Directions for questions 1 to 4: Answer the questions on the basis of the information given below.

In a Cook-House workshop for 100 days, participants registered, face-off against each other for scholarship. The workshop allows participants a maximum of 100 days to master 5 main dishes wherein each dish takes at least 2 days to be mastered in any order of their choosing. No dish is mastered simultaneously. Each participant is scored on each dish on a scale of 0 to 20 to a total of maximum 100 points for the 5 dishes.
Further, the rules for the participants are:
(i) The score of each participant, in points, at any point during the workshop will be **Score Overall = Sum of scores on dishe(s) completed at that point + Bonuses (if any) – Penalties (If any) – Total number of days taken to complete dishe(s) till that point.**
(ii) If any participant masters his/her first chosen dish within 7 days, scores at least 15 points on that dish as well as he/she will get 9 bonus points. However, if any participant takes 19 days or more to master the first dish, 5 points will be deducted as penalty.
(iii) If a participant masters the first 2 dishes within 30 days, scores at least 16 points on an average per dish as well as he/she will get 12 bonus points. However, if the participant is unable to master the first two dishes by the end of day 47, 10 points will be deducted as penalty.
(iv) If a participant masters the first 3 dishes within 40 days, scores at least 12 points on an average per dish as well as he/she will get a staggering 27 bonus points, while a failure to do so within 70 days will see him/her lose 21 points as penalty.
(v) Finally, mastering 4 dishes within 71 days will see a participant earn 12 bonus points while not finishing even by day 91 will see them lose 20 points as penalty.

Q 1. Binu and Vinu mastered exactly 4 dishes. Binu mastered her first 2 dishes in 36 days and the next two in another 35 days, winning the bonus only once. Vinu mastered 4 dishes gaining bonus points on each dish. What could be absolute difference, in points, between Binu's maximum possible score and Vinu's minimum possible score for the first 4 dishes?

1) 4

2) 10

3) 16

4) More than 20 points

Q 2. If Rinu scored a total of 20 points even after she mastered exactly two dishes in 28 days, which of the following COULD represent the number of days she took to master her second dish alone?

1) 25

2) 22

3) 20

4) 9

Q 3. If Tina, received bonus points twice but did not lose any points as penalty, mastering exactly four dishes in 80 days, then among the given options what could be her minimum possible score?

1) −15

2) −18

3) −23

4) −27

Q 4. Parth on mastering his first three dishes scored 14, 18 and 19, in no particular order but did not win bonus points after any dish. Kara, meanwhile, won bonus points twice while getting penalised once, after mastering 3 dishes. The minimum possible value of the sum of days taken by Parth alone and Kara alone is

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Directions for questions 5 to 10: Answer the questions on the basis of the information given below.

Two hundred eighty (280) students in a HR-MBA class of XYZ college gets 3 assignments and 2 research papers to submit within three days – Friday, Saturday and Sunday. It was observed that a student either submitted the assignments or they submitted the research papers but not both.
Further, the following information is also known that:
(i) The numbers of students who submitted atleast one assignment on Friday, Saturday and Sunday (though may be not exclusively) are in the ratio 2 : 1 : 1.
(ii) The numbers of students who submitted exactly one assignment each day is 39.
(iii) The number of students who submitted all assignments on Saturday is the same as the number of students who submitted all their assignments on Sunday. This number is 20% of the number of students who submitted all their assignments on Friday.
(iv) No student submitted any research paper on Sunday. Of all the students who submitted the research papers, only 10 students summitted the research papers on both days.
(v) The number of students who submitted atleast one research paper on Saturday is 60% of the students who submitted all the assignments on Friday.
(vi) The number of students who submitted at least one research paper on Friday and the number of students who submitted all 3 assignments in two days Saturday and Sunday only are in the ratio of 10 : 1.

The professor decides to award grace marks per submission to the students based on how early they submit the assignment or research paper.

	Friday	Saturday	Sunday
Grace marks per Assignment	10	5	1
Grace marks per Research paper	15	10	

The total grace marks professor awarded to the students who submitted all research papers either on Friday or Saturday is 1300.

Q 5. How many students submitted all the assignments together on any day?

1) 105

2) 92

3) 98

4) 112

Q 6. How many students submitted atleast one assignment on Sunday?

Q 7. The grace marks awarded by the professor to the students who submitted either one or two assignments on Saturday and Sunday lies between:

1) 500 and 700

2) 400 and 600

3) 400 and 700

4) 500 and 800

Q 8. How many students submitted atleast one research paper on Friday?

Q 9. What can be said about the grace marks awarded by the professor in the research papers submitted on Saturday?

1) Must be between 400 and 800

2) Cannot be more than 800

3) More than 800

4) Must be between 650 and 750

Q 10. What is the difference between the number of students who submitted the assignments and the number of students who submitted the research papers?

1) 150

2) 65

3) 215

4) 130

Directions for questions 11 to 14: Answer the questions on the basis of the information given below.

The table given below shows the information about the top 10 runs scorer batsmen in all domestic T-20 leagues around the world. In a T-20 match, a team plays only one innings.
Further, it is also known that:
(i) The number of **Ducks** indicates the number of innings in which a player is dismissed without scoring a run.
(ii) The number of **50s** indicates the number of innings in which the player scored more than or equal to 50 but less than 100.
(iii) The number of **100s** indicates the number of innings in which the player scored at least 100 runs.
(iv) Average of a player = Total number of runs scored by the player/Number of innings played by the player
(v) In each innings in which E scored at least 100 runs, each six that he hit covered exactly 110 meters. In each innings in which he scored at least 50 runs but less than 100 runs, each six that he hit covered exactly 105 meters and in each of the other innings, each six that he hit covered exactly 100 meters. Further, in each innings in which he scored at least 100 runs, he hit at most 10 sixes and in each

innings in which he scored at least 50 runs but less than 100 runs, he hit at most 5 sixes.

Player	No. of Innings	Runs Scored	Balls faced	No. of 50s	No. of 100s	No. of 4's	No. of 6's	No. of Ducks
A	121	7437	5611	23	14	987	71	4
B	109	6512	4345	7	24	761	181	6
C	126	7657	5738	29	7	999	109	3
D	139	6677	3684	26	4	932	169	4
E	154	8710	4612	14	11	1013	200	9
F	102	5252	2919	22	7	707	139	5
G	105	4810	2894	16	4	688	144	13
H	120	6230	3497	17	8	735	149	10
I	120	6024	3989	12	12	841	128	6
J	159	4755	2112	21	2	419	199	2

Q 11. If in no innings, A hit more than ten 4's, then what could be the maximum number of innings in which he hit at least one 4 but not more than four 4s?

Q 12. Which player has the second highest strike rate among all the given players? (Strike rate is the runs scored per 100 balls faced.)

1) D

2) E

3) F

4) H

Q 13. What could be the maximum approximate average of B in the innings in which he neither scored a 50 nor scored a 100?

1) 43.65

2) 49.12

3) 48.23

4) 47.20

Q 14. What could be the maximum value of the total distance (in meters) covered by all the sixes that E hit?

1) 19,865

2) 20,340

3) 18,380

4) 21,450

Directions for questions 15 to 20: Answer the questions on the basis of the information given below.

At a selection camp for Jawans in Multifunctional Armed Forces there are three sections of tests - Ground, Aerial and Underwater . The test is open for all types of candidates - Civilian, Army, Airforce and Navy. A total of 15 Jawans - J01, J02, …, J15 - appear for the tests. The maximum score for each test is 10 and all scores are given as whole numbers. Any score below 5 calls for rejection.

A Civilian first appears for the Ground test and then for the Aerial test. If he passes in both tests, then he is selected and he need not appear for the Underwater test. If he fails in both, then he is rejected. If the Civilian fails in one and passes in the other, then he appears for the Underwater test and has to pass to be selected.

An Army jawan appears for the Aerial test first. If cleared, then he is selected. If not, then he has to clear the Underwater test to qualify.

An Airforce jawan appears for the Underwater test first. If cleared, then he is selected. If not, then he has to clear the Ground test to qualify.

A Navy jawan appears for the Ground test first. If cleared, then he is selected. If not, then he has to clear the Aerial test to qualify.

The following facts are also known about the selection process after its completion.
(i) J02, J06, J09, J11, and J12 were rejected and all others were selected.
(ii) Ground tests were taken by only J02, J03, J04, J06, J08, J10, J11, J13 and J14.
(iii) Aerial tests were taken by only J02, J04, J06 through J09, J12 and J13.
(iv) Underwater tests were taken by only J01 through J05, J07, J08, J09, J11, J12 and J15.
(v) J01, J05, J07 and J08 got a score of 9 out of 10 in the same test.
(vi) J10, J13, J14 and J15 got maximum possible scores in one of the tests.

Q 15. For which of the following pairs of jawans can a total score of more than 15 be possible?

1) J08 - J13

2) J04 - J08

3) J14 - J13

4) J04 - J15

Q 16. How many jawans were from the Airforce?

Q 17. What is the difference between the maximum and the minimum scores of any Civilian who is selected?

1) 16

2) 8

3) 10

4) 12

Q 18. How many jawans DEFINITELY failed in the Aerial test?

1) 3

2) 4

3) 5

4) 7

Q 19. The success ratio of a test is the ratio of the number of jawans that passed the test to the number of jawans that appeared for the test. Which option best describes the success ratio of the Ground test?

1) lies between 0.66 and 0.99

2) either 0.33 or 0.66

3) 0.33

4) lies between 0.33 and 0.66 (both inclusive)

Q 20. How many jawans from the Navy did not fail in any of the tests that they appeared for?

1) 2

2) 5

3) 4

4) 3
