Quantitative Aptitude Practice Papers for LIC Assistant Prelims 2019 Solutions

S1. Ans.(c)

Sol. $\frac{65}{100} \times \frac{1700}{13} + 289 = ? \times 34$

$85 + 289 = ? \times 34$

$\frac{374}{34} = ?$

$? = 11$

S2. Ans.(a)

Sol. $121 \times 6 \times \frac{75}{100} \times \frac{840}{14} = ? \times \frac{11}{4}$

$\frac{121 \times 6 \times 3 \times 60}{11} = ?$

$? = 11880$

S3. Ans.(b)

Sol. $5030 + 57 - 2087 = 30 \times ?$

$\frac{3000}{30} = ?$

$? = 100$

S4. Ans.(e)

Sol. $24 \times 15 + 144 + 17 + 155 = ?^2$

$?^2 = 676$

$? = 26$

S5. Ans.(a)

Sol. $\frac{34}{100} \times \frac{900}{13} \times \frac{117}{17} = ?$

$? = 162$

S6. Ans.(d)

Sol. Total no. of students in school A = $\frac{600}{75} \times 100 = 800$

No. of students failed in school B = $\frac{400}{80} \times 20 = 100$

Required percentage = $\frac{100}{800} \times 100 = 12.5\%$

S7. Ans.(c)

Sol. Required ratio = $\frac{250}{40} \times 100 : \frac{500}{80} \times 100$

= 625: 625

= 1: 1

S8. Ans.(b)

Sol. Required difference = $\frac{350}{70} \times 30 - \frac{500}{80} \times 20 = 25$

S9. Ans.(a)

Sol. Required average = $\frac{1}{3} \times \left(\frac{600}{75} \times 100 + \frac{400}{80} \times 100 + \frac{350}{70} \times 100\right)$

$= \frac{1}{3} \times (800 + 500 + 500)$

$= 600$

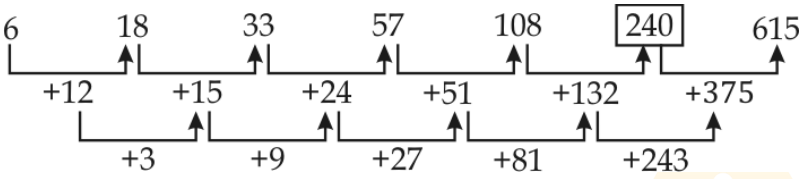
S10. Ans.(e)

Sol. Total no. of students in School D = $\frac{350}{70} \times 100 = 500$

Required percentage = $\frac{600-500}{500} \times 100 = 20\%$ more

S11. Ans.(d)

Sol.



S12. Ans.(a)

Sol. The pattern is

$\boxed{0} + 8 \times 1 = 8$

$8 + 8 \times 3 = 32$

$32 + 8 \times 5 = 72$

$72 + 8 \times 7 = 128$

$128 + 8 \times 9 = 200$

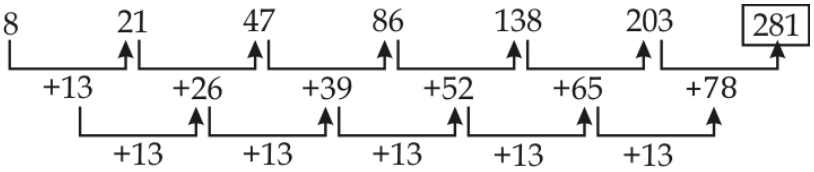
S13. Ans.(c)

Sol. The pattern is ×1, ×2, ×3, ×4, ×5……

So, ? = 720 ×6 = 4320

S14. Ans.(b)

Sol.



S15. Ans.(e)

Sol. The pattern is ×2, ÷3, ×4, ÷5, ×6

So, the no. is 80 ÷ 5 = $\boxed{16}$

S16. Ans.(e)
Sol. 25% of 1460 – ?% of 1120 ≈ 29
$\frac{25}{100} \times 1460 - \frac{?}{100} \times 1120 \approx 29$
$\frac{112}{10} \times ? \approx 365 - 29$
$? \approx \frac{3360}{112}$
$? \approx 30$

S17. Ans.(a)
Sol. $24 + 14 - 2 \approx ?^2$
$?^2 \approx 36$
$? \approx 6$

S18. Ans.(d)
Sol.
11% of 11% of 11000 ≈?
$\frac{11}{100} \times \frac{11}{100} \times 11000 \approx ?$
$? \approx \frac{1331}{10}$
$? \approx 133$

S19. Ans.(a)
Sol. $21 \times \frac{1}{12} \times 16 \times \frac{1}{7} \approx ?$
$? \approx 4$

S20. Ans.(c)
Sol. $120 \div 15 \times 4 \approx ?$
$? \approx 8 \times 4$
$? \approx 32$

S21. Ans.(c)
Sol. let investment of A and B for initial 8 months is Rs. a and b respectively.
ATQ
$\frac{80}{100} \times a = \frac{4}{7} \times b$
$\frac{a}{b} = \frac{5}{7}$
Let a and b are 5x and 7x respectively
ATQ
$12x = 24000$
So, $a = Rs\ 10000$
and $b = Rs\ 14000$
profit share of A and B = $(10000 \times 8 + 14000 \times 4) : (14000 \times 12) = 17 : 21$
Profit share of B = $\frac{7600}{17+21} \times 21 = Rs.\ 4200$

S22. Ans.(b)

Sol. let total quantity of two alloys are = 6x and 5x kg

ATQ

$6x \times \frac{3}{6} + 5x \times \frac{2}{5} = 60$

$5x = 60$

$x = 12$

Required quantity of aluminum = $6x \times \frac{2}{6} = 2x$

$= 2 \times 12$

$= 24$ kg

S23. Ans.(a)

Sol. Required no. of ways = ${}^{12}c_8 \times {}^{5}c_2 \times {}^{4}c_1 + {}^{12}c_9 \times {}^{5}c_2$

$= \frac{12!}{8! \times 4!} \times \frac{5!}{2! \times 3!} \times \frac{4!}{3! \times 1!} + \frac{12!}{9! \times 3!} \times \frac{5!}{2! \times 3!}$

$= 19800 + 2200$

$= 22000$

S24. Ans.(b)

Sol. let height of both the wall is = 40m (l.c.m. of 8 and 10)

So, efficiency of A and B = 5m/hr and 4m/hr respectively

Let after t time ratio becomes 15:16

ATQ

$\frac{40-5t}{40-4t} = \frac{15}{16}$

$640 - 80t = 600 - 60t$

$20t = 40$

$t = 2$hr

S25. Ans.(d)

Sol. let a man and a women can earn Rs. m and Rs. b per hour

ATQ

$\frac{(5m+3b) \times 7}{(3m+5b) \times 12} = \frac{4550}{6600}$

$\frac{5m+3b}{3m+5b} = \frac{13}{11}$

$55m + 33b = 39m + 65b$

$16m = 32b$

$\frac{m}{b} = \frac{2}{1}$

Let m and b are 2x and x respectively

Let 2 men and 2 women work d hr to earn Rs.2100

ATQ

$\frac{(2 \times m + 2 \times b) \times d}{(5m+3b) \times 7} = \frac{2100}{4550}$

$\frac{(2 \times 2x + 2 \times x) \times d}{(5 \times 2x + 3 \times x) \times 7} = \frac{6}{13}$

$\frac{6x \times d}{13x \times 7} = \frac{6}{13}$

$d = 7$ hr

S26. Ans.(b)

Sol. Let efficiency of a man is M.

Let time taken by 4 women is 'D' days.

ATQ,

$6M \times 120 \times 6 = 4 \times \frac{75}{100} \times M \times D \times 8$

$D = \frac{6 \times 120 \times 6 \times 100}{4 \times 75 \times 8}$

D = 180 days

S27. Ans.(a)

Sol. Let profit earned and loss incurred is Rs. 2x and 3x respectively.

Let cost price = C.P.

ATQ,

$\frac{C.P + 2x}{C.P - 3x} = \frac{12}{7}$

7 C.P + 14x = 12 C.P – 36x

50 x = 5 C.P

C.P = 10x

Required profit % = $\frac{2x}{10x} \times 100 = 20\%$

S28. Ans.(c)

Sol. Total possible outcomes = $6^3 = 216$

Feasible outcomes = (6, 6, 4), (4, 6, 6), (6, 4, 6), (5, 5, 6), (6, 5, 5) and (5, 6, 5)

Required probability = $\frac{6}{216} = \frac{1}{36}$

S29. Ans.(b)

Sol. Let radius of circle is 'r' cm.

ATQ,

$\pi r^2 = 124.74$

$\frac{22}{7} \times r^2 = 124.74$

$r^2 = \frac{124.74 \times 7}{22}$

$r^2 = 5.67 \times 7$

$r^2 = 7 \times 0.81 \times 7$

$r = 7 \times 0.9$

r = 6.3 cm

S30. Ans.(d)

Sol. Required selling price of mixture

$= \frac{(50 \times 23 + 46 \times 17)}{23 + 17} \times \frac{40}{100}$

$= \frac{1932}{40} \times \frac{40}{100}$

= Rs. 19.32

S31. Ans.(d)

Sol. Required average $= \frac{180 + 240 + 200 + 250 + 320}{5}$

$= \frac{1190}{5} = 238$ Quintal

S32. Ans.(a)

Sol. Required percentage $= \frac{320-250}{250} \times 100$

$= \frac{70}{250} \times 100 = 28\%$

S33. Ans.(b)

Sol. Required ratio $= \frac{200+250}{240+320} = \frac{450}{560}$

$= 45: 56$

S34. Ans.(d)

Sol. Required difference $= 320 - 280 \times \frac{5}{7} = 320 - 200$

$= 120$ quintals

S35. Ans.(a)

Sol. In 2014 $= \frac{180}{240} \times 100 = 75\%$

In 2015 $= \frac{240}{320} \times 100 = 75\%$

In 2016 $= \frac{200}{250} \times 100 = 80\%$

In 2017 $= \frac{250}{350} \times 100 = 71.43\%$

In 2018 $= \frac{320}{420} \times 100 = 76.19\%$

So, in year 2016 percentage consumption of wheat is maximum.