## IBPS Clerk Preliminary 2021 ICP-2021-090016 HINTS \& SOLUTIONS

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

## HINTS \& SOLUTIONS

(1-5)


1. (2)
2. (4)
3. (1)
4. (5)
5. (3)
6. (2) $I . M>R$ (False)
II. $\mathrm{S}>\mathrm{Q}$ (True)
7. (4) I. $\mathrm{F} \geq \mathrm{E}$ (False)
II. $\mathrm{E}<\mathrm{F}$ (False)
8. (4) $I . R>N$ (False)
II. $\mathrm{N}<\mathrm{S}$ (False)
9. (5) I. D < A (True)
II. A > C (True)
10. (3) I. $\mathrm{N}>\mathrm{S}$ (False)
II. $\mathrm{N}=\mathrm{S}$ (False)
(11-15)

11. (3)
12. (1)
13. (1)
14. (5)
15. (2)
(16-18)

16. (1)
17. (1)
18. (2)
19. (2) The rank of Mahesh is $33-20+1=14$ th from Top
20. (4)

21. (2)

22. (5)

23. (3)

24. (4)

25. (1)

(26-30)

26. (2)
27. (3)
28. (5)
29. (2)
30. (1)
31. (3)

FAT SUM
32. (5) YAK RUM NRK NOV EAT
33. (1)
34. (2)
35. (5)

EAT NOV NRK RUM YAK
No. of letters between $V$ and $O$ are $(P, Q, R, S, T, U)=6$ letters.
36. (1)

Total student in school C in year 2013 $=\frac{12}{10} \times 100=120$
Total student in school C in year $2015=\frac{26}{20} \times 100=130$
$\therefore$ Required average $=\frac{1}{2}[120+130]$
$=125$
37. (3)

Required percentage $=\frac{\frac{45}{20} \times 100-\frac{12}{12} \times 100}{\frac{12}{12} \times 100} \times 100$
$=\frac{225-100}{100} \times 100$
= 125\%
38. (5)

Required ratio $=\frac{\frac{12}{10} \times 45+\frac{68}{20} \times 40}{\frac{12}{12} \times 44+\frac{96}{30} \times 35}$
$=\frac{6 \times 9+68 \times 2}{44+16 \times 7}=\frac{54+136}{44+112}$
$=\frac{190}{156}=95: 78$
39. (3)

Boys in school E in year $2014=\frac{45}{20} \times 60=135$
$1 / 5^{\text {th }}$ of boys in school E play cricket $=\frac{135}{5}=27$
$\therefore$ Boys who don't play cricket $=135-27=108$
40(1)
Girls in school D and E together in year 2014
$=\frac{42}{10} \times 55+\frac{45}{20} \times 40$
$=231+90=321$
Total boys in school B and D together in year 2013
$=\frac{9}{4} \times 48+\frac{68}{20} \times 60$
$=108+204=312$
$\therefore$ Required difference $=321-312=9$
41. (2)

Increase in height $=15 \%=\frac{3}{20}$
Decrease in base radius
$=10 \%=\frac{1}{10}$

$=\frac{7}{200} \times 100=3.5 \%$
Or,
C.S.A of cylinder $=2 \pi r h$
$\therefore$ Change in its C.S.A $=+15-10-\frac{10 \times 15}{100}$
= $5-1.5=+3.5 \%$
$\Rightarrow 3.5 \%$ increased
42. (4)

Let $C P=100$
$\mathrm{MP}=120 \%$ of $\mathrm{CP}=120$
Profit $=8 \%$
SP $=108$
So discount is $=120-108=12$
Discount percentage $=\frac{12}{120} \times 100=10 \%$

Let the sixth no. $=x$
Then the seventh $=\mathrm{x}$
+4 and the eighth
$=x+7$
According to the question,
$2 \times \frac{31}{2}+3 \times \frac{64}{3}+x+x+4+x+7$
$=8 \times 20$
$31+64+3 x+11=160$
$106+3 x=160$
$3 \mathrm{x}=54$
$\mathrm{x}=18$
$\therefore$ Eighth no. $\mathrm{x}+7=18+7=25$
44. (2)

Rs. $1: 50$ p: 25 p
no. of coins $=8 \mathrm{x}: 5 \mathrm{x}: 3 \mathrm{x}$
Value of coins $=8 \mathrm{x}: \frac{5 \mathrm{x}}{2}: \frac{3 \mathrm{x}}{4}$
$\therefore 8 \mathrm{x}+\frac{5 \mathrm{x}}{2}+\frac{3 \mathrm{x}}{4}=112.50$
$\frac{32 \mathrm{x}+10 \mathrm{x}+3 \mathrm{x}}{4}=\frac{11250}{100}$
$\frac{45 \mathrm{x}}{4}=\frac{225}{2}$
$\mathrm{x}=10$
$\therefore 50$ paise coins are $=5 x=5 \times 10=50$
45. (1)

Profit $\longrightarrow 10: 9$
ccording to the question,
$(10+9+8)$ units $=$ Rs. 10,800
27 units $=$ Rs. 10,800

1 unit = Rs. 400
Difference between A's share and C's share
$=(10-8) \times 400=$ Rs. 800
46. (3)

Rate $\left(R_{1}\right)=4 \%, t_{1}=1$ year
Case (I) : Rate (\%) $=4 \%$
Case (II) : When interest is compounded half-yearly
New Rate \% = $\frac{6}{2}=3 \%$
Time $\left(\mathrm{t}_{2}\right)=1 \times 2=2$ years
Effective Rate\% for 2 years
$=3+3+\frac{3 \times 3}{100}=6.09 \%$
Difference in Rates $=(6.09-4) \%$
= 2.09\%
ATQ,
$2.09 \%$ of sum = Rs. 104.50
Sum $=$ Rs. $\frac{104.50}{2.09} \times 100$
= Rs. 5000
47. (2)


A construct in 6 days
$6 \times 3=18$ units Construct B destroys $=8 \times 2=16$ units
Now work left after destroying by B $=18-16=2$ units
Now A will do 24-2 = 22 units of work
A completes in $=\frac{22}{3}=7 \frac{1}{3}$ days
48. (3)


Circumference $=2 \pi r$
Speed of $A=2 \times \frac{8}{40} \times \pi r$
New circumference
$=2 \times \pi \times r \times 10$
Time taken $=\frac{2 \pi r \times 10 \times 40}{2 \pi r \times 8}=50 \mathrm{~min}$
49. (2)

Total stops taken by the man to cover a distance of 90 km is
$=\frac{90}{7} \Rightarrow 12$ stops +6 km
$\therefore$ Time taken in 12 stops
$=12 \times 6 \mathrm{~min}$.
$=72 \mathrm{~min}\{1$ hour 12 min$\}$
Time taken by the man to cover 90 km with $18 \mathrm{~km} / \mathrm{hr}$ without
Stops $=\frac{90}{18}=5$ hours
$\therefore$ Total time to cover total distance
$=5$ hours +1 hour 12 min
$=6$ hours 12 min .
50. (3)

Let the no. Of friend's in beginning $=x$
According to question
$\frac{108}{(x-3)}-\frac{108}{x}=3$
$108 \mathrm{x}-108 \mathrm{x}+3 \times 108=3 \mathrm{x}^{2}-9 x$
$x^{2}-3 x-108=0$
$\mathrm{x}=12,-9$
So no. Of friends in beginning was 12 and no. Of friends attended picnic $=12-3=9$
$?=\frac{3}{8} \times \frac{4}{7} \times \frac{7}{9} \times 738=123$
52. (2)

$$
\begin{aligned}
?= & \frac{17}{5} \times \frac{4}{17}+\frac{5}{3} \times \frac{2}{15} \\
& =\frac{4}{5}+\frac{2}{9}=\frac{36+10}{45}=\frac{46}{45}=1 \frac{1}{45}
\end{aligned}
$$

53. (1)
$135 \%$ of $480+$ ?\% of $320=728$
$\Rightarrow \frac{135}{100} \times 480+\frac{?}{100} \times 320=728$
$\Rightarrow 648+? \times 3.2=728$
$\Rightarrow ? \times 3.2=728-648$
$\Rightarrow ?=\frac{80}{3.2}=25$
54. (3)

$$
\begin{aligned}
& 4368+2158-596-?=3421+1262 \\
& \Rightarrow 6526-596-?=4683 \\
& \Rightarrow ?=5930-4683=1247
\end{aligned}
$$

55. (1)

$$
2172 \div ?=1832-956-514
$$

$$
\Rightarrow \frac{2172}{?}=362 \Rightarrow ?=\frac{2172}{362}=6
$$

56. (2) $\quad ?=666.06+66.60+0.66+6.06+6+60=805.38$
57. (5)

$$
?=69 \div 3 \times 0.85+14.5-3
$$

$=\frac{69}{3} \times 0.85+11.5$
$=23 \times 0.85+11.5$
$=19.55+11.5=31.05$
58. (4)
59. (3)

$$
?=(10)^{24} \times(10)^{-21}
$$

$=(10)^{24-21}=10^{3}=1000$
$?=15-\frac{33}{4}-60 \%$ of $\frac{6}{5}$
$=\left(\frac{60-33}{4}\right)-\frac{6}{5} \times \frac{60}{100}$
$=\frac{27}{4}-\frac{18}{25}=\frac{675-72}{100}=\frac{603}{100}=6.03$
60. (4)

$$
\begin{aligned}
& \sqrt{?}+136=320 \times \frac{5}{8} \\
& \Rightarrow \sqrt{?}+136=200 \\
& \Rightarrow \sqrt{?}=200-136=64 \\
& \Rightarrow ?=64 \times 64=4096
\end{aligned}
$$

61. (1)

$$
\begin{align*}
& 121-2^{2}=121-4=117 \\
& 117-3^{2}=117-9=108 \\
& 108-4^{2}=108-16=92 \\
& 92-5^{2}=92-25=67 \\
& 67-6^{2}=67-36=31 \tag{2}
\end{align*}
$$

$(50 \div 2)+1=25+1=26$
$(26 \div 2)+1=13+1=14$
$(14 \div 2)+1=7+1=8$
$(8 \div 2)+1=4+1=5$
$(5 \div 2)+1=2.5+1=3.5$
63. (4)

The pattern of the number series is :
$5+1^{2}=6$
$6+2^{2}=10$
$10+3^{2}=19$
$19+4^{2}=35$

The pattern of the number series is :

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6\times2-1=11
11\times2-1=21
21\times2-1=41
41\times2-1=81
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65. (1)

The pattern of the number series is :
$5+6=11$
$11+12=23$
$23+24=47$
$47+48=95$
66. (4)
$\frac{200 \times 30}{100}+\sqrt{?}=\frac{550 \times 48}{100}-\frac{150 \times 10}{100}$
$\Rightarrow 60+\sqrt{?}=264-15$
$\Rightarrow \sqrt{?}=249-60=189$
$\Rightarrow$ ? $=189 \times 189=35721$
67. (5)
$\frac{60}{100} \times \frac{20}{100} \times \frac{3}{5} \times ?=450$
$\Rightarrow \frac{9}{125} \times ?=450$
$\Rightarrow ?=\frac{450 \times 125}{9}=6250$
76. (2) Emergence - the process of becoming visible after being concealed. Disappearance - the process of coming into existence or prominence.
77. (5) Predominantly -mainly; for the most part. Subsidiary less important than but related or supplementary to something.
78. (3) Piqued means annoyed. Abet means to urge on or to stimulate. Deterrence means actions taken by states against equally powerful alliances to prevent hostile actions.
Prohibit means formally forbid (something) by law, rule, or other authority hence interdict is the word most similar in meaning.
Segmenting means to divide (something) into separate parts or sections hence sever is the word which is most similar in meaning.
81. (5) The sentence is grammatically correct.
82. (1) 'had he' will be used in place of 'he had' as verb is used before the subject with 'no sooner'.
83. (1) 'are' will be used in place of 'is' as the subject of the sentence 'clothes' is plural for which plural verb is used.
84. (3) 'speaking' will be used in place of 'speak'.
85. (5) The sentence is grammatically correct.
86. (1) The error is in part (b) of the sentence. 'flowed' will be used in place of 'flown' as the V3 of 'flow' is 'flowed'.
87. (2) The error is in part (b) of the sentence. 'was' will be used in place of 'is' as the sentence is in past tense 'said'.
88. (5) The error is in part (d) of the sentence. Therefore none of these is the correct choice. Use 'with' in place of 'by' as 'by' is used before 'agent' while 'with' is used before 'instrument/ tool'.
Ex. A snake was killed by him.
The paper was cut with scissors.
89. (2) The error is in part (b) of the sentence.
'are' will be used in place of 'am' because when two pronouns is connected with 'and' then plural verb is used.
Ex. You and I are working for him.
He and she are husband and wife.
90. (2) The error is in part (b) of the sentence.

Preposition 'to' is used after 'objected' as when 'object' is used in the form of 'verb' to express the meaning as 'to protest/ mind/ demur', then preposition 'to' is used after that.
(91-95) The correct sequence to form meaningful paragraph is CADFBHGE.
91. (3)
92. (1)
93. (5)
94. (2)
95. (4)
96. (5)
97. (4)
98. (3)
99. (2)
100. (2)

