## IBPS RRB Clerk Mains 2019

## REASONING ABILITY

Direction (1-5): Study the following information carefully and answer the questions given below:

Eight student P, Q, R, S, T, U, V and $W$ sits in a circular table (all facing towards the center). Each of them like different colors i.e. Magenta, Blue, Pink, Yellow, Grey, Black, Brown and Violet. (Not necessary in the same order).

There are two persons gap between T and the one who likes Black. U sits immediate right of the one who likes Black color. There are two persons gap between $U$ and the one who likes Blue color. Q faces the one who likes Blue color. W sits second to the right of the one who likes Blue. $R$ likes Pink and faces the one who likes Brown. W does not like Black Color. The one who likes Violet sits next to T. Persons who like Magenta and Grey faces each other. U doesn't like Magenta. The one who likes Grey doesn't sit next to one who likes Violet. P likes Blue and sits third to the right of the one who likes Grey color. V sits third to the right of Brown and doesn't like Blue colour. P sits second to right of the one who likes Yellow Color.

1. Who among the following person sits immediate left of R ?
(a) P
(b) $Q$
(c) S
(d) T
(e) None of the above
2. Who among the following person sits at the immediate right of the one who likes Blue color?
(a) T
(b) The one who likes Magenta
(c) The one who likes Pink
(d) both (a) and (b)
(e) both (b) and (c)
3. Which among the following is true regarding Q ?
(a) Q likes black
(b) $Q$ sits next to $T$
(c) $Q$ sits immediate left of $S$
(d) Q sits immediate right of T
(e) None is true
4. Four of the following five are alike in certain way based from a group, find the one which does not belong to that group?
(a) PT
(b) TW
(c) UV
(d) PR
(e) VR
5. Who among the following person faces the one that likes Yellow colour?
(a) The person who like Blue
(b) The person who like Pink
(c) The person who like Grey
(d) The person who like Brown
(e) The person who like Violet

Direction (6-10): Study the following information carefully and answer the questions given below:

Nine teachers i.e. A, B, C, D, L, M, N, O and P have taken lecture on different dates- $7^{\text {th }}, 10^{\text {th }}$ and $15^{\text {th }}$ of the monthMarch, June and December but not necessarily in the same order.

N has lecture on an even date in the month of having 30 days. Two persons have lecture in between N and O . B has lecture just before P but not in the same month. P does not take lecture before N. More than two persons take lecture between $O$ and $P$. Both $D$ and $M$ have lectures in the same month. There is one person takes the lecture in between A and C. Not more than four persons have taken lectures in between C and D .
6. Who among the following persons take lectures in the month of December?
(a) L, D
(b) P, M, C
(c) P, D, M
(d) $0, B$
(e) None of these
7. Who among the following person has taken a lecture just before 0 ?
(a) L
(b) A
(c) D
(d) M
(e) None of these
8. How many persons have lectures in between N and C ?
(a) None
(b) One
(c) Two
(d) Three
(e) None of these
9. Who among the following person definitely does not have lecture in March?
(a) 0
(b) P
(c) A
(d) L
(e) Both
(b) and (d)
10. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) L
(b) A
(c) C
(d) M
(e) D

Direction (11-15): Study the following information carefully and answer the questions given below:

In a certain code language:
"food safety is required" is coded as "dv sx wr gh"
"safety is very important" is coded as "wr tf gh qs"
"food is very good" is coded as "tf zx gh dv"
11. What is the code of "important" as per the given code language?
(a) wr
(b) tf
(c) gh
(d) qs
(e) None of these
12. Which of the following word has code " $z x$ " as per the given code language?
(a) food
(b) is
(c) good
(d) very
(e) None of these
13. What is the code of "food is good" as per the given code language?
(a) wr zx gh
(b) tf dv zx
(c) gh zx dv
(d) qs dv gh
(e) None of these
14. Which of the following words have code "tf qs dv" as per the gsiven code language?
(a) food is good
(b) safety is required
(c) safety is good
(d) very important food
(e) None of these
15. What may be the code of "road is important" as per the given code language?
(a) rv zx gh
(b) tf rv zx
(c) gh rv qs
(d) qs dv gh
(e) gh qs tf

Direction (16-20): Study the following information carefully and answer the questions given below:
Nine persons viz. A, B, C, D, E, F, G, H and P are sitting in a row facing to the north direction but not necessarily in the same order. D sits 3 rd to the left of $F$ and one of them are sitting at the extreme end. There is one person sits between $D$ and $E$. There are four persons sit between $C$ and B, who sit near to E. Both G and A are immediate neighbors to each other. Both P and H are immediate neighbors to each other. There are more than two persons sit between $P$ and $G$, who does not sit at any of the extreme end.
16. How many persons sit between $B$ and $G$ ?
(a) None
(b) One
(c) Two
(d) Four
(e) None of these
17. What is the position of F with respect to C ?
(a) $3^{\text {rd }}$ to the right
(b) $2^{\text {nd }}$ to the right
(c) $2^{\text {nd }}$ to the left
(d) $4^{\text {th }}$ to the left
(e) None of these
18. Who among the following one sits at the extreme ends of the row?
(a) B
(b) F
(c) $P$
(d) H
(e) None of these
19. How many persons sit between $E$ and $A$ ?
(a) Two
(b) One
(c) None
(d) Four
(e) None of these
20. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) D and E
(b) A and F
(c) P and C
(d) F and E
(e) B and F

Direction (21-23): Study the following information carefully and answer the given questions.

In certain coding language, the directions are coded as per below conditions.
A@B means - A is North of B
$A \% B$ means - A is South of $B$
$A \# B$ means $-A$ is East of $B$
A $\$ \mathrm{~B}$ means - A is West of B
Example: A @ 14 B means A is north of B and the distance between $A$ and $B$ is 14 m .
Condition: D\#100C, E\%120D, H\#130E, A\$120B, C@80B, G@150H, K@100F, K\$70G
21. What is the direction of Point $G$ with respect to Point E?
(a) North-east
(b) South-east
(c) North-west
(d) South-west
(e) North
22. What is the total distance from Point C to Point H ?
(a) 250 m
(b) 350 m
(c) 330 m
(d) 300 m
(e) 220 m
23. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) A-C
(b) E-H
(c) B-D
(d) F-G
(e) D-K

Direction (24-28): Study the following information carefully and answer the questions given below:
There are nine boxes i.e. P, Q, R, S, T, U, V, W and X placed one above the another but not necessarily in the same order. Box P was placed just above the Box U. There are two boxes gap between Q and U . There are three boxes gap between T and S . There are three boxes gap between T and X . There is one box gap between R and Q . There are more than three boxes gap between $P$ and R. The number of boxes above of W is one more than the number of boxes placed below V. There are more than three boxes gap between S and V . Box W was placed above V .
24. Which of the following box is placed just below $S$ ?
(a) W
(b) P
(c) Q
(d) V
(e) R
25. How many boxes are placed between $Q$ and $X$ ?
(a) One
(b) Two
(c) None
(d) Three
(e) None of these
26. Which of the following box is placed in bottom most position?
(a) T
(b) U
(c) W
(d) X
(e) V
27. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) S and U
(b) W and Q
(c) V and X
(d) R and X
(e) U and T
28. If the positions of $S$ and $W$ are interchanged with each other, then find how many boxes are placed between $Q$ and $S$ ?
(a) None
(b) One
(c) Two
(d) Four
(e) More than five

Direction (29-31): Study the following information carefully and answer the questions given below:

A, B, C, D, E, F and G are students in same class and each of them having different heights. They are arranged according to their heights in decreasing order from left to right.

Only two students are shorter than C. F is taller than G and shorter than D. D is not the tallest. A is taller than E and shorter than B. G is taller than C. D's height is three times than A's height. E's height is 40 cm which is $80 \%$ of A's height.
29. Who among the following student is shortest among all?
(a) A
(b) B
(c) E
(d) Either (a) or (c)
(e) None of these
30. What may be the possible height of $F$ ?
(a) 90 cm
(b) 80 cm
(c) 70 cm
(d) 60 cm
(e) Can't be determined
31. How many students are taller than $B$ ?
(a) One
(b) None
(c) Two
(d) Three
(e) Four
32. How many such numerals are there in the number '457891256' which will remain at the same position when arranged in descending order from left to right?
(a) None
(b) One
(c) Two
(d) Three
(e) More than three

Direction (33-37): Study the following information carefully and answer the questions given below:

Seven people $P, Q, R, S, T, U$ and $V$ live on separate floors of a 7-floor building but not necessarily in the same order. Ground floor is as $1^{\text {st }}$ floor, just above floor is as $2^{\text {nd }}$ floor and so on until the topmost floor as 7th floor.

- There are more than three floors gap between P and S.
- Q lives just above the floor in which $V$ lives.
- There is one floor gap between $V$ and $R$.
- U lives below the P's floor but not just below.
- There is one floor gap between T and Q.
- V is neither lives just below nor just above the T's floor.
- The number of floors gap between $Q$ and $R$ is same as between T and V .
- There is more than one floor gap between $U$ and $S$.

33. Who among the following person lives just above the T's floor?
(a) P
(b) U
(c) R
(d) S
(e) None of these
34. Who among the following person lives on the ground floor?
(a) P
(b) S
(c) T
(d) R
(e) U
35. Four of the following five are alike in a certain way and hence they form a group. Which one of the following does not belong to that group?
(a) R
(b) Q
(c) P
(d) V
(e) U
36. How many floors gap is between $P$ and $Q$ ?
(a) None
(b) One
(c) Two
(d) Three
(e) More than Three
37. If $P$ is interchanged his floor with $U$, then who among the following person lives just below the floor in which T lives?
(a) S
(b) P
(c) R
(d) U
(e) None of these

Direction (38-40): In the following questions, the symbols \#, @, *, \% and © are used with the following meanings as illustrated below. Study the following information and answer the given questions:
$P \# Q-P$ is the son of $Q$. $P @ Q-Q$ is the child of $P$.
$P \subset Q-P$ is the parent of $Q$.
$P^{*} Q-P$ is the husband of $Q$.
$\mathrm{P} \% \mathrm{Q}-\mathrm{P}$ is the wife of Q .
38. If $Y @ B * Q \subset T \% E, F @ B$ then how $Y$ is related $T$ ?
(a) Grandfather
(b) Grandson
(c) Daughter
(d) Grandmother
(e) Can't be determined
39. If $H^{*} M \subset O^{*} N @ Z$, the age of $Z$ is 9 years and the age of H is 45 years then what is the probable age of N ?
(a) 49 years
(b) 21 years
(c) 6 years
(d) 52 years
(e) 68 years
40. If A @ C * D © E \% G, then how E is related to A?
(a) Father
(b) Granddaughter
(c) Grandmother
(d) Daughter
(e) Can't be determined

## QUANTITATIVE APTITUDE

41. Glass ' A ' contains 400 ml sprite \& glass ' B ' contains 220 ml coke. $4 \mathrm{X} \mathrm{ml} \mathrm{sprite} \mathrm{taken} \mathrm{out} \mathrm{from} \mathrm{'} A$ ' and mixed in ' $B$ ' and then 3 X ml mixture from ' $B$ ' taken out and poured into a vacant glass ' $C$ '. If ratio of coke to sprite in glass $C$ is $11: 4$, then find remaining quantity of sprite in glass ' B '?
(a) 240 ml
(b) 60 ml
(c) 64 ml
(d) 80 ml
(e) 48 ml
42. Diameter of a cylinder is $\frac{2}{3}$ rd of sum of its radius \& height, while ratio of curved surface area to volume of cylinder is $1: 7$. If radius and height of a cone is same as that of cylinder, then find slant height of cone?
(a) $21 \sqrt{5} \mathrm{~cm}$
(b) $10 \sqrt{5} \mathrm{~cm}$
(c) $7 \sqrt{5} \mathrm{~cm}$
(d) $14 \sqrt{5} \mathrm{~cm}$
(e) $16 \sqrt{5} \mathrm{~cm}$
43. $A, B \& C$ invested their respective savings in a scheme, which offered CI at $20 \%$ p.a. for two years and received total interest of Rs. 1694. If A \& C invested double of their respective saving in another scheme, which offered SI at $10 \%$ p.a. for two years and received total interest of Rs. 1100, then find difference between saving of A \& C together \& saving of B?
(a) 1250 Rs .
(b) 1650 Rs.
(c) 1150 Rs .
(d) 1050 Rs.
(e) 750 Rs .
44. Cost price of a jeans is Rs. 200 more than cost price of a shirt. If shirt is sold at $20 \%$ loss and jeans is sold at $25 \%$ profit, then shopkeeper gets a total profit of $5 \frac{5}{7} \%$ on selling a shirt and a jeans. Find the overall profit or loss (in \%) of shopkeeper, if shirt is sold at $25 \%$ profit and jeans is sold at $20 \%$ loss?
(a) $\frac{5}{7} \%$
(b) $\frac{4}{7} \%$
(c) $\frac{3}{7} \%$
(d) $\underline{2} \%$
(e) $6 \%$
45. A bag contains 12 balls (Red \& blue). Two balls are taken out randomly from the bag and probability of one ball being red and one ball being blue is $\frac{35}{66}$. If ' $n$ ' blue balls added in bag and then two balls are taken out randomly from bag, then minimum probability of remaining blue balls in bag is $\frac{9}{14}$ find ' $n$ '? (blue balls are more than red balls in the bag initially).
(a) 1
(b) 2
(c) 4
(d) 6
(e) 8

Direction (46-50): Read the given information carefully and answer the following questions carefully.

There are 3 flight operators Air India, Indigo and Go Air offering services to two destinations from Delhi to Goa and Ooty. A total of 800 passengers travelled on these routes on a particular day of which $60 \%$ travelled to Ooty. Indigo because of its lowest fare always travel to its full capacity. All planes have 180 seating capacity each. Air India and Go Air issued same number of boarding passes. Passengers travelled to Ooty from Air India and Go Air are in ratio of 8:7.
46. The unoccupied capacity of Air India is what percent of total passengers to Ooty?
(a) $29 \frac{1}{6} \%$
(b) $30 \frac{1}{6} \%$
(c) $70 \frac{5}{6} \%$
(d) $45 \frac{6}{6} \%$
(e) $63 \frac{6}{11} \%$
47. What is the average number of passengers travelled to Ooty from Air India and Indigo?
(a) 240
(b) 140
(c) 170
(d) 160
(e) 180
48. Which flight has maximum unoccupied seats?
(a) Indigo
(b) Air India
(c) Go Air
(d) Air India and Go Air both
(e) All have same no. of unoccupied seats
49. What is the ratio of passengers travelled to Ooty from Air India and Go Air together to the passengers travelled to Goa using Indigo and Go Air together?
(a) $3: 2$
(b) $15: 13$
(c) $17: 13$
(d) $15: 7$
(e) $1: 1$
50. Passengers travelling to Goa using Indigo are what percent more or less than passengers travelling to Ooty using Go Air? (approx.)
(a) 22
(b) 64
(c) 39
(d) 40
(e) 29

Direction (51-55): Bar graph given below shows percentage of labor (adult male labor \& adult female labor) out of total labor working in a firm ' X ' in five different years. Read the data carefully answer the questions.
Note - Total labor $=($ adult male labor + adult female labor + child labor $)$

51. If ratio of girls' child labor to boy's child labor working in the year 2013 is $3: 4$ and their difference is 48 , then find the difference between adult male labor and adult female labor working in that year?
(a) 84
(b) 96
(d) 88
(e) 72
52. Total labor working in 2015 are $20 \%$ more than that of total labor working in 2011, then find total adult female labor working in 2015 is what percent more than total child labors working in 2011?
(a) $42 \%$
(b) $48 \%$
(c) $40 \%$
(d) $36 \%$
(e) $44 \%$
53. If ratio of adult male labors working in 2011 to 2012 is $5: 4$ and total labors working in these two years is 2200 , then find total child labors working in these two years?
(a) 420
(b) 480
(c) 440
(d) 400
(e) 520
54. A child NGO inspection team in 2014 in the city inspected firm X and imposed fine on firm of Rs. 25 for each child labor. If inspection team imposed total Rs. 2000 on the firm and total child labor working in 2015 are 220 more than that of in 2014, then find ratio of adult male labors working in 2014 and 2015 respectively?
(a) $3: 7$
(b) $4: 9$
(c) $4: 7$
(d) $4: 5$
(e) $4: 3$
55. If ratio of total labors working in 2011, 2012 and 2013 is $8: 10: 5$ and total adult female workers working in these three years is 720 , then find total number of child labors working in these three years?
(a) 550
(b) 450
(c) 400
(d) 300
(e) 500
56. Amit's present age is $75 \%$ of Binny's present age where as present age of Chintu is $\frac{5}{8}$ th of Binny's present age. If difference between difference of Chintu and Binny age and difference of Binny and Amit age is 6 years then find the average of their age two years later?
(a) 44 years
(b) 42 years
(c) 36 years
(d) 40 years
(e) 38 years
57. Speed of boat in still water is $37.5 \%$ less than the speed of the boat in downstream and boat covers 30 km in upstream in 5 hours, then find time taken by boat to cover 84 km in downstream?
(a) 3.5 hr
(b) 3 hr
(c) 4.5 hr
(d) 4 hr
(e) 5 hr
58. If we add 4 to the numerator of the fraction and increases denominator by $50 \%$ then both become equal. And when the numerator is increased by 5 and denominator is doubled then it becomes equal to the original fraction. What will be two times of that fraction?
(a) $\frac{4}{5}$
(b) $\frac{3}{2}$
(c) $\frac{8}{5}$
(d) $\frac{5}{2}$
(e) $\frac{5}{3}$
59. Efficiency of $A$ is $40 \%$ more than that of $B$ and ratio of efficiency of C to A is $6: 7$. Time taken by A and C together to complete the work is 18 days. Find the number of days taken by all of them working together to complete twice of the same work?
(a) 32 days
(b) 24 days
(c) 25 days
(d) 26 days
(e) 27.5 days
60. Ravi cuts a square field of maximum possible area from his circular field. Find the area of the remaining circular field if the cost of grass cutting of the square field at Rs 4 per $\mathrm{m}^{2}$ is Rs 882 ?
(a) $120 \mathrm{~m}^{2}$
(b) $126 \mathrm{~m}^{2}$
(c) $121 \mathrm{~m}^{2}$
(d) $116 \mathrm{~m}^{2}$
(e) $109 \mathrm{~m}^{2}$

Directions (61-65): Study the pie charts given below and answer the following questions.
Pie charts shows the percentage distribution of total consumption (fruits + vegetables) on five different days of a week (Monday, Tuesday, Wednesday, Thursday and Friday) and percentage distribution of total vegetables consumption on these 5 days.

61. Fruits consumed on Monday and Tuesday together are what percent more or less than vegetables consumed on Wednesday and Thursday together?
(a) $20 \%$
(b) $50 \%$
(c) $80 \%$
(d) $40 \%$
(e) $70 \%$
62. If fruits consumed on Saturday are $50 \%$ more than that of consumed on Friday and ratio of fruits consumed to vegetables consumed on Saturday is 2 : 3 , then find total fruits and vegetables consumed on Saturday.
(a) 3900
(b) 4800
(c) 4300
(d) 4500
(e) 4000
63. Fruits consumed on Wednesday and Thursday together are what percent of total fruits and vegetables consumed on these two days together?
(a) $34 \frac{4}{11} \%$
(b) $31 \frac{1}{\pi 1} \%$
(c) $41 \frac{11}{11}^{4}$
(d) $39 \frac{9}{11} \%$
(e) $43 \frac{4}{11} \%$
64. The average of fruits consumed on Tuesday, Wednesday and Thursday are how much less than average of vegetables consumed on Monday and Friday?
(a) 4250
(b) 5050
(c) 4650
(d) 5450
(e) 4850
65. Vegetables consumed on Tuesday and Friday together are how much more or less than vegetables consumed on Wednesday and Thursday together?
(a) 2900
(b) 2200
(c) 2700
(d) 2500
(e) 1800

Directions (66-70): Study the passage given below and answer the following questions.
Data gives information about total crop production in a village in 2012, 2013, 2014, 2015 \& 2016. Ratio of total crop production in 2012 to that of in 2013 is $13: 20$. Total crop production in 2015 is $10 \%$ less than that of in 2016 and total crop production in 2015 is equal to average of crop production in 2012 \& 2014. Total crop production in 2014 is $60 \%$ more than that of in 2013. Average crop production in all these 5 years is 4500 tonnes.
66. Find total crop production in 2015 \& 2016 together.
(a) 8000 tonnes
(b) 9500 tonnes
(c) 9000 tonnes
(d) 7500 tonnes
(e) 8500 tonnes
67. If in 2013 village produced only three crops (wheat, rice and bajra) in the ratio $36: 27: 17$ respectively, then find difference in production of wheat and production of bajra in the village in 2013.
(a) 850 tonnes
(b) 1100 tonnes
(c) 750 tonnes
(d) 500 tonnes
(e) 950 tonnes
68. If village produced only wheat and bajra in 2012 in the ratio $8: 5$ and selling price (per ton) of wheat and bajra in 2012 is Rs. 625 and Rs. 500 respectively, then find total revenue of village in 2012.
(a) Rs.10,00,000
(b) Rs.25,00,000
(c) Rs.22,00,000
(d) Rs.15,00,000
(e) Rs.18,00,000
69. In 2016 \& 2017 village produced only wheat \& rice and ratio of production of wheat to that of rice in the village in 2016 \& 2017 is $16: 9$ and $4: 3$ respectively. If production of wheat in village in 2017 is 400 tonnes more than that of in 2016, then find production of rice in the village in 2017 is what percent of that of in 2016?
(a) $120 \%$
(b) $150 \%$
(c) $160 \%$
(d) $180 \%$
(e) $80 \%$
70. Find ratio of total crop production in the village in 2013 to that of in 2014.
(a) $5: 8$
(b) $3: 4$
(c) $1: 4$
(d) $7: 10$
(e) None of the above.

Directions (71-75): In the given questions, two quantities are given one as 'Quantity I' and another as 'Quantity II'. You have to determine relationship between two quantities and choose the appropriate option.
71. Quantity I: A train can cross a pole in 24 sec with a speed of $75 \mathrm{~km} / \mathrm{h}$. Length of train.
Quantity II: A train can cross a pole in 12 sec and a tunnel in 55.2 sec . If length of tunnel is 1800 m . length of train.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I $\geq$ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I $\leq$ Quantity II
72. Quantity I: Marked price of article, if article is marked at $50 \%$ above cost price and on selling the article, profit earned is $20 \%$ and S . P is Rs 1020.
Quantity II: Total cost of fencing a square of side 37.5 meter and cost of wire is Rs 0.17 per centimeter.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I $\geq$ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I $\leq$ Quantity II
73. Quantity I: value of x
$(x+3)^{2}=(x-3)^{2}+x^{2}$
Quantity II: value of y
$y^{2}-29 y+204=0$
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I $\geq$ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I $\leq$ Quantity II
74. Quantity I: Amount obtained after two years on Rs. 2450 at $14 \frac{2}{7} \%$ simple interest per annum.
Quantity II: Amount obtained after two years on investment of Rs 2450 at $12 \frac{1}{2} \%$ p.a.compounded yearly.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I $\geq$ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I $\leq$ Quantity II
75. Quantity I: Actual discount percent. If a shopkeeper gives 1 article free at every purchase of 4 articles and also give $20 \%$ discount.
Quantity II: Final new profit percent. If selling price is increased by $14 \frac{2}{7} \%$ then profit percent becomes $\frac{36}{19}$ of initial profit percent.
(a) Quantity I > Quantity II
(b) Quantity I < Quantity II
(c) Quantity I $\geq$ Quantity II
(d) Quantity I = Quantity II or no relation
(e) Quantity I $\leq$ Quantity II
76. Cost price of article $A$ is Rs 600 more than that of $B$ and selling price of A is Rs 1200 more than that of B. If difference between profit earned on selling these two articles is $13 \frac{1}{3} \%$ of the cost price of A then find profit earned on B if profit \% earned on A is $33 \frac{1}{3} \%$ ?
(a) Rs 800
(b) Rs 900
(c) Rs 840
(d) Rs 960
(e) Rs 1000
77. In 100 lit mixture of milk and water, milk is 68 lit more than that of water. When 'a' lit of milk is taken out and $(a+15)$ lit of water is added, milk becomes $50 \%$ more than that of water. Find value of ' a '?
(a) 20
(b) 15
(c) 18
(d) 12
(e) 16
78. Investment of Sumit is $25 \%$ more than that of Maanik and that of Ravi is Rs 8000 in that business. After 8 months, Sumit and Maanik have increased their amount by $20 \%, 25 \%$ respectively and at the end of the year, profit share of Sumit and Ravi becomes equal then find the profit share percentage of Maanik?
(a) $28 \frac{8}{9} \%$
(b) $28 \frac{1}{3} \%$
(c) $27 \frac{4}{9} \%$
(d) $33 \frac{1}{3} \%$
(e) $26_{3}^{2} \%$
79. Area of rectangle having length and breadth in the ratio of $4: 3$ is $432 \mathrm{~cm}^{2}$. A square whose side is equal to diagonal of rectangle then find ratio of numerical value of perimeter to the area of square?
(a) $7: 55$
(b) $4: 35$
(c) None of these
(d) $1: 8$
(e) 2:15
80. 180 m long Train A crosses Train B of 120 m in length which is running in opposite direction in $5 \frac{5}{11} \mathrm{sec}$. If speed of train B is $20 \%$ more than that of train $A$, then find the time taken by both trains to cross each other, when they running in same direction?
(a) 60 sec
(b) 58 sec
(c) 55 sec
(d) 50 sec
(e) 65 sec

## ENGLISH LANGUAGE

Directions (81-90): Read the following passage carefully and answer the questions given below them. Certain words are given in bold to help you locate them while answering some of the questions.

At the first monetary policy statement of the Reserve Bank of India (RBI) for 2018-19, it seems impossible to believe that the previous bi-monthly on 7 February marked a high point in the relationship between the Union finance ministry and the RBI. There was on that date a regulatory add-on of a 180-day window of forbearance for payment dues from small borrowers, and abolition of loan limits in the MSME (medium, small and micro enterprises) segment. Those initiatives followed the supportive measures for the small- scale sector in the Union budget on 1 February, through the corporate tax cut, and additional funding for the Micro-units Development Refinance Agency (Mudra).
The appearance of team play was shattered after the Punjab National Bank (PNB) fraud broke in mid- February. The PNB fraud has variously been placed as having been in operation since 2011, perhaps even earlier. Union finance minister Arun Jaitley, speaking at the Economic Times Global Business Summit on 23 February, blamed the top management and auditors of PNB, but was also quoted as having added: "Regulators ultimately decide the rules of the game and regulators have to have a third eye which is to be perpetually open. But unfortunately in the Indian system, we politicians are accountable, the regulators are not."

RBI governor Urjit Patel came back forcefully on the occasion of a 14 March address at the Gujarat National Law University, pointing to the lack of ownership-neutrality in the Banking Regulation Act of 1949. The act as amended withholds the RBI from imposing certain types of penalties for errant conduct on public sector banks, like firing the chief executive officer, removing directors or superseding the board. The speech lists seven of them. Patel was right to have pointed them out, appropriately in an address to young entrants into the legal profession. That kind of unevenness in the regulatory landscape clearly has to be swept away.
The PNB fraud is said to have started rolling in 2011. As it happens, RBI that year appointed a high-level steering committee chaired by then deputy governor K.C. Chakraborty (a past chairman of PNB), to upgrade banking supervision to global best practices. Its report recommended that supervision be expanded in scope to go beyond a narrow focus on regulatory compliance or bank solvency, towards assessing the riskiness of a bank's operations, and its risk mitigation strategies. Independently, an inspection of select overseas branches of Indian banks was also conducted in May 2012, the previous one having been done in May 2008, but the findings are not publicly known.

The Chakraborty Committee report was submitted in June 2012. Its recommendations were accepted, and the supervisory system overhauled on to a new risk-based supervision (RBS) platform. Training was initiated for senior officers of the major banks. The new framework went into operation in 2013-14, renamed SPARC (supervisory programme for assessment of risk and capital). An initial set of 28 banks from across the ownership spectrum, accounting for $60 \%$ of total banking assets, was covered that year. PNB may well have been among them. Eight more banks were added over the next two years, and by 2016-17, all scheduled commercial banks were covered. SPARC specifically calls for ongoing interaction between banks and supervisors, not just periodic inspections. Finally, there is a further overlay since 28 February 2017 of a standing committee on cyber security.

In a parallel development starting in 2012-13, memoranda of understanding (MoUs) were signed with 16 overseas regulators, which the annual report for that year says led to "substantial progress in supervisory information sharing and cooperation within jurisdictions where Indian banks are operating". By the close of reporting year 201617, the number of such MoUs had expanded to 40, and there was also a statement of cooperation with three US financial regulators. Since overseas jurisdictions were another point from which the PNB fraud could have been spotted, these agreements do not seem to have led to information exchange of any diagnostic value.
81. What benefits have been provided by the government to small borrowers?
(I) Allocation of additional funds.
(II) Abrogating the loan limits in the MSME segment.
(III) Government has extended the time period for small borrowers for payment of their dues.
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct
82. What can be inferred from the statement, "we politicians are accountable, the regulators are not."?
(a) Only politicians need to take decisions for regulating the banks.
(b) RBI should not be held responsible for their ineffective regulation against frauds in PSU banks.
(c) In Indian system, politicians are made responsible for any type of fraudulent activity.
(d) Both (b) and (c)
(e) All are correct
83. Which type(s) of unevenness has/have been pointed out by RBI governor?
(a) appointment of high level supervision committee
(b) growing fraudulent activities and scams in banks.
(c) uncontrolled regulation in banks.
(d) imposing penalty on PSBs.
(e) All are correct
84. What are the efforts made by RBI to avoid the future loss in banks?
(I) turning towards privatization of banks.
(II) providing training to bank officials.
(III) updating supervisory system
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct
85. Identify the tone of the author with respect to the passage.
(a) eulogistic
(b) informal
(c) nostalgic
(d) critical
(e) didactic
86. According to the passage, the new framework SPARC includes
(I) to upgrade banking supervision to global standards.
(II) interaction between banks and supervisors.
(III) enhancing cyber security of scheduled commercial banks
(a) Only (I)
(b) Only (III)
(c) Both (II) and (III)
(d) Both (I) and (III)
(e) All are correct

Directions (87-88): Choose the word which is most similar in meaning to the word printed in bold in the context of the passage.
87. Perpetually
(a) abate
(b) constantly
(d) harness
(e) stride
(c) dissent
88. Forbearance
(a) banish
(b) cease
(d) usurp
(e) tolerance

Directions (89-90): Choose the word which is most opposite in meaning of the word printed in bold in the context of the passage.
89. Overhaul
(a) ensue
(b) accede
(c) acquiesce
(d) ruin
(e) hapless
90. Supersede
(a) herald
(b) confide
(c) concede
(d) relinquish
(e) retain

Directions (91-95): In each question, the word at the top of the table is used in four different ways, numbered (a) to (d). Choose the option in which the usage of the word is INCORRECT or INAPPROPRIATE. If it is used correctly in every sentence choose option (e) as your choice.
91. APPRAISE
(a) The President appropriately appraised Russell and Financial Times readers that he had already signed into law the National Peace and Reconciliation Commission Act.
(b) In cooperation with other professionals, social workers will appraise the individual's needs.
(c) He coolly appraised the situation, deciding which person would be most likely to succeed.
(d) This prompted many employers to appraise their selection and recruitment policies
(e) All are correct.
92. CREDULOUS
(a) Because my brother is a credulous consumer, he is a salesperson's dream.
(b) Even though there was very little evidence, the credulous jury decided the defendant was guilty.
(c) Reference credulous sources to strengthen your argument.
(d) Because the credulous public wanted to believe the killer was off the streets, they never questioned the arrest of an innocent man.
(e) All are correct.
93. FLAUNT
(a) While many people love to flaunt their possessions, I prefer people that keep a low profile.
(b) The orchestra decided to flaunt convention/ tradition and wear their everyday clothes for the concert.
(c) Donald Trump loves to flaunt his wealth and grandiose, whenever he has the chance.
(d) Flavio was flaunting his tan in a pair of white trunks.
(e) All are correct.
94. UNBEARABLE
(a) A delegation of councilors is lobbying the Government because they say the noise is unbearable.
(b) This argument is unbearable from an intellectual, moral and practical standpoint.
(c) All I remember of childbirth was the unbearable pain and the relief when it was all over.
(d) The grief she felt over Helen's death was almost unbearable.
(e) All are correct.
95. LUXURIANT
(a) We've bought a wonderfully luxuriant carpet for our bedroom.
(b) In addition to its inferior size, the coyote is also shorter in the leg than the wolf, and carries a more luxuriant coat of hair.
(c) This stretch of land was once covered with luxuriant forest, but is now bare.
(d) He took no leading part in the war against the English, his energies being largely occupied with the satisfaction of his artistic and luxuriant tastes.
(e) All are correct.

Directions (96-102): In each of the following questions, various sentences are given and you have to choose the one which has some or any grammatical error in it. In the questions where option (e) is all are correct and all the sentences are grammatically correct choose option (e) as the correct choice.
96. (a) The potassium found in potatoes is said to reduce cholesterol level, blood pressure and controls heart problems.
(b) The calcium and magnesium content in potatoes can help ease rheumatism.
(c) Health experts and nutritionists say that turnip juice has more Vitamin C than orange juice.
(d) To watch even a single plant grow from seedling to small and big with more leaves each day and find them flowering and giving fruits can give you happiness untold.
(e) All are correct.
97. (a) Everyone who desires to participate in the good to be obtained must share in the act.
(b) As we have seen above, all must participate that none may be in a position to reproach the rest.
(c) While Dean had no desire to participate in the new and perilous sport of ice climbing, he didn't share Cynthia total perplexity at why a sane human being would even consider subjecting himself or herself to such uncomfortable danger.
(d) They were dressed like the others, and seemed to participate in the general joy.
(e) He being the best student in the class, Gopal was chosen to participate in the competition.
98. (a) There is no end of 'paddies' along this river, and I'm sure they cannot understand your lingo.
(b) Knowledge of regional language is necessary for bank officers because they are to understand what their customers say.
(c) This was one point at which we touched, and which went far to enable me to understand him.
(d) Am I to understand that you have no intention of respecting my wishes in this matter?
(e) All are correct.
99. (a) Today he revealed the fact that he was angry on me because I had not helped him.
(b) There was but one person likely to know all Mr. Topsparkle's secrets, and he would be unlikely to reveal them.
(c) The study revealed the toxic effects of the pollutant.
(d) It was almost as if he were shutting Felipa off before she could reveal something.
(e) All are correct.
100. (a) I paused for a moment to have a full view of this notorious criminal.
(b) I know that several of my readers may remind me of Sir Boyle Roche, whose bulls have become not only notorious, but proverbial.
(c) The man who was blind with the right eye was a notorious criminal of this area.
(d) Many of the pretended magnetizers were notorious libertines, who took that opportunity of gratifying their passions.
(e) All are correct.
101. (a) He won't lose his mate, even if he chooses to kill her rather than give her up.
(b) Her skin began to flush until it was pink enough to look human rather than the sleep of the dead.
(c) Ordinarily when in difficulty Renu prefers keeping her counsel rather than going about here and there for advice.
(d) Maybe he'd rather listen than talk.
(e) All are correct.
102. (a) Only 6 crore out of 29 crore persons holding permanent account number (PAN) file income tax returns at present.
(b) Only three out of a thousand are born with this rare disease.
(c) So, with a snort and a neigh and a whisk of his short tail he trotted off the roof into the air and at once began floating downward to the street.
(d) The mark of these technologies is that they are greeted with universal skepticism at first.
(e) All are correct.

Directions (103-107): Given below are five sentences of a paragraph in a jumbled fashion. Arrange the sentences to form a coherent paragraph and answer the following questions.
(A) It plans to use this for the Chandrayaan-II moon mission in the early months of 2019.
(B) The multi-band, multi-beam satellite can cater to the communication needs of people in Jammu and Kashmir and the Northeast.
(C) With a liftoff mass of 640 tonnes, the GSLV MkIII is the heaviest launch vehicle made in India, and GSAT29 is the heaviest satellite to take off from Indian soil.
(D) The Geosynchronous Satellite Launch Vehicle MarkIII (GSLV Mk III) launched GSAT29, an advanced communications satellite, into a geosynchronous transfer orbit where the satellite's closest approach to earth would be 190 km and the farthest $35,975 \mathrm{~km}$.
(E) The Indian Space Research Organization has marked a big milestone by successfully testing its heavy- lift launcher while launching an advanced communication satellite.
103. What should be the last sentence of the sequence?
(a) D
(b) A
(d) C
(e) E
104. What should be the SECOND sentence of the sequence?
(a) D
(b) A
(c) B
(d) C
(e) E
105. What should be the FOURTH sentence of the final sequence?
(a) A
(b) E
(c) D
(d) B
(e) C
106. What should be the THIRD sentence of the final sequence?
(a) D
(b) A
(c) C
(d) B
(e) E
107. What should be the FIRST sentence of the final sequence?
(a) C
(b) D
(c) B
(d) E
(e) A

Directions (108-110): In the following questions, a sentence is divided into four parts consisting of a highlighted word in each part. Choose the option reflecting the word which is either misspelt or grammatically incorrect. If all the highlighted words are correct, choose option (e) i.e. "all are correct" as your answer choice.
108. The Monetry Policy Committee / of India is a committee of the Reserve Bank of India/ that is responsible for fixing the / benchmark interest rate in India.
(a) Monetry
(b) Reserve
(c) Responsible
(d) Interest
(e) All are correct
109. Trade wars can easily / lead to confrontation, which may / result in impulsive / behviour and misjudgment.
(a) Trade
(b) Confrontation
(c) Impulsive
(d) Behviour
(e) All are correct
110. Saudi Arabia signalled its discomfort / with the faling prices / and hinted at a fresh cut / of one million barrels a day.
(a) Signalled
(b) Faling
(c) Hinted
(d) Barrels
(e) All are correct

Directions (111-120): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five options are given. Find out the appropriate word which fits into the blank appropriately.

The theory that authoritarian governments can $\qquad$ (111) __ policy consensus more easily than multiparty democracies holds some___(112) $\qquad$ .Critical reforms in a country like India are often______ by the political conflict $\qquad$ (114) $\qquad$ in the democratic process. But if that were the whole story, then all dictatorships would be economic powerhouses. The case of Asia's hyper-growth economies suggests what is important isn't $\qquad$ (115) $\qquad$ itself, but what policies the autocrat chooses to impose-and, more importantly, to whom he listens.
Historically, Asia's most successful strongmen have all benefited from $\qquad$ (116) $\qquad$ sound economic guidance.
In South Korea, long-serving ruler Park Chung-hee $\qquad$ (117) $\qquad$ that top economic posts be filled by highly __(118) $\qquad$ economists and other professionals. As one study put it, "Though political agencies in the early Park regime were $\qquad$ (119) $\qquad$ by the military, economic agencies generally were not. Rather, under Park the__(120) of economics experts in the Korean government rose considerably."
111. (a) impose
(b) deliver
(c) give
(d) urge
(e) demand
112. (a) fault
(b) belief
(c) merit
(d) payment
(e) attraction
113. (a) enlightened
(b) clasp
(c) abet
(d) joined
(e) stymied
114. (a) invested
(b) engrained
(c) chisel
(d) defined
(e) erode
115. (a) autocracy
(b) calamity
(c) racism
(d) democracy (e)brutality
116. (a) commonly
(b) remarkably
(c) odd
(d) higher
(e) violently
117. (a) endured
(b) acquired
(c) insisted
(d) pretended
(e) argued
118. (a) amateurish
(b) master
(c) whole
(d) trained
(e) expert
119. (a) followed
(b) ordered
(c) oppressed
(d) direct
(e) dominated
120. (a) feature
(b) report
(c) status
(d) phase
(e) place

## REASONING ABILITY

Solutions (1-5):


1. (e);
2. (d);
3. (a);
4. (d);
5. (e);

Solutions (6-10):

| Months | Dates | Persons |
| :---: | :---: | :---: |
| March | 7 | A |
|  | 10 | O |
|  | 15 | C |
| June | 7 | L |
|  | 10 | N |
|  | 15 | B |
| December | 7 | P |
|  | 10 | D |
|  | 15 | M |

6. (c);
7. (b);
8. (b);
9. (e);
10. (a);

Solutions (11-15):

| Words | Codes |
| :--- | :--- |
| Safety | wr |
| Is | gh |
| Very | tf |
| Important | qs |
| Food | dv |
| Required | sx |
| Good | zx |

11. (d);
12. (c);
13. (c);
14. (d);
15. (c);

Solutions (16-20):
16. (c);

17. (e);
18. (c);
19. (a);
20. (d);

Solutions (21-23):

21. (a);
22. (b);
23. (b);

Solutions (24-28):

| Boxes |
| :---: |
| S |
| P |
| U |
| W |
| T |
| Q |
| V |
| R |
| X |

24. (b);
25. (b);
26. (d);
27. (d);
28. (b);

Solutions (29-31):

$$
\begin{array}{llllll}
\mathrm{B} & \frac{\mathrm{D}}{150} \\
\mathrm{~cm}
\end{array} \quad-\quad \mathrm{F} \quad \mathrm{C} \quad \frac{\mathrm{~A}}{50} \quad \frac{\mathrm{E}}{\substack{50 \\
\mathrm{~cm}}}
$$

29. (c);
30. (e);
31. (b);
32. (b);

$$
\begin{array}{ll|lllllll}
4 & 5 & 7 & 8 & 9 & 1 & 2 & 5 & 6 \\
9 & 8 & 7 & 6 & 5 & 5 & 4 & 2 & 1
\end{array}
$$

Solutions (33-37):

| Floors | Persons |
| :---: | :---: |
| 7 | P |
| 6 | T |
| 5 | U |
| 4 | Q |
| 3 | V |
| 2 | S |
| 1 | R |

33. (a);
34. (d);
35. (b);
36. (c);
37. (b);
38. (e);

39. (b);


Z(9)
40. (b);


## QUANTITATIVE APTITUDE

41. (c); Given, sprite taken out from glass ' A ' $=4 \mathrm{X} \mathrm{ml}$ Total mixture in glass ' B ' $=(220+4 \mathrm{X}) \mathrm{ml}$ Ratio of coke to sprite in glass ' B ' $=\frac{220}{4 X}=\frac{55}{X}$
Now mixture taken out from glass ' $B$ ' and poured in glass ' C ' $=3 \mathrm{X} \mathrm{ml}$
Given, ratio of coke to sprite in glass ' C ' $=11: 4$
$\frac{3 X}{55+X} \times 55: \frac{3 X}{55+X} \times \mathrm{X}=11: 4$
$\frac{55}{X}=\frac{11}{4} \Rightarrow X=20 \mathrm{ml}$
$X \quad 4$
Required quantity $=4 \times X-\frac{3 X}{55+X} \times X$
$=4 \times 20-\frac{3 \times 20}{55+20} \times 20$
$=80-\frac{60}{75} \times 20=80-16=64 \mathrm{ml}$
42. (d); Let radius of cylinder $=\mathrm{rcm}$

And, let height of cylinder $=\mathrm{h} \mathrm{cm}$
ATQ -
$2 r=\frac{2}{3}(r+h)$
$3 \mathrm{r}=\mathrm{r}+\mathrm{h} \Rightarrow \mathrm{h}=2 \mathrm{r}$
Curved surface area of cylinder $=2 \pi r h$
And, volume of cylinder $=\pi r^{2} h$
$\frac{2 \pi r h}{\pi r^{2} h}=\frac{1}{7} \Rightarrow r=14 \mathrm{~cm}$
$\mathrm{h}=28 \mathrm{~cm}$
So, $\mathrm{l}=\sqrt{r^{2}+h^{2}}$
$\mathrm{l}=\sqrt{14^{2}+28^{2}}$
$\mathrm{l}=\sqrt{196+784} \Rightarrow \mathrm{l}=\sqrt{980}$
$\mathrm{l}=\sqrt{7 \times 7 \times 2 \times 2 \times 5} \Rightarrow \mathrm{l}=14 \sqrt{5} \mathrm{~cm}$
43. (b); Let saving of $A, B$ \& $C$ be Rs.X, Rs. $Y$ \& Rs. $Z$ respectively
ATQ - $-\mathrm{Cquivalent} \mathrm{CI} \mathrm{of} \mathrm{two} \mathrm{years} \mathrm{at} \mathrm{the} \mathrm{rate} \mathrm{of} 20 \%=$

$$
\begin{aligned}
& 20+20+\frac{20 \times 20}{100}=44 \% \\
& \frac{44}{100}(X+Y+Z)=1694 \\
& X+Y+Z=1694 \times \frac{100}{44}
\end{aligned}
$$

X + Y + Z = 3850 $\qquad$ (i)

And, when A \& C invested double of their respective saving -100
$20 \times(2 X+2 Z)=1100$
$\overline{100}$
X + Z = 2750 $\qquad$
Saving of $B=3850-2750=1100$ Rs.
Required difference $=2750-1100=1650$ Rs.
44. (a); Let cost price of shirt $=X$ Rs.

So, cost price of jeans $=(X+200)$ Rs.
Selling price of shirt $=\frac{4 X}{5}=0.80 X$ Rs.
Selling price of jeans $=(X+200) \times \frac{5}{4}$
$=(1.25 x+250)$ Rs.
ATQ -
$2 \mathrm{X}+200=(2.05 \mathrm{X}+250) \times \frac{700}{740}$
$74 \mathrm{X}+7400=71.75 \mathrm{X}+8750$
$2.25 \mathrm{X}=1350 \Rightarrow \mathrm{X}=600$ Rs.
Cost price of jeans $=800$ Rs.
Now, SP of shirt when shirt sold at $25 \%$ profit
$=600 \times \frac{125}{100}=750$ Rs.
$\underset{=800}{\text { And, SP }}{ }_{80}^{100}$ jeans when jeans sold at $20 \%$ loss

$$
\times \frac{}{100}=640 \mathrm{Rs}
$$

Total selling price $=750+640=1390$ Rs.
Required loss $\%=\frac{1400-1390}{1400} \times 100=\frac{100}{14} \%={ }^{5} \%$
45. (c); Let total number of red balls $=x$

So, total number of blue balls $=(12-x)$
ATQ -
$\frac{x(12-x)}{6 \times 11}=\frac{35}{66}$
$12 x-x^{2}=35 \Rightarrow x^{2}-12 x+35=0$
$x(x-5)-7(x-5)=0 \Rightarrow x=5 \& 7$
Now new number of blue balls in bag $=(7+n)$
Given, $\frac{(5+n)}{(10+n)}=\frac{9}{14}$
$70+14 n=90+9 n \Rightarrow 5 n=20 \Rightarrow n=4$

## Solutions (46-50):

Total passengers $=800$
(since, Indigo always travel fully occupied \& each plane has 180 seats)
Passengers travelled to Ooty from Indigo $=180$
Passengers travelled to Goa from Indigo $=180$
Passengers travelling to Ooty $=\frac{60}{100} \times 800=480$
Passengers travelling to Goa $=\frac{40}{100} X 800=320$
Air India and Go Air have issued same no. of boarding passes
Passengers using Air India = Passengers using Go Air
$=\frac{800-360}{2}=220$
Passengers travelled to Ooty using Air India
$=\frac{480-180}{15} \times 8=160$
Passengers travelled to Ooty using Go Air
$=480-(160+180)=140$
Passengers travelling to Goa using Air India $=220-160$ $=60$
Passengers travelling to Goa using Go Air =220-140=80

| Flight <br> Operator | Total <br> Passengers | Passengers <br> to Ooty | Passengers <br> to Goa |
| :---: | :---: | :---: | :---: |
| Air India | 220 | 160 | 60 |
| Indigo | 360 | 180 | 180 |
| Go Air | 220 | 140 | 80 |
| Total <br> Passengers | 800 | 480 | 320 |

46. (a); Unoccupied capacity of Air India
$=180+180-160-60=140$
Total passengers to Ooty $=480$
Required percentage $=\frac{140}{480} \times 100=29 \frac{1}{6} \%$
47. (c); Required average $=\frac{160+180}{2}=170$
48. (d); Unoccupied seats

Air India $=180+180-160-60=140$
Indigo $=180+180-180-180=0$
Go Air $=180+180-140-80=140$
49. (b); Required ratio $=\frac{160+140}{180+80}=\frac{300}{260}=15: 13$
50. (e); required $\%=\frac{180-140}{140} \times 100=28.57$ $=29 \%$ (approx.)
51. (b); Let total labor working in $2013=100 \mathrm{x}$

Total child labor working in $2013=28 x$
$\left.\begin{array}{l}\text { ATQ } \\ 28 \mathrm{x} \times\left(\mathrm{C}_{7}^{4}-{ }_{7}^{3}\right)\end{array}\right)=48 \Rightarrow 4 \mathrm{x}=48 \Rightarrow \mathrm{x}=12$
Required difference $=1200 \times\left(\frac{40}{100}-\frac{32}{100}\right)=96$
52. (e); Let total labors working in $2011=500 \mathrm{y}$

So, total labors working in $2015=600 \mathrm{y}$
Total female labor working in 2015
$=600 \mathrm{y} \times \frac{24}{100}=144 \mathrm{y}$

Total child labors working in 2011
$=500 \mathrm{y} \times \frac{20}{100}=100 \mathrm{y}$
Required percentage $=\frac{144 y-100 y}{100 y} \times 100=44 \%$
53. (c); Let total labors working in $2011=x$

And, total labors working in $2012=y$
Total male labors working in $2011=0.5 \mathrm{x}$
And, total male labors working in $2012=0.48 \mathrm{y}$
ATQ -
$\frac{0.5 x}{0.48 y}=\frac{5}{4} \Rightarrow x: y=6: 5$
So, $\mathrm{y}=\frac{5 x}{6}$
ATQ -
$\mathrm{x}+{ }_{6}^{5}=2200 \Rightarrow \mathrm{x}=1200$
$y=1000$
Total child lapors zworking in
together $=120011$
$\times+1090$
$\times 2012$
together $=1200 \times \frac{100}{}+1090 \times-=440$
100
54. (c); Total child labor working in $2014=\frac{2000}{25}=80$

Total male labors working in $2014=80 \times \frac{60}{10}$
= 480
Total child labor working in 2015 $=80+220$
= 300
Total male labors working in $2015=300 \times \frac{56}{20}$
= 840
Required ratio $=\frac{480}{840}=4: 7$
55. (e); Let total labors working in 2011, 2012 and 2013
be 80a, 100a \& 50a respectively
Total female labors working in 2011
$=80 \mathrm{a} \times \frac{30}{100}=24 a$
Total female labors working in 2012
$=100 \mathrm{a} \times \frac{32}{100}=32 a$
Total female labors working in 2013
$=50 \mathrm{a} \times \frac{32}{100}=16 a$
ATQ -
$24 \mathrm{a}+32 \mathrm{a}+16 \mathrm{a}=720$
$72 \mathrm{a}=720 \Rightarrow \mathrm{a}=10$
Total number of child labors working in 2011,
2012 and 2013
$=800 \times \frac{20}{100}+1000 \times \frac{20}{100}+500 \times \frac{28}{100}$
$=160+200+140=500$
56. (d); Let present age of Chintu be $5 x$ years Then present age of Binny $=8 x$ years
And present age of Amit $=6 x$ years
ATQ
$8 x-5 x-(8 x-6 x)=6$
$x=6$
Required average $=40$ years
57. (a); Let the speed of boat in downstream be $8 x$ km/hr
Then speed of boat in still water $=5 x \mathrm{~km} / \mathrm{hr}$
Speed of boat in upstream $=5 x-(8 x-5 x)$
$=2 \mathrm{xkm} / \mathrm{hr}$
ATQ
$\frac{30}{5}=2 x \Rightarrow x=3$
Required time $=\frac{84}{24}=3.5 \mathrm{hrs}$.
58. (e); Let the numerator and denominator of a fraction be $x$ and $y$ respectively
ATQ
$x+4=1.5 y$
And $\frac{x+5}{2 y}=\frac{x}{y} \Rightarrow \mathrm{x}=5$
and $\mathrm{y}=6$
Original fraction $=\frac{5}{6}$
Required fraction $=\frac{6}{6} \times 2=\frac{5}{3}$
59. (d); Let the efficiency of $B$ be $5 x$ units/day

Then efficiency of $A=7 x$ units/day
efficiency of $C$ is $=\frac{6}{7} \times 7 x=6 x$ units/day
$\therefore \mathrm{A}: \mathrm{B}: \mathrm{C}=7: 5: 6$
ATQ,
Total work $=(A+C) \times 18=(7+6) \times 18$
$=234$ units
Required days $=\frac{234 \times 2}{(7+5+6)}=26$ days.
60. (b); Let side of square be a cm and radius of circle be r cm.


Area of the square field $=220.5 \mathrm{~m}^{2}$
Diagonal of the square field=21 m
Radius of the circular field
$=\frac{\text { Diagonal of the square field }}{2}=10.5 \mathrm{~m}$
Area of the circular field $=346.5 \mathrm{~m}^{2}$
Area of the remaining circular field $=126 \mathrm{~m}^{2}$
61. (a); Fruits consumed on Monday and Tuesday together $=\left(\left(20,000 \times \frac{40}{100}\right)-\left(15,000 \times \frac{42}{100}\right)\right)+$ $\left(\left(20,000 \times \frac{8}{100}\right)-\left(15,000 \times \frac{{ }^{6}}{100}\right)\right)$
$=(8,000-6,300)+(1,600-900)=2,400$
Vegetables consumed on Wednesday and
Thursday together $=15,000 \times \frac{10+10}{100}=3,000$
Required $\%=\frac{3,000-2,400}{3,000} \times 100=20 \%$
62. (d); Fruits consumed on Saturday
$=\frac{150}{100} \times\left(\left(20,000 \times \frac{30}{100}\right)-\left(15,000 \times \frac{32}{100}\right)\right)$
$=1800$
Vegetables consumed on Saturday $=1800 \times \frac{3}{2}$
$=2700$
Total fruits and vegetables consumed on
Saturday $=1800+2700=4500$
63. (b); Fruits consumed on Wednesday and Thursday together $=\left(\left(20,000 \times \frac{10}{100}\right)-\left(15,000 \times \frac{10}{100}\right)\right)+$
$\left(\left(20,000 \times \frac{12}{100}\right)-\left(15,000 \times \frac{10}{100}\right)\right)$
$=(2000-1500)+(2400-1500)=1400$
Total fruits and vegetables consumed on
Wednesday and Thursday together
$=20,000 \times \frac{10+12}{100}=4400$
Required $\%=\frac{1400}{4400} \times 100=31 \frac{9}{11} \%$
64. (e); Average of fruits consumed on Tuesday,

Wednesday and Thursday $=1 \times \underset{3}{f}(20,000 \times$
$\left.\left.\frac{8+10+12}{100}\right)-\left(15,000 \times \frac{6+10+10}{100}\right)\right)=700$
Average of vegetables consumed on Monday and
Friday $=\frac{1}{2} \times\left(15,000 \times \frac{42+32}{100}=5550\right.$
Required difference $=5550-700=4850$
65. (c); Required difference $=15,000 \times \frac{(32+6)-(10+10)}{100}$
$=2700$

## Solutions (66-70):

Let total crop production in 2012 \& 2013 be 13x tonnes and 20x tonnes respectively.
Now, total crop production in $2014=\frac{160}{100} \times 20 x=32 \mathrm{x}$
Now, total crop production in $2015=\frac{13 x+32 x}{2}=22.5 \mathrm{x}$
And, total crop production in $2016=22.5 x \times \frac{100}{90}=25 \mathrm{x}$
ATQ,
$\frac{13 x+20 x+32 x+22.5 x+25 x}{5}=4500 \Rightarrow \mathrm{x}=200$

| Year | Total crop production (in tonnes) |
| :---: | :---: |
| $\mathbf{2 0 1 2}$ | 2600 |
| $\mathbf{2 0 1 3}$ | 4000 |
| $\mathbf{2 0 1 4}$ | 6400 |
| $\mathbf{2 0 1 5}$ | 4500 |
| $\mathbf{2 0 1 6}$ | 5000 |

66. (b); Total crop production in 2015 \& 2016 together $=4500+5000=9500$ tonnes
67. (e); Required difference $=\frac{36-17}{36+27+17} \times 4000$ $=950$ tonnes
68. (d); Required revenue
$=\left(2600 \times \frac{8}{8+5} \times 625\right)+\left(2600 \times \frac{5}{8+5} \times 500\right)$
$=10,00,000+5,00,000=$ Rs. $15,00,000$
69. (b); Let production of wheat and rice in the village in 2017 be $4 x$ tonnes and $3 x$ tonnes respectively. ATQ,
$4 x-\left(5000 \times \frac{16}{16+9}\right)=400 \Rightarrow x=900$
Hence, required percentage $=\frac{3 \times 900}{5000 \times \frac{9}{25}} \times 100$ $=150 \%$
70. (a); Required ratio $=\frac{4000}{6400}=5: 8$
71. (d); Quantity I:
length of train $=\frac{24 \times 75}{18} \times 5=500$ meter.

## Quantity II:

Let speed of train be ' $V$ km /hr' and length of train be 'x meter'.
ATQ,
$\frac{x}{12}=V \ldots$ (i)
Now,
$\frac{x+1800}{55.2}=V$.
On solving (i) \& (ii), we get:
$x=500$ meter
So, Quantity II = quantity I
72. (b); Quantity I: Let C. $P=$ Rs. 100 x

Then M. $\mathrm{P}=100 x \times \frac{150}{100}=$ Rs. 150 x
S.P $=100 x \times \frac{120}{100}=$ Rs. 120 x

ATQ,
$120 \mathrm{x}=$ Rs. 1020
$\mathrm{x}=$ Rs. 8.5
So, $150 \mathrm{x}=$ Rs. 1275

## Quantity II:

Perimeter of field $=37.5 \times 4=150$ meter
$=15000 \mathrm{~cm}$.
Total cost of fencing $=15000 \times 0.17=$ Rs. 2550
So, Quantity I < Quantity II.

## 73. (e); Quantity I:

$(x+3)^{2}=(x-3)^{2}+x^{2}$
$x^{2}+9+6 x=x^{2}+9-6 x+x^{2}$
$x^{2}-12 x=0$
$x(x-12)=0$
$\mathrm{x}=0,12$
Quantity II: $\mathrm{y}^{2}-$
$29 y+204=0 y^{2}-12 y-$
$17 y+204=0 y(y-12)-$
$17(y-12)=0$
$(y-12)(y-17)=0$
$y=12,17$
So, Quantity II $\geq$ Quantity I
74. (a); Quantity I:

Amount $=2450+2450 \times \frac{1}{7} \times 2$
$=2450+700=$ Rs. 3150
Quantity II:
Amount $=2450\left(1+\frac{1}{8}\right)^{2}$
$=2450 \times \frac{81}{64}=$ Rs 3100.78 .
So, Quantity I > Quantity II
75. (d); Quantity I:

Let total M. R. P of 5 article = Rs. 100x
1 article is free, then S. P for 5 articles
$=100 \mathrm{x}-20 \mathrm{x}=$ Rs. 80 x
Again, he gives 20\% discount, S.P become of each article $=80 x \times \frac{80}{100} \times{ }^{1}=$ Rs. $12.8 x$
Actual Discount percentage $=\frac{20 x-12.8 x}{20 x} \times 100$
$=\frac{7.2}{20} \times 100=36 \%$
Quantity II:
Let C.P = Rs. x
Let Initial S.P= Rs. 7y
Final S.P = Rs. 8 y
$\frac{{ }_{36}{ }^{\text {AT }}}{19}\left(\frac{\left(\mathrm{~g}_{y-x}\right)}{x}\right) \times 100=\frac{{ }^{8 y-x}}{x} \times 100$
$252 \mathrm{y}-36 \mathrm{x}=152 \mathrm{y}-19 \mathrm{x}$
$\frac{x}{y}=\frac{100}{17}$
Let C.P= Rs. 100a
Final S.P=Rs. 136a
Final profit $\%=\frac{136 a-100 a}{100 a} \times 100=36 \%$
So, Quantity I = Quantity II
76. (b); Let the cost price and selling price of $B$ be Rs $x$
and Rs y respectively
CP of $\mathrm{A}=(\mathrm{x}+600)$
And SP of A = $(y+1200)$
Difference of their profits
$=(y+1200-x-600)-(y-x)=600$
ATQ
$(x+600) \times \frac{40}{300}=600 \Rightarrow x=3900$
Profit earned of $B=4500 \times \frac{1}{3}-600=$ Rs 900
77. (b); Let quantity of milk and water be $x$ lit and $y$ lit respectively.
Then
$x+y=100$.
And
$x-y=68$. $\qquad$
From (i) and (ii)
$x=84 \& y=16$
ATQ
$\frac{84-a}{16+a+15}=\frac{3}{2}$
$\Rightarrow 5 \mathrm{a}=75 \Rightarrow \mathrm{a}=15$ lit
78. (a); Let initial investment of Maanik be Rs $x$. Investment of Sumit= Rs 1.25 x
Sumit Maanik Ravi
$(1.25 \mathrm{x} \times 8+1.25 \mathrm{x} \times 1.2 \times 4):(\mathrm{x} \times 8+1.25 \mathrm{x} \times 4)$ : $8000 \times 12$
16x: 13x : 96000
Let profit share of Sumit, Maanik and Ravi be Rs
$16 x y, 13 x y$ and $96000 y$ respectively
ATQ
$16 x y=96000 y \Rightarrow x=6000_{000} 8$
Required proft share $\%=\frac{78000}{270000} \times 100=28-\%$
79. (e); Let length of the rectangle be 4 x cm Then breadth of that rectangle $=3 \mathrm{x} \mathrm{cm}$

ATQ
$4 \mathrm{x} \times 3 \mathrm{x}=432 \Rightarrow \mathrm{x}=6$
Length $=24 \mathrm{~cm}$ and breadth $=18 \mathrm{~cm}$
Diagonal $=\sqrt{(576+324)}=30 \mathrm{~cm}$
Required ratio $=\frac{120}{900}=2: 15$
80. (a); Let speed of train $A$ be $5 x \mathrm{~km} / \mathrm{hr}$

Then speed of train $B=6 x \mathrm{~km} / \mathrm{hr}$
ATQ-
$(6 x+5 x) \times{ }_{18}^{5}=\frac{120+180}{\frac{60}{11}} \Rightarrow$
$\mathrm{x}=18$
Required time $==\frac{120+180}{(108-90 \times-5}{ }_{18}^{5}=60 \mathrm{sec}$

## ENGLISH LANGUAGE

81. (e); All the sentences are correct. Government in the budget this year has announced the additional funding to Mudra, add-on of a 180-day window of forbearance for payment dues from small borrowers and abolition of loan limits in the MSME. Hence option (e) is the correct choice.
82. (d); As mentioned in second paragraph of the passage that finance minister highlighted the responsibilities of regulators of PSU banks i.e. RBI. Here unfortunately determines the negative point that politicians are made responsible for frauds and scams in banks rather than regulators.
Hence option (d) is the correct choice.
83. (d); Refer the third paragraph of the passage.
84. (c); Refer the first few lines of second paragraph "Training was initiated for senior officers of the major
banks." "the supervisory system overhauled on to a new risk-based supervision (RBS) platform.".
85. (d); The author has given deep analysis of decision of RBI governor Urjit Patel regarding monetary policy,
with a neutral outlook. Hence 'critical' is the correct tone of the author.
86. (e); All of the sentences are correct. Refer to fourth and fifth paragraphs of the passage.
87. (b); Perpetually means never ending or changing, having same meaning as constantly.
Abate means becoming less intense.
Dissent means disagreement.
Stride means a decisive step, advance, proceed.
88. (e); Forbearance means patient self-control; restraint and tolerance, having same meaning as tolerance. Recuperate means recover or regain.
Usurp means take illegally or by force.
89. (d); Overhaul means take apart (a piece of machinery or equipment) in order to examine it and repair it if necessary. Hence it has the opposite meaning to ruin.
Ensue means happen or occur afterwards or as a result.
Acquiesce means accept something reluctantly but without protest.
Hapless means unfortunate.
90. (e); Supersede means take the place of (a person or thing previously in authority or use); supplant. Hence it has the opposite meaning to retain.
Relinquish means voluntarily cease to keep or claim; give up. Concede means admit or agree that something is true after first denying or resisting it.
Herald means a person or thing viewed as a sign that something is about to happen.
Confide means tell someone about a secret or private matter while trusting them not to repeat it to others.
91. (a); Option (a) is incorrect as apprised should be used here.
Appraise means to ascertain the value of and does not mean to apprise or to inform. Correct: "I appraised the jewels." / "I apprised him of the situation."
92. (c); Option (c) is incorrect as credible should be used in place of credulous.
Credible means believable and does not mean credulous or gullible. Correct: "His sales pitch was not credible." / "The con man took advantage of credulous people."
93. (b); In option (b) the use of flaunt is incorrect and must be replaced with flout.
Flaunt means to show off and does not mean to flout. Correct: "She flaunted her abs." / "She flouted the rules."
94. (b); In option (b) the use of unbearable is incorrect and untenable should be used instead.
Untenable means indefensible or unsustainable and does not mean painful or unbearable. Correct: "Now that all the facts have been revealed, that theory is untenable." / "Her death brought him unbearable sadness."
95. (d); Option (d) is incorrect as luxuriant should be replaced with luxurious.
Luxuriant means abundant or florid and does not mean luxurious. Correct: "The poet has a luxuriant imagination." / "The car's fine leather seats were luxurious."
96. (e); All the given sentences are grammatically correct.
97. (e); In this sentence, use of ' He ' is superfluous as the subject of 'Being' is 'Gopal'. It is to be noted that whenever a sentence containing Participle is used with only one Subject which does dual work, then a Subject is not required before Participle.
e.g. Being tired, he sat down. [= As he was tired, he sat down.]
98. (b); Replace "Knowledge of regional language" by "The knowledge of a regional language" as generally "The + Noun + of + Noun" is used. Also, 'regional language' is a Singular Countable Noun. So ' $a$ ' will be used before 'regional language'. Hence the correct form of the sentence should be - The knowledge of a regional language.
99. (a); Use 'with' in place of 'on' as "angry with somebody" and "angry at something" are the correct usage.
e.g. He is angry with you.

He is angry at your behavior.
100. (c); Replace 'with' by 'an' as "blind in the right eye/the left eye" is used while "blind with both the eyes" is the correct usage.
101. (c); Use 'to' in place of 'rather than' as when two nouns or gerunds are compared using the word 'prefer', the preposition 'to' is used. e.g. She preferred playing to gossiping.
However when 'prefer' is used to compare two infinitives, 'rather than' is used instead of 'to'. e.g. We preferred to read rather than write.
102. (e); All the given sentences are grammatically correct.
103.(c); The correct arranged form of the given paragraph is EADCB. Hence (B) must be the last sentence of the paragraph. This is because it concludes the paragraph which talks about GSLV Mk III that is it talks about its applications and uses among which one is catering to the needs of the people in J\&K and the Northeast by the help of communication.
104.(b); Option (b) is the appropriate choice as the answer. (A) is the second statement of the paragraph when it will be arranged in a coherent way. The sentence starts with 'It' which means something has to be mentioned beforehand about which we are talking so it will be second sentence that is ISRO which plans to use this for the Chandrayaan-II moon mission in the early months of 2019.
105. (e); Option (e) is the correct choice as the answer. (C) will be the fourth sentence when the paragraph is arranged in a coherent way. The sentence that precedes sentence (C) is sentence (D) which mentions about satellite GSLV where the satellite's closest approach to earth would be 190 km and the farthest $35,975 \mathrm{~km}$. So after (D) it must be (C), as statement (C) refers the details about GSLV.
106. (a); Option (a) is the most correct choice as the answer. The correct sequence of arrangement of paragraph is EADCB.
107.(d); Option (d) is the most suitable choice as the answer of the option. The first sentence is the opening line of the sentence which gives introduction to the paragraph which is that The Indian Space Research Organization (ISRO) has marked a big milestone by successfully testing its heavy-lift launcher while launching an advanced communication satellite.
108. (a); The highlighted word in the first part is incorrectly spelled as "Monetry". However, the precise spelling of the word in "Monetary" and it means relating to money or currency. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (a) is the most suitable answer choice.
109.(d); The highlighted word in the fourth part is incorrectly spelled as "behviour". However, the precise spelling of the word in "behaviour" or "behavior" and it means the way in which one acts or conducts oneself, especially towards others. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (d) is the most suitable answer choice.
110. (b); The highlighted word in the first part is incorrectly spelled as "faling". However, the precise spelling of the word in "falling" and it means move from a higher to a lower level, typically rapidly and without control. All the other words have been spelt correctly and are in appropriate grammatical syntax. Hence, option (b) is the most suitable answer choice.
111. (a); "impose" is the most appropriate word in the context of its meaning to the sentence. It is to be noted that the sentence is talking about the authoritarian governments, so the word "impose" makes the sentence more meaningful. Hence option (a) is the correct choice.
Impose means force (an unwelcome decision or ruling) on someone.
Urge means try earnestly or persistently to persuade (someone) to do something.
112. (c); "merit" is the most appropriate word that fits into the provided space adding meaning to the sentence.
Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Merit means the quality of being particularly good or worthy, especially so as to deserve praise or reward.
113. (e); "stymied" is the most appropriate word that fits perfectly into the provided space. The word "stymied" means prevented or hindered the progress of. Other words are contextually incorrect. Hence option (e) is the correct choice. Clasp means hold (someone) tightly.
Abet means encourage or assist (someone) to do something wrong, in particular to commit a crime.
114. (b); "engrained" is the most appropriate word that fits perfectly into the provided space. The word "engrained" means firmly fixed or established (a habit, belief, or attitude) in a person. Other words are contextually incorrect. Hence option (b) is the correct choice.

Chisel means cut or shape (something) with a chisel.
Erode means gradually destroy or be gradually destroyed.
115. (a); "autocracy" is the most appropriate word that fits perfectly into the provided space. The word "autocracy" means a system of government by one person with absolute power. The word
"autocrat" in the latter part of the sentence suggests that "autocracy" would give the most logical meaning to the sentence. Hence option (a) is the correct choice.
116. (b); "remarkably" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (b) is the correct choice.

Remarkably means in a way that is worthy of attention.
117. (c); "insisted" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Insist means demand something forcefully, not accepting refusal.
Endure means remain in existence; last.
Acquire means buy or obtain (an asset or object) for oneself.
Pretend means behave so as to make it appear that something is the case when in fact it is not.
118. (d); "trained" is the most appropriate word that fits into the provided space adding meaning to the sentence. It is to be noted that the expression "highly trained economists and other professionals" makes the sentence logically meaningful. Hence option (d) is the correct choice.
Amateurish means done in an unskillful or inept way.
119. (e); "dominated" is the most appropriate word that fits into the provided space adding meaning to the
Sentence. Other words do not give a contextual essence to the sentence. Hence option (e) is the correct choice.
Oppress means cause distress or anxiety to. Dominate means have power and influence over.
120. (c); "status" is the most appropriate word that fits into the provided space adding meaning to the sentence. Other words do not give a contextual essence to the sentence. Hence option (c) is the correct choice.
Status means relative social or professional position; standing. Phase means a distinct period or stage in a process of change or forming part of something's development.

