# Bank Clerk | Prelims -2021. ICP-2021-090025 HINTS \& SOLUTIONS 

ANSWER KEY

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

## HINTS \& SOLUTIONS

1.(2) The give statement is 'Indian exchanges do not offer trading in exotic derivative instruments'. So, there are certain derivative instruments which are exotic which cannot be traded in the Indian exchanges. So, Indian exchanges do not offer trading in all types of derivative instruments.
Hence, option (2) is the correct answer.
2.(3) The answer to the question can be inferred from the second paragraph where it is mentioned that ' NSE was the global leader in terms of volume of trading of index options'.
Hence, option (3) is the correct answer.
3.(5) The answer to the question can be inferred from the third paragraph where it is mentioned that ' Incidentally, three exchanges-Korea Exchange, NSE and the Moscow Exchange-accounted for $68 \%$ of the total single stock futures total volumes traded'.
Hence, option (5) is the correct answer.
4.(1) The statement given in options (1) is false. It can be inferred from the third paragraph where it is mentioned that the NSE and Korea Exchange together accounted for
90.7\% of the volume of index options in the Asia-Pacific region. So, mentioning of the World Federation of Exchanges make the statement false.
The option (2) is True. It can be inferred from the fourth paragraph.
The option (3) is true. It is written in the fifth paragraph. Hence, option (1) is the correct answer.
The answer to the question can be inferred from the first paragraph where it is mentioned that ' ...but that has not stopped the bourses from becoming one of the largestderivative trading centres globally...'
Bourse means a stock exchange in non-English speaking country.
The passage is talking about how Indian stock exchange is performing well in the derivatives section.
Hence, option (d) is the correct answer.
Minute means small.
Among the given options, the word 'minute' has a meaning which is OPPOSITE in meaning to the word 'largest'.
Hence, option (e) is the correct answer.
Global [adjective] means 'relating to the whole world; worldwide';
International [adjective] means ' of or having to do with more than one nation';
The word 'international' has a meaning which is nearly SIMILAR to the meaning of the word 'Global'.
Hence, option (d) is the correct answer.
The erroneous phrase is part (B). Instead of 'has', 'had' should be present because when two past events are discussed, then the clause having 'after' should be in Past Perfect but Main Clause should be in Simple Past tense. Hence, option (b) is the correct answer.
9.(4) The erroneous phrase is part (D). Instead of 'that', 'which' should be used. Though 'that' is used in place of 'who' or 'which' but only 'which' can refer any clause in the form of Relative Pronoun, 'Who' or 'that' can't refer any clause.
Hence, option (d) is the correct answer.
10.(4) The erroneous phrase is part (D). Instead of 'more', 'most' should be used because when comparison is made between more than two persons or things, then we use Adjective of Superlative Degree.
Hence, option (d) is the correct answer.
11. (3) The most suitable set of words to replace the given bold words in the sentence, to make the sentence grammatically correct and contextually meaningful, is "opaque, questions". Hence, option (3) is the most viable answer choice.
Undermine- erode the base or foundation of
Laconic- (of a person, speech, or style of writing) using very few words.
Restive- unable to remain still
Extant- surviving.
12. (1) The most suitable set of words to replace the given bold words in the sentence, to make the sentence grammatically correct and contextually meaningful, is "understatement, violence."
Hence, option (1) is the most viable answer choice.
Laudable- deserving praise and commendation.
Obliviate- to forget
Subsume- include or absorb (something) in something else.
13. (5) The given bold words in the sentence are grammatically and contextually correct and hence need no replacement.
Hence, option (5) is the most viable answer choice.
Tortuous- excessively lengthy and complex.
Stigma- a mark of disgrace associated with a particular circumstance, quality, or person.
Gouge- overcharge
Tarnish- dullness of colour
Debris- scattered pieces of rubbish or remains.
Damp- wet
14. (4) The most suitable set of words to replace the given bold words in the sentence, to make the sentence grammatically correct and contextually meaningful, is "confuse, vegetables."
Hence, option (4) is the most viable answer choice. 22. (1) Contrive- create or bring about using specific skill Subsume- include or absorb (something) in something else. Protract- prolong.
15. (2) The most suitable set of words to replace the given bold words in the sentence, to make the sentence grammatically correct and contextually meaningful, is "spotlight, continued." Hence, option (2) is the most viable answer choice.
Spotlight means a lamp projecting a narrow, intense beam of light directly on to a place or person, especially a performer on stage.
Insolent- showing a rude and arrogant lack of respect. variance-the fact or quality of being different, all these options doesn't go with the context of the sentence as in the sentence they are talking about economies and the currency fluctuation against dollar. Hence, option (2) is the most viable answer choice.
16. (2) Phrase 'the storyline and the nudge' doesn't make any sense. But the phrase 'the storyline and the characters' make sense. So, the interchange should be 2-4. Hence, the option (2) is the correct answer.
17. (1) Among the given options, option (1) is the correct answer.
The phrase 'recommend overboard your portfolio 'doesn't make sense but the phrase 'recommend diversifying your portfolio' do make sense. So, the interchange should be between the words 1 and 2 (or 2 and 1 ). Hence, the option (1) is the correct answer.
18. (2) Among the given options, option (1) is the correct answer.
The phrase 'with a global growth' though seems correct but it is contextually incorrect because the starting phrase of the sentence, 'Apart from the high base effect' conveys the idea that the ending phrase of the sentence should be something which will contradict the starting phrase. Hence 'with a global growth' should be replaced by 'with a global slowdown.'

So, the interchange should be between the words 1 and 3 (or 3 and 1).
Hence, the option (2) is the correct answer.
19. (1) The position of the words 'prospecting' and 'licence' is wrong. Interchanging the words would make the sentence grammatically correct and contextually meaningful.
So, the option (1) is the correct answer.
20. (4) The presence of the word 'insights' at (4) and 'offer' at (2) is making the sentence grammatically \& contextually incorrect and incoherent. Upon interchanging the words at (4) and (2), we get a grammatically correct and contextually meaningful sentence.
Hence, the option (4) is the correct answer.
21. (4) Sentence (C) and (E) makes a perfect match, the connection between C and E can be traced from the key words, "companies" and "workers."
Deterrent- a thing that discourages or is intended to discourage someone from doing something.
Phrase (A) and (F) makes a perfect match. The connection between A and F can be traced from the key words, "fear" and "deterrent."
Hence option (4) is the correct answer choice.
Only phrases (C) and (F) make proper combination as the phrase, "less formal and more engaging work" used in sentence (C) makes a match with the phrase, "do away with rigid hierarchical structures."
Hence option (1) is the correct answer choice.
23. (3) Only sentence (A) and (D) makes a perfect match as in sentence (A) has mentioned some new developed laws, policies and frameworks and in sentence (D) has mentioned that these will help realizing the young people their full potential. Hence option (3) is the correct answer choice.
Only sentence (B) and (F) makes a perfect match.
Indebtedness- the condition of owing money.
Spate- a large number of similar things coming in quick succession.
Phrase (B) states increasing costs, decrease in income and pegged up condition of indebtedness these all conditions can be easily correlated with the succession of a large number of suicidal cases among the farmers that has been mentioned in the stanza ( $F$ ).
Hence option (2) is the correct answer choice.
25. (4) Only sentence (C) and (E) makes a perfect match as both are talking about the investment schemes,
Phrase (C) has mentioned the investment schemes and phrase (E) as talked about the pattern of the interest rates in such schemes. None of the other two sentences make the meaningful coherent sense.
Hence option (4) is the correct answer choice.
26. (4) The hint for the blank can be derived from the word 'boisterous' which precedes the blank.
Boisterous [adjective] means 'noisy, energetic, and cheerful';
Garrulous [adjective] means 'excessively talkative, especially on trivial matters';
Among the given options, the word 'garrulous' complements the word 'boisterous'.
Hence, option (4) is the correct answer.
27. (2) Alacrity [noun] means ' brisk and cheerful readiness'; invocation [noun] means 'a series of words said as a magic spell or charm';

Foreknowledge [noun] means 'the fact of knowing something in advance;
The hint for the blank can be derived from the word 'speed' and the fact that the word 'speed' is connected with the blank through the word 'and'. So, the word filling the blank should complement the word 'speed'.
Among the given options, the word 'alacrity' complements the word 'speed'.
Hence, option (2) is the correct answer.
28. (5) The blank seems to be filled by an adjective.

Nemesis [noun] means 'the inescapable agent of someone's or something's downfall';
Slander [noun] means ' the action or crime of making a false spoken statement damaging to a person's reputation';
Bane [noun] means 'a cause of great distress or annoyance';
Conglomerate [noun] means 'a thing consisting of a number of different and distinct parts or items that are grouped together';
A person would contemplate to make a team with a person who would be her/his nemesis.
Among the given options, the word 'nemesis' provides the correct context to the blank.
Hence, option (5) is the correct answer.
29. (2) The blank seems to be filled by a noun.

Slough [noun] means ' a swamp (a piece of wet, spongy land)';
Ambivalence [noun] means 'the state of having mixed feelings or contradictory ideas about something or someone';
A person would be shocked if a hospital is being build on a swamp.
Among the given words, the word 'slough' provides the correct context to the blank.
Hence, option (2) is the correct answer.
30. (1) Enamoured means "be filled with love for." Allay [verb] means ' diminish or put at rest (fear, suspicion, or worry)'; The context of the sentence suggests that when Rakhi and Ramesh met, they fell in love for each other.
Among the given options, the word 'enamoured' provide the correct context to the blank.
Hence, option (1) is the correct answer.
31. (4) $\Rightarrow 35 \%$ of $180+18^{2}=(27)^{\frac{5}{3}}+?^{2}$
$\Rightarrow 63+324=243+?^{2}$
$\Rightarrow 387-243=?^{2}$
$\Rightarrow ?^{2}=144$
$\Rightarrow$ ? $=12$
32. (1) $\frac{323}{357} \times 441-15 \times 21=$ ?
$\Rightarrow \frac{19 \times 17}{17 \times 21} \times 441-15 \times 21=$ ?
$\Rightarrow$ ? $=19 \times 21-15 \times 21=4 \times 21=84$
33. (3)
$7 \frac{4}{5}-3 \frac{2}{3}+4 \frac{8}{15}=\frac{234}{?}$
$8+\frac{12-10+8}{15}=\frac{234}{?}$
$8+\frac{2}{3}=\frac{234}{?}$
$\frac{26}{3}=\frac{234}{?}$
$\Rightarrow$ ? $=27$
34. (5) $\quad ?^{\frac{2}{3}}=64 \%$ of $150+7 \times 3-9^{2}$
$?^{\frac{2}{3}}=96+21-81$
$?^{\frac{2}{3}}=36$
$\Rightarrow$ ? $=36^{\frac{3}{2}}=216$
35. (3) $? \times 4-40^{2}=14^{2}-36 \times 44$
$? \times 4=196+40^{2}-(40-4) \times(40+4)$
$? \times 4=196+40^{2}-40^{2}+4^{2}=212$
? $=\frac{212}{4}=53$
36-40. Day1
No. of male visited on day $1=\frac{1400}{13+15} \times 13=650$
No. of female visited $=1400-650=750$
Day2
No. of male visited $=\frac{1700}{37+31} \times 37=925$
No. of female visited $=1700-925=775$
Day3
No. of male visited $=\frac{1200}{13+12} \times 13=624$
No. of female visited $=1200-624=576$
Day4
No. of male visited $=\frac{1500}{7+8} \times 7=700$
No. of female visited $=1500-700=800$
Day5
No. of male visited $=\frac{800}{11+5} \times 11=550$
No. of female visited $=800-550=250$
required percentage $=\frac{925-250}{250} \times 100=270 \%$
average no. of people of five days
of week $=\frac{1400+1700+1200+1500+800}{5}=1320$
So, in 2 days of week no. of people visited
are less than average no. of people.
required value $=\sqrt{576}=24$
required ratio $=\frac{750+775+800}{3}: \frac{925+700}{2}$
$=\frac{2325}{3}: \frac{1625}{2}$
$=62: 65$
total no. of male visited on day3
$=624+650 \times \frac{4}{100}=650$
Total no. of female visited on day 3
$=\frac{650}{13} \times 12=600$
Required no. of female $=600-576=24$
Let speed of stream be $x \mathrm{~km} / \mathrm{hr}$.
So, speed of boat in still water $=6 x \mathrm{~km} / \mathrm{hr}$.
ATQ
$\frac{105}{7}=(6 \mathrm{x}-\mathrm{x})$
$\Rightarrow 5 \mathrm{x}=15$
$\mathrm{x}=3$
So, required speed $=6 \mathrm{x}$
$=18 \mathrm{~km} / \mathrm{hr}$.
Let total work be 300x units
So, efficiency of $A=\frac{300 x \times \frac{200}{300}}{8}=25 \mathrm{x}$ units $/$ day
And efficiency of $B=\frac{300 x \times \frac{100}{300}}{(14-8)}$
$=\frac{100 x}{6}$
$=\frac{{ }_{50}{ }^{6} x}{3}$ units/day
Required difference $=\frac{300 x}{\left(\frac{50 x}{3}\right)}-\frac{300 x}{25 x}$
$=18-12=6$ days
Total outcomes $=2^{3}=8$
Possible outcomes $=3[(\mathrm{HTH}),(\mathrm{HHT}),(\mathrm{THH})]$
Required probability $=\frac{3}{8}$
44. (4) Let width of rectangle $A$ be ' $4 x$ meters'

So, length of rectangle $A=4 x \times 1.25=5 x$ meters
ATQ,
$4 \mathrm{x} \times 5 \mathrm{x}=1280$
$20 \mathrm{x}^{2}=1280$
$x^{2}=64$
$\mathrm{x}=8$
Hence, side of equilateral triangle $=4 \mathrm{x}=32 \mathrm{~m}$
Required perimeter $=3 \times 32=96$ meters
45. (5) Let present age of $A$ be $x$ years.

So, C's present age $=(x+4)$ years
And, B's present age $=19+10=29$ years
ATQ,
$\frac{(x+5)+(29+5)}{2}=40$
$\Rightarrow \mathrm{x}+39=80$
$x=41$ years
So, required sum $=41+41+4=86$ years
46. (3) $.697+2^{2}=701$
$701+4^{2}=717$
$717+6^{2}=753$
$753+8^{2}=817$
$817+10^{2}=917$
so, 717 is missing no.
47. (4)

48. (1)

49. (1) series is as follows
$2^{3} \times 2,3^{3} \times 2,4^{3} \times 2,5^{3} \times 2,6^{3} \times 2,7^{3} \times 2$,
So, missing no. is $7^{3} \times 2=686$.
50. (5)

51. (3)
I. $x^{2}-15 x+56=0$
$x^{2}-8 x-7 x+56=0$
$x(x-8)-7(x-8)=0$
$(x-8)(x-7)=0$
$\mathrm{x}=7,8$
II. $y^{2}-12 y+35=0$
$\mathrm{y}^{2}-7 \mathrm{y}-5 \mathrm{y}+35=0$
$y(y-7)-5(y-7)=0$
$(y-7)(y-5)=0$
$\mathrm{y}=5,7$
So, $x \geq y$.
52. (2) $\quad$ I. $6 x^{2}-17 x+12=0$
$6 x^{2}-9 x-8 x+12=0$
$3 x(2 x-3)-4(2 x-3)=0$
$(2 x-3)(3 x-4)=0$
$\mathrm{x}=\frac{3}{2}, \frac{4}{3}$
II. $3 y^{2}-26 y+48=0$
$3 y^{2}-18 y-8 y+48=0$
$3 y(y-6)-8(y-6)=0$
$(y-6)(3 y-8)=0$
$y=6, \frac{8}{3}$
So, $x<y$.
y.
53. (5) $\quad$ I. $(x+4)^{2}+x+4=0$
$x^{2}+16+8 x+x+4=0$
$x^{2}+9 x+20=0$
$x^{2}+5 x+4 x+20=0$
$x(x+5)+4(x+5)=0$
$(x+5)(x+4)=0$
$\mathrm{x}=-4,-5$
II. $(y+5)^{2}=4$
$\mathrm{y}^{2}+25+10 \mathrm{y}=4$
$\mathrm{y}^{2}+10 \mathrm{y}+21=0$
$\mathrm{y}^{2}+7 \mathrm{y}+3 \mathrm{y}+21=0$
$y(y+7)+3(y+7)=0$
$(y+7)(y+3)=0$
$y=-3,-7$
So, no relation.
54. (5) I. $(x+21)^{2}=1681$
$x+21= \pm 41$
$\mathrm{x}+21=41$
$\mathrm{x}=20$
$x+21=-41$
$\mathrm{x}=-62$
II. $(y+25)^{2}=1849$
$y+25= \pm 43$
$y+25=43$
$y=18$
$y+25=-43$
$y=-68$
So, no relation
55. (5) I. $\mathrm{x}^{2}-12 \mathrm{x}+11 \mathrm{x}-132=0$
$x(x-12)+11(x-12)=0$
$(x+11)(x-12)=0$
$\mathrm{x}=-11,12$
II. $y^{2}-14 y-8 y+112=0$
$y(y-14)-8(y-14)=0$
$(y-8)(y-14)=0$
$y=8,14$
No relation can be established between x \& y .
Let the CP of AC be Rs. 100x
Then, CP of washing machine be Rs. 80x.
CP of TV = Rs. 75 x
ATQ,
$100 \mathrm{x}+80 \mathrm{x}+75 \mathrm{x}=51,000$
$\Rightarrow 255 \mathrm{x}=51,000$
$\Rightarrow \mathrm{x}=200$.

| Articles | TV | Washing Machine | AC |
| :--- | :--- | :---: | :--- |
| CP | 15,000 | 16,000 | 20,000 |
| SP | 17,700 | 21,600 | 24,500 |

56.(2) Required average $=\frac{17,700+24,500}{2}$
= Rs. 21,100
57.(4) Total profit earned on selling TV and AC
$=2700+4500=$ Rs. 7200
Profit earned on selling washing machine $=5600$
Required $\% \frac{7200-5600}{5600} \times 100 \%$
$=\frac{200}{7} \%$
$=28 \frac{4}{7} \%$
58.(1) Marked price of $\mathrm{AC}=\frac{24500}{80} \times 100=$ Rs. 30,625

Required $\%=\frac{30,625-20,000}{20,000} \times 100 \%$
$=\frac{425}{8} \%=53 \frac{1}{8} \%$
59.(3)

Total profit $=$ Rs. $(17,700-15,000)+$
$(21,600-16,000)+(24,500-20,000)$
= Rs. 12,800.
60.(5) Cost price of Laptop $=\frac{215}{100} \times 21,600$
= Rs. 46,440
Required difference $=51,000-46,400$
=Rs. 4600
61. (1) let radius of cylinder is ' $r$ ' cm

ATQ
$\Pi r^{2}=132$
$\mathrm{r}^{2}=\frac{132}{22} \times 7$
$r^{2}=42$
Height of Cylinder $=\frac{42}{2}=21 \mathrm{~cm}$
Volume of Cylinder $=\pi r^{2} \mathrm{~h}$
$=132 \times 21=2772 \mathrm{~cm}^{3}$
62. (5) Let efficiency of Shyam $=x$ unit/day

So, Ram's efficiency $=2 x$ unit/day
Total work $=16 \times(2 x+x)=48 \mathrm{x}$
Time taken by Shyam $=\frac{48 x}{x}=48$ days
63. (4) Let child is born after $x$ years
$32 \times 4+4 \mathrm{x}=28 \times 5$
$128+4 \mathrm{x}=140$
$\mathrm{x}=3$ year
And, $140+5 y=40 \times 4$
$=\frac{x+b+c+d}{4}=\frac{a+b+c+d}{4}+1 \ldots$ (i)
Let then it replaced ' $b$ '
$=\frac{x+a+c+d}{4}+1=\frac{a+b+c+d}{4}$.
Solving (i) and (ii)
$b-a=8$
65. (4) speed of train $=\frac{18 \times 1000}{15 \times 60}=20 \mathrm{~m} / \mathrm{s}$

Time taken by train to cover 100 m
$=\frac{100}{20}=5 \mathrm{sec}$.
As train stops for 1 min after every 20 m ,
so it will take 4 min extra to cover 100 m .
Required time $=4 \times 60+5=245 \mathrm{sec}$.
66. (5)

67. (4)

68. (3)


69-70.

69. (5)
70. (4)
72. (1)
73. (2)
74. (4)
75. (2)
76. (3)

71-75. From the given statements, $D$ faces the person who sits 2nd to the left of E. Here, we get two possibilities i.e. Case 1 and Case 2. B sits immediate right of the person who faces $E$.


From the given statements, $G$ doesn't face $A$ who is an immediate neighbor of D. Here, Case 2 is ruled out. There is one person sits between $G$ and $H$.
So, final arrangement will be: -

77. (4)
78. (2)
79. (3)
80. (1)

81-85.
From the given statements, U takes leave before V , so U can't take leave on 25th April. U doesn't take leave in the month of 31 days. Here, we get three possibilities i.e. Case 1, Case 2 and Case 3. There are three persons take leave between $U$ and $Y$.

| Months | Dates | Case <br> 1 | Case 2 | Case 3 |
| :--- | :--- | :--- | :--- | :--- |
| January | 13 |  |  |  |
|  | 25 |  |  |  |
| February | 13 | U |  | Y |
|  | 25 |  | U |  |
| March | 13 |  |  |  |
|  | 25 |  |  |  |
| April | 13 | Y |  | U |
|  | 25 |  | Y |  |

From the given statements, $R$ and $S$ takes leave on prime numbered date. Neither T nor $X$ takes leave on 25 th of the month. Here, Case 1 and Case 3 are ruled out. There are as many persons take leave before R as after W . $T$ takes leave before $S$ and after X . U takes leave before V .

| Months | Dates | Persons |
| :---: | :---: | :---: |
| January | 13 | X |
|  | 25 | W |
| February | 13 | T |
|  | 25 | U |
| March | 13 | S |
|  | 25 | V |
| April | 13 | R |
|  | 25 | Y |
| 82.(3) |  |  |
| 84.(2) |  |  |

86-90. From the given statements, $E$ is the mother of $B$ who is the husband of $D$. We have to complete first blood relation so according to the statements given, there is a sister of $B$, a father of $B$, a father in law of $A$, a husband of C and brother of C . After combining all, we have blood relation as below-


From the given statements, Father in law of $A$ dances in odd numbered floor. Here, F is the father in law of A . There are three persons dancing between father in law of A and the husband of C. Here, A is the husband of C. A dances above the sister of $B$ but not immediate above the floor. Here, C is the sister of B. Here, we get four possibilities i.e. Case 1, Case 2, Case 3 and Case 4.

| Floors | Case 1 | Case 2 | Case 3 | Case 4 |
| :---: | :---: | :---: | :---: | :---: |
| 7 | F | $\ldots . /$ | A |  |
| 6 |  | $\ldots . /$ |  | A |
| 5 |  | A | $\mathrm{C} /$ | $\ldots . . /$ |
| 4 |  |  | $\mathrm{C} /$ | $\ldots . . / \mathrm{C}$ |
| 3 | A | $\mathrm{C} /$ | F | $\ldots . . / \mathrm{C}$ |
| 2 | $\ldots \ldots$. | $\mathrm{C} /$ | $\ldots . / \mathrm{C}$ | $\ldots . . / \mathrm{C}$ |
| 1 | C | F | $\ldots . . / \mathrm{C}$ | F |

From the given statements, there are as many persons dance above the father of $B$ as below the mother in law of $D$. Here, $F$ is the father of $B$ and $E$ is the mother in law of $D$. Here, Case 1 is ruled out. There are two persons dancing between $D$ and the brother of $C$. Here, $B$ is the brother of C. Here, Case 2 and Case 4 are eliminated, and we get one more possibility i.e. Case 3a.

| Floors | Case 3 | Case <br> 3 a |
| :---: | :---: | :---: |
| 7 | A | A |
| 6 | E | E |
| 5 | $\mathrm{~B} / \mathrm{D}$ | $\mathrm{B} / \mathrm{D}$ |
| 4 | C | C |
| 3 | F | F |
| 2 | $\mathrm{D} / \mathrm{B}$ | $\ldots$ |
| 1 | $\ldots \ldots$ | $\mathrm{D} / \mathrm{B}$ |

## 3a.



Ground floor is not vacant. So, Case 3 is ruled out. B doesn't dance in ground floor.
So, final arrangement will be: -

| Floors | Person |
| :---: | :---: |
| 7 | A |
| 6 | E |
| 5 | B |
| 4 | C |
| 3 | F |
| 2 | $\ldots$. |
| 1 | D |

91-95. From the given statements, $R$ sits 2 nd to the right of $S$. From here we get two possibilities i.e. Case 1 and Case 2. $Q$ sits immediate left of $P$, who sits $2 n d$ to the left of $R$. $Q$ does not sit near to $R$.



From the given statements, $P$ sits 3rd to the left of $D$, who faces opposite direction with respect to R. A does not sit near to $R$. The immediate neighbors of $S$ are facing opposite direction to each other.



From the given statements, B sits 2nd to the right of C, who faces inside. Here Case 1 is ruled out now. Both $Q$ and $A$ are facing opposite direction with respect to $B$. So, the final arrangement will be: -

91. (2)
92. (3)
93. (1)
$\mathbf{9 6 - 1 0 0}$. From the given statements, E who faces North, sits 3rd from one of the extreme ends. Here, we get two possibilities i.e. Case 1 and Case 2. Two persons sit between $C$ and $D$, who is an immediate neighbor of $E$. Here, we get two more possibilities i.e. Case 1a and Case 2a. B sits immediate right of $D$.



From the given statements, $A$ sits 3 rd to the left of the person who sits 2 nd to the right of $B$. Here, Case 1 is ruled out. C and F are immediate neighbors of A . Here, Case 1a and Case 2 are ruled out. $F$ sits 4th from one of the extreme ends.
So, the final arrangement will be: -

96. (5)
97. (2)
98. (3)
99. (1)
100. (2)

