REGIONAL RURAL BANKS (RRBs)

OFFICE ASSISTANT EXAM 2018

Based on Memory

PRELIMINARY EXAMINATION (OBJECTIVE)*

Sr. No.	Name of Tests (Objective)	No. of Questions	Medium of Exam	Maximum Marks	Duration
1.	Reasoning	40	Hindi/English	40	Composite time of 45 minutes
2.	Numerical Ability	40	Hindi/English	40	
	Total	80		80	

*Candidates have to qualify in both the tests by securing minimum cut-off marks. Adequate number of candidates in each category, depending upon requirements, will be shortlisted for Online Main Examination.

INSTRUCTIONS

(1) Time limit to complete this test is 45 minutes no sectional timing.

(2) It is not necessary for the candidate to attempt the section in order of their arrangement in this test. You can choose to attempt any section first, as per your preference. All questions are compulsory and carry equal marks.

(3) Do not use calculators, or any electronic medium for calculations. You may take a clean sheet of paper for rough work and all calculations must be performed manually by the candidate.

(4) There will be penalty for wrong answer marked by you in the objective tests. There are five alternatives in every question of a test.

(5) For each question for which a wrong answer has been given by you, 1/4 or 0.25 of the marks assigned to that question will be deducted as penalty. If a question is left blank, i.e. no answer is given by you, there will be no penalty for that question.

REASONING

Directions (Qs.1-4): The following questions are based on the five four-letter words given below:

TRAP SING SLAP DOLL WADS
(The new words formed after performing the mentioned operations may or may not necessarily be meaningful English words)

1. If the second letter of each word is replaced by the third letter following it in alphabetical series, which word still makes a meaningful English word?
(1) TRAP (2) SING (3) SLAP (4) DOLL (5) WADS

2. If the first letter of each word is replaced by its following letter and the last letter is replaced by the letter preceding it, which word will have the most number of vowels?
(1) TRAP (2) SING (3) SLAP (4) DOLL (5) WADS

3. When the letters of each word are rearranged, which word can make the most number of meaningful words?
(1) WADS (2) TRAP (3) SLAP (4) SING (5) TRAP and SLAP

4. If the first letter is removed from each word, how many meaningful English words can still be formed?
(1) None (2) 2 (3) 3 (4) 5 (5) 1

Directions (Qs.5-8): Study the information and answer the following questions:

In certain code language,
'student shouted in the class' is written as 'lye pr vin ce vx'
'teacher shouted for silence' is written as 'ce lo jer pt'
'it is the fifth class' is written as 'vx ti mn lye no'
'silence is necessary for student' is written as 'jer pt ti bv vin'

5. In the given code language, what does the code 'lo ti pr vx lye' stands for?
(1) student shouted for the teacher
(2) teacher shouted for the student
(3) teacher is in the class
(4) silence in the fifth class
(5) can't say

6. In the given code language, 'necessary' coded as?
(1) pt (2) ti (3) vin (4) bv (5) jer

7. In the given code language, what is the possible code for 'silence is maintained'?
(1) pt mn lye (2) ti pt vx (3) ze pt ti (4) ti no mn (5) jer pt lo

8. In the given code language, what is the code used for 'student shouted'?
(1) 'vin ce' (2) Either 'vin ce' or 'pr vin'
(3) Both 'ce vin' and 'lye pr' (4) Can't say (5) None of these

9. Find the missing term in the following letter series
ATB, CSE, FRH, JQK, ?, UOQ
(1) NPN (2) OPN (3) OPO (4) NPO (5) MPO

Directions (Qs.10-14): Study the following information to answer the given questions:

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row-1, P, Q, R, S, T and V are seated and all of them are facing south. In row-2, A, B, C, D, E and F are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

A sits third to right of D. Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbor of T. B sits at one of the extreme ends. Only two people sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbor of T. C does not face V. P is not an immediate neighbor of R.

10. Who amongst the following sit at extreme ends of the rows?
(1) B, E (2) S, T (3) P, R (4) B, F (5) None of these

11. Who amongst the following faces A?
(1) R (2) T (3) P (4) Q (5) S

12. How many persons are seated between T and S?
(1) One (2) Two (3) Three (4) Four (5) None

13. Which of the following is true regarding F?
(1) F faces second to right of V
(2) F is not an immediate neighbor of A
(3) F sits third to left of D
(4) F sits at one of the extreme ends of the line
(5) F faces V

14. Who is second to the left of person who is facing E?
(1) P (2) S (3) V (4) Q (5) None of these

15. If it is possible to form a three digit number which is the perfect square of a two-digit odd number with the third, the fifth and the eighth digits of the number 532784691, which of the following will be the second digit of that two-digit odd number? If more than one such number can be formed, give @ as the answer and if no such number can be formed, give © as the answer
(1) 1 (2) 7 (3) 9 (4) @ (5) ©

16. In a certain code 'REASONING' is written as 'TBFSMFMGP'. How is 'AUDITIONS' written in that code?
(1) JRVBRMMKS (2) CRRVMMRO (3) JEVBRRMMK
(4) SFTUFMHHM (5) EJVRBRMMK

17. A man is facing west he goes 10 m and turn left and covers 20 m, then turns right and covers 20 m, then turns right and covers 20 m. At what distance is he from starting point?
(1) 30 m (2) 20 m (3) 40 m (4) 50 m (5) None of these

18. In a family, six members P, Q, L, M, N and O have gathered for a birthday celebration. M is the sister of L, who is mother of Q, P is the father of N, who is brother of Q. O is son-in-law of L. How is Q related to M?
(1) Sister (2) Niece (3) Daughter (4) Aunt (5) Father-in-law

Directions (Qs.19-22): Study the following arrangement carefully and answer the given questions:

S 4 Q J K N R 3 % U @ © V L 5 W 1 X $ Z 2 C A 6 # 9 F N 8 H & E P

19. How many such Numbers are there in the given arrangement, each of which is immediately followed by a letter but not immediately preceded by a number?
(1) None (2) One (3) Two (4) Three (5) More than three

20. How many such consonants are there in the given arrangement, each of which is immediately preceded by a consonant and immediately followed by a symbol?
(1) None (2) One (3) Two (4) Three (5) More than three

21. What should come in the place of question mark (?) in the following series based on the above arrangement?
QKR, U©L, 1$2, ?
(1) A#F (2) 69F (3) 698 (4) 6#F (5) 69N

22. How many such numbers are there in the given arrangement, each of which is immediately preceded by a consonant and not immediately followed by a letter?
(1) None (2) One (3) Two (4) Three (5) More than three

23. Considering minimum number of person in the row if Rahul is sitting third to the right of the 13^{th} to the left of the Sneha, who is 4^{th} from the right of the Ravi and there are 10 people sitting between Ravi and Kunal. Ravi is 24^{th} from the left end and Kunal position is 16^{th} from the right end. How many people are sitting between Rahul and Kunal?
(1) 4 (2) 10 (3) 7 (4) 6 (5) 9

Directions (Qs.24-27): In the following question assuming the given statements to be true, find out which of the following two conclusions definitely follow.

Give answer (1): If **only** conclusion **I** is true
Give answer (2): If **only** conclusion **II** is true
Give answer (3): If **either** conclusion I **or** conclusion II is true
Give answer (4): If **neither** conclusion I **nor** conclusion II is true
Give answer (5): If **both** conclusion I **and** conclusion II are true

24. Statements: P > S, C < D, S ≤ C
Conclusions: I. P < C II. S < D

25. Statements: G > H = C, E = F, E ≥ D > C
Conclusions: I. H < E II. F < H

26. Statements: N < O ≥ R > T; R < A; B ≤ T
Conclusions: I. N < A II. B < A

27. Statements: L ≥ M > K, Z = K < P
Conclusions: I. Z ≤ L II. Z < M

28. If it is possible to make a meaningful word from the fourth, sixth, seventh and eleventh letter from the word 'ORIENTATION', which of the following will be the last letter of the word? If no such word can be formed mark 'X' as the answer. If more than one word is formed mark 'Y' as the answer
(1) X (2) N (3) E (4) Y (5) T

Directions (Qs.29-32): In the question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be a at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows from the given statements disregarding commonly known facts.

Give answer (1): If **only** conclusion **I** follows
Give answer (2): If **only** conclusion **II** follows
Give answer (3): If **either** conclusion I **or** conclusion II follows
Give answer (4): If **neither** conclusion I **nor** conclusion II follows
Give answer (5): If **both** conclusion I **and** conclusion II follow

29. Statements: No ball is a pen
All pens are malls
All malls are asteroids

Conclusions: I. All malls can never be balls
II. All balls are definitely asteroids

30. Statements: All tattoos are rings
No ring is a song
Some songs are plans

Conclusions: I. All rings being plans is a possibility
II. No tattoo is a song

31. Statements: All singers are dancers
All heroines are singers
All dancers are producers

Conclusions: I. All producers being heroine is a possibility
II. Some producers are singers

32. Statements: All wings are summer
Some summer are soaps
No soap is an ant

Conclusions: I. At least some wings are soaps
II. Some ants being summer is a possibility

Directions (Qs.33-34): Study the following information and answer the questions.

Anju is elder to Sana. Bhumi is elder to Anju but younger to Deepti, Deepti is elder to Sana. Sana is younger to Bhumi and Gita is the eldest of them. Based on this information, give answer of the questions given below.

33. Who is the youngest of them?
(1) Deepti (2) Sana (3) Bhumi (4) Anju (5) None of these

34. If all these children are standing in a row in ascending order of their ages, then who of them will be in the middle?
(1) Anju (2) Deepti (3) Bhumi (4) Sana (5) None of these

35. How many pairs of letters are there in the word "PHILOSOPHY" that has as many letters between them in the word as in the alphabet?
(1) Four (2) Three (3) Two (4) One (5) More than Five

Directions (Qs.36-40): Study the following information carefully and answer the questions given below:

Eight professors A, B, C, D, E, F, G and H are going to attend seminars in different International Summits, on different months viz. January, May, September and December but not necessarily in the same order. In each month, they will attend the seminar on dates 11th or 18th of the given month. Only one professor will attend the seminar on these given dates. E will attend the seminar on 18th of any of the given month but before G. Only one professor will attend the seminar between C and F. Four professors will attend the seminar between E and H. Two professors will attend the seminar between E and G. Two professors will attend the seminar between D and C. F will attend the seminar in September. There is no one between F and G attending the seminar. B will attend the seminar after A.

36. Who among following will attend the seminar on 11th January?
(1) B (2) A (3) C (4) G (5) D

37. Who among following will attend the seminar on 11th December?
(1) H (2) A (3) B (4) F (5) C

38. A attends the seminar on which of the following dates?
(1) 11th May (2) 11th September (3) 18th September
(4) 18th December (5) None of these

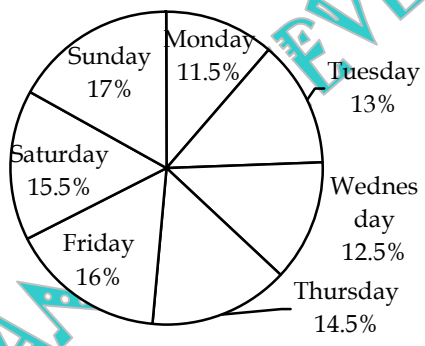
39. How many professors will attend the seminar after B?
(1) One (2) Two (3) Three (4) No one (5) Four

40. How many professors will attend seminar between A and G?
(1) Two (2) Three (3) Four (4) Five (5) One

NUMERICAL ABILITY

Directions (Qs.41-45): Study the Pie-chart and answer the following questions.

Total number of cakes sold = 8400



Note: Cakes on Everyday day = No. of Vanilla Cakes + No. of Chocolate Cakes

41. The ratio of Number of Vanilla Cakes Sold to Chocolate Cakes Sold is 2 : 1 of the total cakes sold on Monday and the ratio of the number of Vanilla Cakes Sold to Chocolate Cakes Sold is 3 : 2 of the total Cakes sold on Wednesday. Then difference of Vanilla Cakes Sold on Monday and Vanilla Cakes sold on Wednesday is?
(1) 13 (2) 14 (3) 15 (4) 16 (5) None

42. If the ratio of Vanilla Cakes Sold on Thursday to Vanilla Cakes sold on Saturday is 3 : 4, Number of Chocolate Cakes sold on Thursday is equal to Number of Chocolate cakes sold on Saturday then Number of Chocolate Cakes sold on Saturday is equal to total number of Cakes sold on which day?
(1) Monday (2) Tuesday (3) Wednesday (4) Thursday
(5) Friday

43. If the average number of Vanilla Cakes Sold on Friday and Sunday are 858 and Number of Chocolate Cakes Sold on Sunday are 72 more than Number of Chocolate Cakes sold on Friday then Number of Chocolate Cakes sold on Friday is?
(1) 482 (2) 492 (3) 498 (4) 512 (5) None

44. Ratio of Vanilla Cakes Sold to Chocolate Cakes Sold is 46 : 45 on Tuesday then how many number of Vanilla Cakes are Sold on that day?
(1) 540 (2) 546 (3) 552 (4) 562 (5) None

45. If the ratio of Vanilla Cakes sold to Chocolate Cakes sold on Monday is 2 : 1 and the ratio of Selling Price of Vanilla Cake to Chocolate Cake is the 1 : 4, total amount earned by him on Monday is Rs.9660 then what is the rate of One Vanilla Cake?
(1) Rs.4 (2) Rs.5 (3) Rs.10 (4) Rs.20 (5) None

46. Ajay's friend Ashish said, "My age is 4 less than the twice of your age. " If Ashish is 10 years old. What is the age of Ajay?
(1) 9 (2) 7 (3) 10 (4) 14 (5) Can't say

47. If the age of Sumit's grandfather is the sum of Sumit's age and his father's age. Sumit's Father age is twice of his age and his grandfather's age is 69. Find Sumit's Father's age.
(1) 50 (2) 29 (3) 32 (4) 46 (5) 25

48. a : b = 4 : 9. If 4 is added to both of the numbers then the new ratio becomes 21 : 46. What is the sum of a and b?
(1) 260 (2) 140 (3) 100 (4) 320 (5) 210

49. The average salary of the entire staff in an office is Rs.3600. The average salary of ladies staff is Rs.5600 and that of gents staff is Rs.2400. If the number of ladies staff is 6, then find number of gents staff in the office?
(1) 2 (2) 12 (3) 40 (4) 18 (5) 10

50. Vijay left an amount of Rs.380000 to be divided between his two sons aged 8 years and 10 years such that both of them would get an equal amount when each attain 18 years age. What is the share of elder brother if the whole amount was invested at 10% simple interest?
(1) Rs.24500 (2) Rs.220000 (3) Rs.160000 (4) Rs.180000 (5) Rs.200000

51. Divya invested an amount of Rs.50000 to start a software business. After six months, Akanksha joined her with an amount of Rs.80000. At the end of 3 years they earned a profit of Rs.24500. What is Divya's share in the profit?
(1) Rs.14000 (2) Rs.9423 (3) Rs.10250 (4) Rs.12500 (5) None of these

52. A, B and C enter into a partnership, investing Rs.16,000. A invests Rs.6500 and B and C invests in the ratio of 2 : 3. Find the profit of C, when the annual profit is Rs.11,200?
(1) Rs.3450 (2) Rs.3330 (3) Rs.3990 (4) Rs.3650 (5) None of these

53. A group of workers was put on a job. From the second day onwards, one worker withdrawn each day. The job was finished when the last worker was withdrawn. The total work done is equal to 55% of square of the total number of workers working initially. How many workers are there in the group?
(1) 10 (2) 20 (3) 25 (4) 40 (5) 45

54. P, Q and R start a small business. P contributes $\frac{1}{5}th$ of the total capital invested in the business. Q contributes as much as P and R together. Total profit at the end of the year was Rs.5200. What was R's profit share? (in Rupees)
(1) 1510 (2) 2510 (3) 1500 (4) 2560 (5) 1560

55. If the rate of interest be 4% per annum for the first year, 5% per annum for the second year and 6% per annum for the third year, the compound interest of Rs.10000 for 3 years will be? (in Rs.)
(1) 1600 (2) 1625.80 (3) 1575.20 (4) 2000 (5) None of these

56. Rahman has to make a journey of 72 km. He rides by scooter at 12 km/hr. After going certain distance, the scooter got punctured and he walks the remaining distance at 4.5 km/hr. Where the scooter did get punctured if total time taken for the journey was 8.5 hours?
(1) 18 km (2) 54 km (3) 36 km (4) 48 km (5) None of these

57. A man can row 9 km/h in still water. It takes him twice as long as to row up as to row down. Find the rate of stream of the river
(1) 7 km/hr (2) 6 km/hr (3) 9 km/hr (4) 3 km/hr (5) 2 km/hr

58. A circular road runs around a circular garden. If the difference between the circumference of outer and inner circles be 44 m, the width of the road is:
(1) 7 (2) 14 (3) 8 (4) 9 (5) None of these

59. A grocer who sells mixed pulses which are known to have good nutritional value by mixing three kind of pulses gram, pigeon pea and moong in the ratio 2 : 1 : 3. If the three pulses cost Rs.76 per kg, Rs.90 per kg and Rs.180 per kg, what should be the cost price per kg for the mixed pulse?
(1) Rs.130.33 (2) Rs.130.66 (3) Rs.133.33
(4) Rs.90 (5) None of these

60. If a pipe A can fill a tank 3 times faster than pipe B and takes 32 minutes less than pipe B to fill the tank. If both the pipes are opened simultaneously, then find the time taken to fill the tank?
(1) 14 min (2) 12 min (3) 15 min (4) 16 min (5) None of these

Directions (Qs.61-65): What should come in the place of the question mark (?) in the following number series?

61. 2 6 12 36 72 ?
(1) 144 (2) 108 (3) 216 (4) 288 (5) 180

62. 143, 169, 195, 221, ?
(1) 287 (2) 339 (3) 453 (4) 247 (5) 345

63. 6, 24, 60, 120, 210, ?
(1) 360 (2) 330 (3) 240 (4) 336 (5) 350

64. 1441, 1434, 711, 232, 54, ?
(1) 53 (2) 51 (3) 10.8 (4) 7.8 (5) None of these

65. 3, 11, 31, 69, 131, 223, ?
(1) 351 (2) 350 (3) 349 (4) 270 (5) 288

Directions (Qs.66-67): What should come in place of question mark (?) in the following questions?

66. $\left[4\frac{1}{5}+2\frac{1}{3}\ of\ 2\frac{2}{5}\{4-2(18\div12)\}\right]+2\frac{1}{5}=?$
(1) 15 (2) 11 (3) 12 (4) 14 (5) None of these

67. 25% of $(7500+\sqrt{?})=1879$
(1) 16 (2) 64 (3) 1024 (4) 256 (5) None of these

68. What approximate value should come in place of question mark (?) in the following question?
34.99 × 3.04 + 80.03% of 40.06 – 12.977 × 1.907 + ? = 45.06 × 3.009
(1) 20 (2) 28 (3) 18 (4) 24 (5) 30

69. What should come in place of question mark (?) in the following question?
$\left(\frac{16}{81}\right)^{-\frac{3}{4}}\times\left(\frac{49}{9}\right)^{\frac{3}{2}}\times\left(\frac{343}{216}\right)^{\frac{2}{3}}=?$
(1) $\frac{16087}{298}$ (2) $\frac{16080}{288}$ (3) $\frac{16807}{288}$ (4) $\frac{16687}{288}$ (5) $\frac{16087}{300}$

70. If $m=64$, then $\left(\sqrt{(m^2)}\right)^{\frac{1}{3}}=?$
(1) 1 (2) 2 (3) 3 (4) 4 (5) 5

71. If Sunil is 20% taller than Aman, then by what percent is Aman shorter than Sunil?
(1) $16\frac{4}{6}\%$ (2) $16\frac{5}{6}\%$ (3) $17\frac{4}{6}\%$ (4) $17\frac{5}{6}\%$ (5) $18\frac{4}{6}\%$

72. What should come in place of question mark (?) in the following question? (approx)
36% of 450 + ?% of 350 = 463
(1) 98 (2) 100 (3) 86 (4) 76 (5) None of these

73. What should come in place of question mark (?) in the following question?
139% of $459+5\frac{1}{2}$ of $384=?$
(1) 2760 (2) 2860 (3) 2960 (4) 2660 (5) 2560

74. What approximate value should come in place of the question mark (?) in the following question?

$\left[\sqrt{(4000)}\right] \times 0.8 = (?)^2$

(1) 1 (2) 7 (3) 2 (4) 1.17 (5) None

75. What should come in place of question mark (?) in the following question?

(170 + 85% of 860) – 181 = 4 × 5% of ?

(1) 4600 (2) 260 (3) 1600 (4) 360 (5) 3600

Directions (Qs.76-80): The following table shows the total number of vacancies in IBPS RRB from six different states in different years, and the ratio of officer scale-I vacancy to office Assistant Vacancy among them. Answer the given questions based on this table.

States	2015		2016		2017	
	Total Vacancies	Officer Scale-I Office Assistant	Total Vacancies	Officer Scale-I: Office Assistant	Total Vacancies	Officer Scale-I: Office Assistant
Karnataka	876	7 : 5	828	11 : 7	988	7 : 12
Rajasthan	870	3 : 2	726	7 : 4	715	8 : 5
West Bengal	986	17 : 12	867	12 : 5	924	8 : 13
Tamil Nadu	646	11 : 8	754	7 : 6	672	3 : 5
Andhra Pradesh	847	4 : 7	845	8 : 5	952	9 : 8
Telangana	810	8 : 7	792	7 : 4	637	4 : 3

76. What is the total number of office Assistant Vacancies from West Bengal in all three years together?

(1) 1135 (2) 1435 (3) 1235 (4) 1185 (5) 1065

77. What is the total number of officer scale-I Vacancies from all six states in the year 2016?

(1) 3090 (2) 2760 (3) 2880 (4) 3010 (5) 3150

78. What is the average number of office assistant Vacancies from Telangana in all three years together?

(1) 317 (2) 312 (3) 319 (4) 313 (5) 311

79. What is the difference between the total number of officer scale-I Vacancies from Karnataka in the year 2015 and the total number of office Assistant Vacancies from Andhra Pradesh in the year 2017?

(1) 60 (2) 64 (3) 63 (4) 65 (5) 67

80. The total number of officer scale-I vacancies from Rajasthan in the year 2015 is approximately what percentage of the total number of office Assistant vacancies from Tamil Nadu in the year 2016?

(1) 115.50 (2) 137.50 (3) 90 (4) 150 (5) 165

ANSWERS

1. **Ans (3): SLAP**
TUAP SLNG SOAP DRLL WDDS
SOAP is a meaningful English word, thus the answer is SLAP

2. **Ans (1): TRAP**
URAO TINF TLAO EOLK XADR
URAO has the most number of vowels, hence the answer is TRAP

3. **Ans (5): TRAP and SLAP**
TRAP → PART, RAPT, TARP
SING → GINS
SLAP → LAPS, ALPS, PALS
DOLL → No meaningful word can be formed
WADS → DAWS

4. **Ans (2): 2**
RAP ING **LA**P OLL ADS

For (Qs.5 to 8):

Word	student	shouted	the/class	in	teacher	for/silence	it/fifth	necessary	is
Code	vin	ce	vx/lye	pr	lo	jer/pt	mn/no	bv	ti

5. **Ans (3): teacher is in the class**
'lo ti pr vx lye' is the code for 'teacher is in the class'

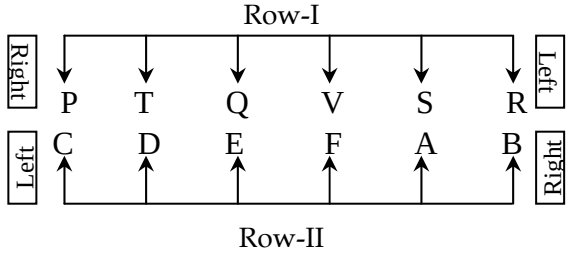
6. **Ans (4): bv**
'necessary' is coded as 'bv'

7. **Ans (3): ze pt ti**
The code for silence may be 'jer' or 'pt'
'is' is coded as 'ti' and 'maintained' may be coded as 'ze'

8. **Ans (1): 'vin ce'**
'student shouted' is coded as 'vin ce'

9. **Ans (2): OPN**
$A \xrightarrow{+2} C \xrightarrow{+3} F \xrightarrow{+4} J \xrightarrow{+5} \mathbf{O} \xrightarrow{+6} U$
$T \xrightarrow{-1} S \xrightarrow{-1} R \xrightarrow{-1} Q \xrightarrow{-1} \mathbf{P} \xrightarrow{-1} O$
$B \xrightarrow{+3} E \xrightarrow{+3} H \xrightarrow{+3} K \xrightarrow{+3} \mathbf{N} \xrightarrow{+3} Q$

For (Qs.10 to 14):



10. **Ans (3): P, R**
P and R sit at the extreme end of Row-1

11. **Ans (5): S**
S faces A

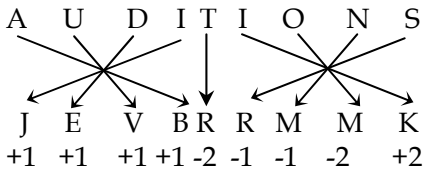
12. **Ans (2): Two**
Two persons, Q and V sit between T and S

13. **Ans (5):** F faces V

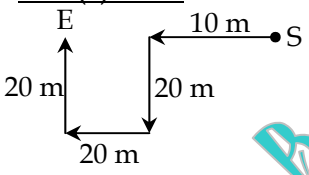
14. **Ans (2): S**
S is second to the left of Q who is facing E

15. **Ans (2): 7**
5 3 **2** 7 **8** 4 6 **9** 1
The 2-digit number is **17** and its second digit is **7**

16. **Ans (3): JEVBRRMMK**



17. **Ans (1): 30 m**



$\therefore$ SE = 10 + 20 = 30 m

18. **Ans (2): Niece**

M (-) – L (-) $\Leftrightarrow$ P (+)
|
O (+) $\Leftrightarrow$ Q (-) – N (+)

Q is the niece of M

19. **Ans (5): More than three**
Symbol, letter/Number/Letter
Such combinations are: S4Q, L5W, W1X, Z2C, #9F, N8H

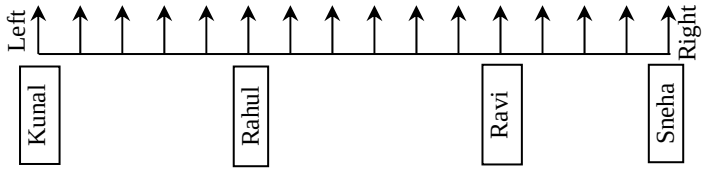
20. **Ans (1): None**
Consonant/Consonant/Symbol
There is no such combination

21. Ans (5): 69N

Q $\xrightarrow{+7}$ U $\xrightarrow{+7}$ I $\xrightarrow{+7}$ **6**
K $\xrightarrow{+7}$ © $\xrightarrow{+7}$ $ $\xrightarrow{+7}$ **9**
R $\xrightarrow{+7}$ L $\xrightarrow{+7}$ 2 $\xrightarrow{+7}$ **N**

22. Ans (2): One
Consonant/Number/Symbol, Number
Such Combinations is: R3%

23. Ans (1): 4



24. Ans (2): only conclusion II is true
P > S ≤ C < D
Conclusions: I. P < C (×) II. S < D (✓)

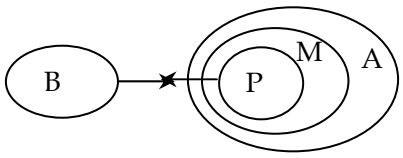
25. Ans (1): only conclusion I is true
G > H = C < D ≤ E = F
Conclusions: I. H < E (✓) II. F < H (×)

26. Ans (2): only conclusion II is true
N < O ≥ R < A; B ≤ T < R < A
Conclusions: I. N < A (×) II. B < A (✓)

27. Ans (2): only conclusion II is true
L ≥ M > K = Z < P
Conclusions: I. Z ≤ L (×) II. Z < M (✓)

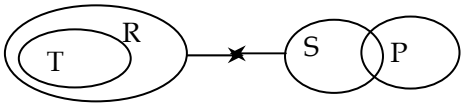
28. Ans (4): Y
O R I **E** N **T** **A** T I O **N**
Meaningful word: TEAN, NEAT

29. Ans (1): only conclusion I follows



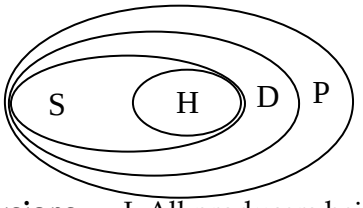
Conclusions: I. All malls can never be balls (✓)
II. All balls are definitely asteroids (×)

30. Ans (5): both conclusion I and conclusion II follow



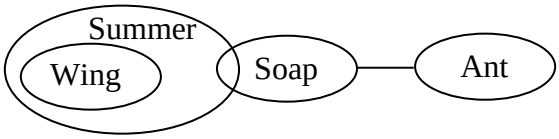
Conclusions: I. All rings being plans is a possibility (✓)
II. No tattoo is a song (✓)

31. **Ans (5): Both conclusion I and conclusion II follow**



Conclusions: I. All producers being heroine is a possibility (✓)
II. Some producers are singers (✓)

32. **Ans (2): Only conclusion II follows**



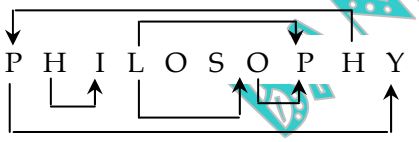
Conclusions: I. At least some wing are soap (×)
II. Some ant being summer is a possibility (✓)

For (Qs.33 & 34): Gita > Deepti > Bhumi > Anju > Sana

33. **Ans (2): Sana**
Sana is the youngest person

34. **Ans (3): Bhumi**
Bhumi is in the middle of the given persons

35. **Ans (5): More than Five**



For (Qs. 36 to 40):

Month	Date	Person
January	11th	D
	18th	E
May	11th	A
	18th	C
September	11th	G
	18th	F
December	11th	H
	18th	B

36. **Ans (5): D**
D will attend the seminar on 11th January

37. **Ans (1): H**
H will attend the seminar on 11th December

38. **Ans (1): 11th May**
A attends the seminar on May 11

39. Ans (4): No one

B is the last person attending seminar

40. Ans (5): One

Only one person C attends a seminar between A and G

41. Ans (2): 14

On Monday $\Rightarrow$ Vanilla cakes sold = $\frac{2}{3}\times 11.5\times 84 = 2\times 11.5\times 28 = 644$

On Wednesday $\Rightarrow$ Vanilla cakes sold = $\frac{3}{5}\times 12.5\times 84 = 210\times 3 = 630$

$\therefore$ Required difference = 644 – 630 = 14

42. Ans (1): Monday

Total number of cakes sold on Thursday = $V_1 + C = 14.5\times 84$

Total number of cakes sold on Saturday = $V_2 + C = 15.5\times 84$

$V_1 : V_2 = 3:4 \Rightarrow V_1 = 3\times 84 = 252$ and $V_2 = 4\times 84 = 336$

Number of chocolate cakes sold on Saturday = 996 = 84 × 11.5

$\therefore$ Total Cakes sold on Monday = 11.5 × 84 = 996

43. Ans (2): 492

Total number of chocolate cakes sold on Friday = $V_1 + C_1 = 1344$

Total number of cakes sold on Sunday = $V_2 + C_2 = 1428$

Total number of vanilla chocolate cakes sold on both days together = 858 × 2 = 1716

$\therefore C_1 + C_2 + 1716 = 2772 \Rightarrow C_1 + C_2 = 1056$

We have $C_2 - C_1 = 72$

$\therefore$ Solving both equations we get, $C_1 = 492$

44. Ans (3): 552

Total number of vanilla cakes sold on Tuesday = $\frac{46}{91}\times 13\times 84 = 552$

45. Ans (2): Rs.5

Total selling price of vanilla cake = $\frac{1}{5}\times 9660 = 1932$

Total vanilla cakes sold = $\frac{2}{3}\times 11.5\times 84 = 644$

Total chocolate cakes sold = $\frac{1}{3}\times 11.5\times 84 = 322$

$\therefore 644R_1 + 322R_2 = 9660 \Rightarrow 644R_1 + (4\times 322)R_1 = 9660 \Rightarrow R_1 = \text{Rs.}5$

46. Ans (2): 7

Let Ajay age be x

Ashish age = $2x$ – 4 = 10 $\Rightarrow 2x = 14 \Rightarrow x = 7$

$\therefore$ Ajay is 7 years old

47. Ans (4): 46

Let Sumit's age be x

$x + 2x = 69 \Rightarrow 3x = 69 \Rightarrow x = 23$

$\therefore$ Sumit's father's age is = $2x$ = 2 × 23 = 46 years

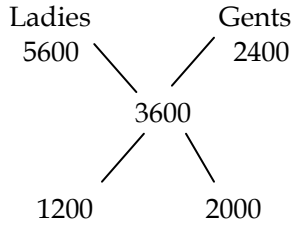
48. Ans (1): 260

New ratio of a, b $\Rightarrow \frac{a}{b} = \frac{4x+4}{9x+4} = \frac{21}{46} \Rightarrow (189-184)x = 25\times 4 \Rightarrow 5x = 25\times 4 \Rightarrow x = 20$

Sum of a and b = $(9 + 4)x$ = 13 × 20 = 260

49. Ans (5): 10

Using Alligation mixture,



$\therefore$ Ratio of Ladies and Gents = 12 : 20 = 3 : 5

$\therefore$ Required number of gents = $\frac{6}{3}\times 5 = 10$

50. Ans (5): Rs.200000

Younger brother (8 yrs) : Elder brother (10 yrs)

Let investment $\Rightarrow$ 100 : 100

Interest $\Rightarrow$ 10 × 10 $\Rightarrow$ 100 : 8 × 10 = 80

Total amount at the age of 18 each = 200 : 180

$\therefore$ 200% of A = 180% of B

$\therefore$ A : B = 9 : 10

$\therefore$ Share of elder brother is = $\frac{10}{19}\times 380000$ = Rs.200000

51. Ans (5): None of these

The ratio of both girls' amount of investment with time,

Divya : Akanksha = 50000 × 36 : 80000 × 30 = 180 : 240 = 3 : 4

So, Divya's share in the profit will be $\Rightarrow \left(\frac{3}{7}\right)\times 24500$ = Rs.10500

52. Ans (3): Rs.3990

Total investment = Rs.16,000; A's investment = Rs.6500

B's and C's investment = 16,000 – 6500 = Rs.9500

The ratio of B and C's investment = 2 : 3

B's investment $= \frac{2}{5}\times 9500 = 3800$, C's investment $= \frac{3}{5}\times 9500 = 5700$

$\therefore$ Ratio of their investment = 6500 : 3800 : 5700 = 65 : 38 : 57

$\therefore$ C's profit = $\frac{57}{160}\times 11200$ = Rs.3990

53. Ans (1): 10

$\frac{n(n+1)}{2} = n\times\frac{55n}{100} \Rightarrow 100n + 100 = 110n \Rightarrow n = 10$

$\therefore$ There are 10 workers in the group

54. Ans (5): 1560

Let total share in the investment be 10

$\therefore$ P's share = $\frac{1}{5} \times 10 = 2$

Q = P + R $\Rightarrow$ Q = 2 + R

$\therefore$ P : Q : R = 2 : 2 + R : R

$\therefore$ 4 + 2R = 10 $\Rightarrow$ R = 3

R's profit share = $\frac{3}{10} \times 5200 = \text{Rs.}1560$

55. Ans (3): 1575.20

Principal	=	10000
$\frac{4}{100} \times 10000$	=	400
1st year	=	10400
$\frac{5}{100} \times 10400$	=	520
2nd year	=	10920
$\frac{6}{100} \times 10920$	=	655.2
3rd year	=	11575.2

$\therefore$ Compound Interest for 3 years = 11575.2 – 10000 = Rs.1575.20

56. Ans (2): 54 km

Time = $\frac{\text{Distance}}{\text{Speed}}$

$\therefore 8.5 = \frac{x}{12} + \frac{72-x}{4.5} \Rightarrow 25.5 = \frac{x}{4} + \frac{72-x}{1.5} \Rightarrow \frac{1.5x + 72 \times 4 - 4x}{6} = 25.5$

$\Rightarrow 2.5x = 288 - 153 \Rightarrow x = \frac{135}{2.5} = 54$ km

57. Ans (4): 3 km/h

Ratio of time Downstream to Upstream $\Rightarrow$ 1 : 2

Ratio of Speed Downstream to Upstream $\Rightarrow$ 2 : 1

Let x be the speed of the stream at river

$\therefore 2(9 - x) = (9 + x) \Rightarrow 18 - 2x = 9 + x \Rightarrow 3x = 9 \Rightarrow x = 3$ km/h

58. Ans (1): 7

Let outer radius R and inner radius r,

$2\pi(R - r) = 44 \Rightarrow (R - r) = \frac{44}{(2 \times \pi)} \Rightarrow (R - r) = 7\text{m}$

59. Ans (1): Rs.130.33

Total cost price for six kilograms of mixture =

(2 × 76 + 90 + 3 × 180) = (152 + 90 + 540) = Rs.782

$\therefore$ Cost price of one kg of mixed pulse = $\frac{\text{Rs.}782}{6} = \text{Rs.}130.33$

60. Ans (2): 12 min

Ratio of Efficiency A : B = 3 : 1

Ratio of Time taken A : B = 1 : 3

$\therefore$ Time taken by A = $\frac{1}{2}\times 32 = 16$ min

Time taken by B = $\frac{3}{2}\times 32 = 48$ min

$\therefore$ Total time taken by them = $\frac{48\times 16}{48+16} = \frac{48\times 16}{64} = 12$ min

61. Ans (3): 216

2 (×3) 6 (×2) 12 (×3) 36 (×2) 72 (×3) **216**

62. Ans (4): 247

143 (+26) 169 (+26) 195 (+26) 221 (+26) **247**

63. Ans (4): 336

6 (+3×6) 24 (+6×6) 60 (+10×6) 120 (+15×6) 210 (+21×6) **336**

64. Ans (4): 7.8

1441 (÷1 – 7) 1434 (÷2 – 6) 711 (÷3 – 5) 232 (÷4 – 4) 54 (÷5 – 3) **7.8**

65. Ans (1): 351

3 (+8) 11 (+12) 31 (+20) 69 (+18) 131 (+38) 223 (+24) **351**

3 (+8) 11 (+20) 31 (+38) 69 (+62) 131 (+92) 223 (+128) **351**

3 (+8) 11 (+12) 31 (+18) 69 (+24) 131 (+30) 223 (+36) **351**

66. Ans (3): 12

$? = \left[\frac{21}{5}+\frac{7}{3}\text{ of }\frac{12}{5}\{4-3\}\right]+\frac{11}{5} \Rightarrow ? = \left[\frac{21}{5}+\frac{28}{5}\right]+\frac{11}{5} \Rightarrow ? = \left[\frac{49}{5}\right]+\frac{11}{5} = \frac{60}{5} = 12$

67. Ans (4): 256

$\frac{25}{100}\times(7500+\sqrt{x}) = 1879 \Rightarrow$

$\frac{25}{100}\times 7500 + \frac{25}{100}\times\sqrt{?} = 1879 \Rightarrow 1875 + \frac{\sqrt{x}}{4} = 1879$

$$\frac{\sqrt{x}}{4} = 4 \Rightarrow \sqrt{x} = 16 \Rightarrow x = 16^2 = 256$$

68. Ans (4): 24

? = 45 × 3 – 35 × 3 – 8 × 4 – 13 × 2 = 135 - 105 – 32 + 26 = 24

69. Ans (3): $\frac{16807}{288}$

$$? = \left[\left(\frac{2}{3}\right)^4\right]^{-\frac{3}{4}} \times \left[\left(\frac{7}{3}\right)^2\right]^{\frac{3}{2}} \times \left[\left(\frac{7}{6}\right)^3\right]^{\frac{2}{3}}$$

$$\Rightarrow \left(\frac{2}{3}\right)^{-3} \times \left(\frac{7}{3}\right)^3 \times \left(\frac{7}{6}\right)^2 \Rightarrow \left(\frac{3}{2}\right)^3 \times \left(\frac{7}{3}\right)^3 \times \left(\frac{7}{6}\right)^2$$

$$? = \frac{27}{8} \times \frac{343}{27} \times \frac{49}{36} = \frac{16807}{288}$$

70. Ans (4): 4

$$? = \left(\sqrt{(64^2)}\right)^{\frac{1}{3}} = 64^{\frac{1}{3}} \Rightarrow ? = (4^3)^{\frac{1}{3}} = 4$$

71. Ans (1): $16\frac{4}{6}\%$

Sunil : Aman = 120 : 100

$$\therefore \text{Required percentage} = \frac{20}{120} \times 100 = \frac{100}{6} = 16\frac{4}{6}\%$$

72. Ans (3): 86

$$162 + \frac{7}{2} \times ? = 463 \Rightarrow \frac{7}{2} \times ? = 301 \Rightarrow ? = 301 \times \frac{2}{7} = 86$$

73. Ans (1): 2760

$$140\% \text{ of } 460 + \frac{11}{2} \times 384$$

$$\Rightarrow ? = \frac{(140 \times 460)}{100} + \frac{11}{2} \times 384$$

$$\Rightarrow ? = 644 + 2112 = 2756 \approx 2760$$

74. Ans (2): 7

$$20\sqrt{10} \times 0.8 = ?^2 \Rightarrow 20 \times 3.16 \times 0.8 = ?^2$$

$$\Rightarrow ?^2 = 50.596 \approx 51 \Rightarrow ? = \sqrt{51} = 7.14 \approx 7$$

75. Ans (5): 3600

$$\left(170 + \frac{85}{100} \times 860\right) - 181 = 4 \times \frac{5}{100} \times ?$$

$$\Rightarrow (170 + 731) - 181 = 4 \times \frac{?}{20} \Rightarrow 901 - 181 = \frac{?}{5}$$

$720 = \frac{?}{5} \Rightarrow ? = 720 \times 5 = 3600 \Rightarrow ? = 3600$

76. Ans (3): 1235

Total no. of Vacancies from west Bengal = $986 \times \frac{12}{29} + 867 \times \frac{5}{17} + 924 \times \frac{13}{21} = 408 + 255 + 572 = 1235$

77. Ans (4): 3010

Total officer Scale-I Vacancies from all six states in the year 2016,

$= 754 \times \frac{7}{13} + 845 \times \frac{8}{13} + 792 \times \frac{7}{11} + 828 \times \frac{11}{18} + 726 \times \frac{7}{11} + 867 \times \frac{12}{17}$

= 406 + 520 + 504 + 506 + 462 + 612 = 3010

78. Ans (4): 313

Required average = $\frac{1}{3} \times \left\{810 \times \frac{7}{15} + 792 \times \frac{4}{11} + 637 \times \frac{3}{7}\right\}$

$\Rightarrow \frac{1}{3} \times \{378 + 288 + 273\} = \frac{939}{3} = 313$

79. Ans (3): 63

Required difference = $876 \times \frac{7}{12} - 952 \times \frac{8}{17} = 511 - 448 = 63$

80. Ans (4): 150

Number of Officer Scale-I Vacancies from Rajasthan in the year 2015 = $870 \times \frac{3}{5} = 522$

No. of Office Assistant Vacancies from Tamil Nadu in the year 2016 = $754 \times \frac{6}{13} = 348$

$\therefore$ Required percentage = $\frac{522}{348} \times 100 \approx 150\%$

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"PRACTICE MAKES PROGRESS...!