## LIC AAO Prelims

## Memory Based Paper of LIC AAO Prelims 2019

## Quantitative

## Memory Based Quantitative Paper for LIC AAO Prelims 2019

Directions (1-5): The given pie chart shows the distribution of total number of people in four different towns and the table shows the number of males in the given towns. Read the graph carefully and answer the following questions.


1. Find the difference between total number of males in town $B$ and females in town $D$ and total number of males in town $C$ and females in town A.
(a) 1800
(b) 1850
(c) 1650
(d) 2000
(e) 2500
2. Find the sum of the average of total number of males and the average of total number of females.
(a) 3200
(b) 3000
(c) 2000
(d) 3600
(e) 2800
3. Total number offemales in town $B$ and town $C$ is what percent of total number of males in town $C$ and town $D$ together?
(a) $125 \%$
(b) $112.5 \%$
(c) $110 \%$
(d) $150 \%$
(e) $121 \%$
4. Find the ratio of males of town $A, B$ and $C$ together to females of town $B$ and $D$ together.
(a) $97: 121$
(b) $128: 141$
(c) $146: 97$
(d) 107:46
(e) $147: 46$
5. Find the number of females in all the towns together.
(a) 5650
(b) 5440
(c) 4555
(d) 6550
(e) 5550
6. Find out the wrong number in the series:
$38,48,36,51,34,53$
(a) 38
(b) 48
(c) 36
(d) 51
(e) 34
7. Find out the wrong number in the series:

49, 54, 59, 64, 79, 74
(a) 54
(b) 59
(c) 64
(d) 79
(e) 74
8. Find out the wrong number in the series:
$2.5,3,5,15,60,300,1800$
(a) 15
(b) 3
(c) 60
(d) 3000
(e) 18000
9. Find out the wrong number in the series:

11, 21, 61, 241, 1207, 7201
(a) 21
(b) 61
(c) 241
(d) 1207
(e) 7201
10. Find out the wrong number in the series: 600, 466, 356, 292, 256, 240, 236
(a) 466
(b) 356
(c) 292
(d) 256
(e) 240
11. The ratio of investments of $A$ and $B$ is 2 : 3 . The ratio of time of investment of $A$ and $B$ is $5: 4$. The profit of $A$ is what percent less than of the profit of $B$ ?
(a) $24 \%$
(b) $16.67 \%$
(c) $25 \%$
(d) $30 \%$
(e) $10 \%$
12. The combined cost price of $A$ and $B$ is Rs. 4400. $A$ is sold at a profit of $15 \%$ and $B$ is sold at a profit of $18 \%$. The profit of $A$ and $B$ is equal. Find the cost price of $B$.
(a) Rs. 2500
(b) Rs. 2100
(c) Rs. 2000
(d) Rs. 2600
(e) Rs. 1600
13. The quantity of milk in a mixture is 58 lt and the quantity of water in the mixture is $x$ lt. $3 x$ It of milk and $2 x$ lt of water is added in the mixture. The final ratio of milk and water is $4: 3$. Find the quantity of milk in the final mixture.
(a) 116 lt
(b) 216 lt
(c) 221 It
(d) 232 lt
(e) $250 / \mathrm{t}$
14. A certain sum is invested at simple interest at a rate of $8 \%$ for 3 years. He invested the interest at compound interest at a rate 20\% for 2 years. The amount becomes Rs. 864. Find the initial sum.
(a) Rs. 7600
(b) Rs. 7200
(c) Rs. 8000
(d) Rs. 7650
(e) None of these
15. 2 dices are thrown randomly. Find the probability that the sum would be 6 .
(a) $11 / 36$
(b) $5 / 36$
(c) $25 / 36$
(d) $1 / 6$
(e) $1 / 18$
16. The cost of rice $A$ is Rs. 24 per $\mathbf{k g}$ and the cost of rice $B$ is Rs. $x .30 \mathrm{~kg}$ of rice $A$ and 20 kg of rice B was mixed and sold at a profit of $50 \%$ at a rate of Rs. 43.2 per kg . Find the value of $\mathbf{x}$.
(a) 24
(b) 25
(c) 36
(d) 40
(e) 48
17. The ratio of age of son and father is $\mathbf{1 : 5}$. The ratio of father and mother is $8: 7$. The difference of father and mother is 5 years. Find the age of son.
(a) 6 years
(b) 5 years
(c) 2 years
(d) 8 years
(e) 10 years
18. The surface area of a sphere is $400 \pi$. The diameter of the sphere is equal to the side of a square. Find the perimeter of the square.
(a) 80 cm
(b) 64 cm
(c) 72 cm
(d) 84 cm
(e) 90 cm

Directions (19-23): Read the bar chart given below and answer the following questions.
Bar chart shows the units of laptops sold in two different months (i.e. April and May) by 5 different companies (A, B, C, D \& E).

19. Laptops sold by company-B \& C together in May are what percent more than laptops sold by company-D in April?
(a) $90 \%$
(b) $50 \%$
(c) $80 \%$
(d) $20 \%$
(e) $40 \%$
20. Laptops sold by company-A \& B together in April are how much more or less than average number of laptops sold by company-C \& E in May?
(a) 400
(b) 1000
(c) 800
(d) 200
(e) 600
21. Find ratio of laptops sold by company-B \& E together in April to laptops sold by company-C \& D together in May.
(a) $13: 18$
(b) $25: 44$
(c) $7: 15$
(d) $11: 23$
(e) None of the above.
22. Find average number of laptops sold by company-A, D \& E in May is what percent of laptops sold by company-C in April?
(a) $112 \%$
(b) $128 \%$
(c) $84 \%$
(d) $156 \%$
(e) $144 \%$
23. Find total laptops sold by all 5 companies in May are what percent more or less than total laptops sold by all 5 companies in April?
(a) $18 \%$
(b) $45 \%$
(c) $50 \%$
(d) $36 \%$
(e) $29 \%$
24. The total cost price of the two products is Rs 4400. One product sold at $15 \%$ profit while second product sold at $\mathbf{1 8 \%}$ loss. If neither profit nor loss occur than find the cost price of the first products.
(a) Rs 2400
(b) Rs 2200
(c) Rs 3000
(d) Rs 3400
(e) Rs 2800
25. A man deposit $10 \%$ of his salary in PF. He saves $30 \%$ of the remaining. The ratio of his expense on medicine and groceries is $3: 4$ of the remaining salary after saving. If his expense on the medicine was Rs 8100 . Find the monthly salary.
(a) Rs 30,000
(b) Rs 25,000
(c) Rs 20,000
(d) Rs 35,000
(e) None of these
26. The surface area of the sphere is $\mathbf{6 1 6}$ cm 2 . Find the perimeter of the square if the diameter of the sphere is two times of the side of the square.
(a) 35 cm
(b) 28 cm
(c) 21 cm
(d) 42 cm
(e) 49 cm
27. A boat which sails at $10 \mathrm{~km} / \mathrm{h}$ in still water starts chasing in upstream directions, from 10 km behind, another one which can sail at $4 \mathrm{~km} / \mathrm{h}$ in the upstream direction. After how many hours it will catch up if the stream is flowing at $\mathbf{2 k m} / \mathrm{h}$ :
(a) 4 h
(b) 2.5 h
(c) 2 h
(d) 3.5 h
(e) None of these
28. The area of the rectangle is four times of the area of the square. If the length of the rectangle is 60 cm and breadth of the rectangle is equal to the side of the square, then find the side of the square.
(a) 20 cm
(b) 25 cm
(c) 18 cm
(d) 15 cm
(e) 22 cm
29. Ratio of efficiency of $A$ and $B$ in completing a work is $3: 4$. Both started to work together but A left after 2 days. Another person $C$ joins $B$ and they together complete the remaining work in 6 days. If $A$ and $B$ together can complete the work in 8 days then $C$ alone can complete the work.
(a) $\frac{27}{4}$ days
(b) $\frac{56}{3}$ days
(c) $\frac{41}{3}$ days
(d) $\frac{28}{3}$ days
(e) $\frac{49}{3}$ days
30. $A, B$ and $C$ invested in a business in the ratio $6: 8: 9$. The time invested by $A, B$ and $C$ is in the ratio of $4: 3: 4$. If profit of $B$ at the end of year is 16750 then what is the share of profit of $\mathbf{C}$.
(a) 20225
(b) 22125
(c) 25225
(d) 25125
(e) 23125

Directions (31-35): simplify the value of (?) in the following questions.
31. $\frac{3.02^{2}}{?}+9.02 \times 49.01=12.02 \times 6.03 \div ?$
(a) $\frac{1}{9}$
(b) $\frac{1}{7}$
(c) 6
(d)
$\frac{1}{5}$
32. $\underset{\mathbf{5 6 0 0}}{\mathbf{1 1 0 . 1}} \times \frac{419.97}{69.87}+\mathbf{4 9 9 . 9}-\mathbf{3 9 . 9}=$ ? \% of
(a) 15
(b) 25
(c) 20
(d) 10
(e) 30
33. $59.8 \%$ of $1539.5+37.5 \%$ of $95.78+0.99=$ (?) ${ }^{2}$
(a) 28
(b) 31
(c) 26
(d) 25
(e) 35
34. $(74.98)^{2}-(24.99)^{2}-(30.02)^{2}=(?)^{3}$
(a) 14
(b) 15
(c) 18
(d) 17
(e) 16
35. $(2)^{?+2}=\frac{(511.79)}{31.89} \times \frac{64.03}{(127.95)} \times 8.01$
(a) 6
(b) 5
(c) 4
(d) 3
(e) 7

