfrac{R}{100}\right)^2 - 1\right]$

$= 48500\left[\left(1 + \dfrac{6}{100}\right)^2 - 1\right]$

$= 48500 \times 0.1236 = Rs.\ 5994.60$

38. (3) Required ratio
= 65 × 8 : 70 × 4 = 13 : 7

39. (2) Quicker approach

Required ratio

$= \dfrac{5 \times 120}{100} : \dfrac{4 \times 125}{100} : \dfrac{7 \times 120}{100}$

= 30 : 25 : 42

40. (5) Quicker approach

Average original length

$= \dfrac{160 \times 35 - 144 + 104}{35}$

$= \dfrac{5560}{35}$ = 158.86 cm.

41. (4) x = -15, 13
Y = -15
x ≥ y

42. (2) $X^2 - 4X - 3X + 12 = 0$

or, (X - 4)(X - 3) = 0

$\therefore$ X = 4, 3

and $y^2 - 3y + 2 = 0$

or, (y - 2)(y - 1) = 0

$\therefore$ y = 2, 1

There, x > y

43. (4) $x^2 - 8x + 15 = 0$

(x - 3)(x - 5) = 0

x = 3, 5

$y^2 - 5y + 6 = 0$

(y - 2)(y - 3) = 0

y = 2, 3

$\therefore$ x ≥ y

44. (5) $x^2 + 6x + 3x + 18 = 0$

or, x(x + 6) + 3(x + 6) = 0

or, (x + 6)(x + 3) = 0

$\therefore$ x = -6, -3

and, $y^2 - 4y + 3y - 12 = 0$

or, y(y - 4) + 3(y - 4) = 0

or, (y + 3)(y - 4) = 0

$\therefore$ y = -3, 4

Hence, x ≤ y

45. (2) $x = \dfrac{9}{4}, 1$ and y = -2, -1

Hence x > y

46. (2) Number of projects handled by company A

$= \dfrac{190+450+350+270+430+570}{6}$

$= \dfrac{2260}{6} = 376\dfrac{2}{3}$

47. (3) Required ratio
= (450 + 250) : (550 + 350)
= 700 : 900 = 7 : 9

48. (4) Required percent

$= \dfrac{440 - 250}{250} \times 100$

$= \dfrac{1900}{25} = 76\%$

49. (1) Average number of projects handled by company B

$= \dfrac{350 + 250 + 550 + 320 + 380 + 440}{6}$

$= \dfrac{2290}{6} = 381\dfrac{2}{3}$

50. (2) Number of projects handled in the years 2001, 2003 and 2006:
Company A $\Rightarrow$ 190 + 350 + 570 = 1110
Company B $\Rightarrow$ 350 + 550 + 440 = 1340
Required difference = 1340 - 1110 = 230

51. (4) Number of books sold by store P in May = 177
Number of books sold by store T in July = 249

$\therefore$ Required percent $= \dfrac{249 - 177}{249} \times 100$

$= \dfrac{7200}{250} = 28.8 = 29\%$

52. (3) Required ratio
= (156 + 220) : (215 + 249)
= 376 : 464 = 47 : 58

53. (5) Number of books sold by stores Q, S and T in April = 208 + 187 + 175 = 570
Number of non-academic books sold = 70% of 570

$= \dfrac{570 \times 70}{100} = 399$

54. (1) Number of books sold by store R in April, June and July = 216 + 235 + 278 = 729

∴ Required average = $\frac{729}{3}$ = 243

55. (4) Required difference
= (253 + 265) - (197 + 188)
= 518 - 385 = 133

Calculation (Q.N. 56 – 60):

Total number of girls = $2800 \times \frac{4}{7} = 1600$

Total number of boys = 2800 - 1600 = 1200

Number of boys in painting = $1200 \times \frac{20}{100} = 240$

Number of girls in cooking = $\frac{1}{4} \times 1600 = 400$

Number of boys in cooking = 700 - 400 = 300

Number of boys in singing = $\frac{2}{5} \times 1200 = 480$

Number of boys in dancing = 1200 - 240 - 300 - 480 = 180

Number of girls in dancing = $180 \times \frac{5}{4} = 225$

Number of girls in singing = 2 × 480 = 960

Number of girls in painting = 1600 - 400 - 225 - 960 = 15

56. (5) Required ratio = 240 : 480 = 1 : 2

57. (1) Required per cent = $\frac{400}{2800} \times 100 = \frac{100}{7} = 14$

58. (3) Required per cent = $\frac{300}{2800} \times 100 = 10.71$

59. (4) Number of children in dancing classes = 180 + 225 = 405

60. (2) Number of girls taking painting classes = 15

61. (2)
62. (4)
63. (5)
64. (3)
65. (2)

(66 – 69):

(i) P © D $\Rightarrow$ P ≥ Q

(ii) P ★ Q $\Rightarrow$ P ≤ Q

(iii) P @ Q $\Rightarrow$ P < Q

(iv) P $ Q $\Rightarrow$ P > Q

(v) P % Q $\Rightarrow$ P = Q

66. (4) J $ K $\Rightarrow$ J > K

K ★ T $\Rightarrow$ K ≤ T

T @ N $\Rightarrow$ T < N

N © R $\Rightarrow$ N ≥ R

Therefore,

J > K ≤ T < N ≥ R

Conclusions

I. J $ T $\Rightarrow$ J > T : Not True

II. R ★ T $\Rightarrow$ R ≤ T : Not True

III. N $ K $\Rightarrow$ N > K : True

IV. R ★ K $\Rightarrow$ R ≤ K : Not True

67. (4) H @ B $\Rightarrow$ H < B

B ★ E $\Rightarrow$ B ≤ E

V © E $\Rightarrow$ V ≥ E

W $ V $\Rightarrow$ W > V

Therefore,

H < B ≤ E ≤ V < W

Conclusions

I. W $ E $\Rightarrow$ W > E: True

II H @ E $\Rightarrow$ H < E: True

III. H @ V $\Rightarrow$ H < V: True

V. W $ B $\Rightarrow$ W > B: True

68. (3) K ★ D $\Rightarrow$ K ≤ D

D @ N $\Rightarrow$ D > N

N % M $\Rightarrow$ N = M

M ©W $\Rightarrow$ M ≥ W

Therefore,

K ≤ D > N = M ≥ W

Conclusions

I. M @ K $\Rightarrow$ M < K: Not True

II. N @ K $\Rightarrow$ N < K: Not True

III. M @ D $\Rightarrow$ M < D: True

V. W ★ N $\Rightarrow$ W ≤ N: True

69. (3) N $ T $\Rightarrow$ N > T

T © R $\Rightarrow$ T ≥ R

R % M $\Rightarrow$ R = M

M @ D $\Rightarrow$ M < D

Therefore,

N > T ≥ R = M < D

Conclusions

I. D $ R $\Rightarrow$ D > R: True

II. M @ T $\Rightarrow$ M < T: Not True

III. M % T $\Rightarrow$ M = T: Not True

V. M $ D $\Rightarrow$ M > D: Not True

M is either smaller than or equal to T. Therefore, either II or III is true.

(70 – 72):
70. (4)
71. (1)
72. (2)

(73 – 77)

Person	Profession	Floor
B	Doctor	6
C/F	Engineer	5
A	Journalist	4
D	Lawyer	3
E	Architect	2
F/C	Teacher	1

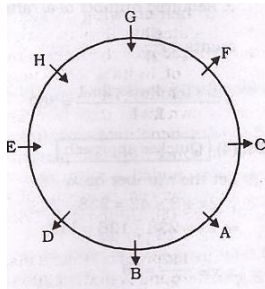73. (2) Engineer

74. (2) Lawyer

75. (3) E–Architect–Floor 2

76. (1) A–Journalist–Floor 2

77. (2) According to the given condition, the journalist must stay below the floor of the Engineer. So, if the journalist stays on floor 2, the condition is not violated. Therefore, the Engineer keeps on staying on floor 5, i.e. his original position

(78 – 82):

78. (3) Except E, all others face outside.
79. (1) H and D are immediate neighbours of E.
80. (4) G and C are immediate neighbours of F.
        F faces outside.
        F sits second to the left of H.
81. (5) H sits third to the left fifth to the right of C.
82. (2) H is sitting to the immediate ate right of G.
83. (2) 29 about 24 call 9 13 tariff even
84. (3) Step IV
85. (4) 59 bead 38 father tenure 11 ultimate 24
86. (4) Cannot be determined
87. (1) 51 butter 32 24 12 entry sand carry
88. (2) Arguments I and III are strong.
89. (5) None of the arguments is strong.
90. (2) Argument I is based on an example. We know that citing example is a bad argumentation. Only Argument II seems to be strong.
91. (5) All the three courses of action are suitable for pursuing. The Courses of action mentioned here are appropriate to tackle the problem.
92. (3) Course of action II seems to be suitable for pursuing. The government should make effort to point out the cause of price rise instead of setting up an expert committee to study the trend of prices. Course of action III negates the importance of essential commodities.
93. (4) All the three courses of action are suitable for pursuing.
94. (4) Large number of branches of many government owned banks in the rural areas are making huge losses every year due to lack of adequate business activities.
95. (2)
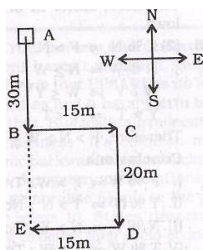
    Required distance = AE = AB + BE
        = (30 + 20) m = 50m
96. (1) From the first two lines of the passage, it is clear that the Inference is definitely true.
97. (2) The use of term 'always' in the Inference shows that the Inference is probably true.
98. (1) The Inference is definitely true. Consider the following line of the passage :

"Excessively low interest rates skew the risk reward equation by making projects that are actually not viable, appear viable."

99. (5) The Inference is definitely false. Consider the following line of the passage:
        "It is now well established that long periods of unduly low interest rates encourage banks to take more risks."
100. (1) The Inference is definite: true.