<u>DI MIXED - IV</u>

Directions for Questions 1 to 5: Answer the questions on the basis of the information given below. The recruitment test of a company had several questions. Three candidates namely Rohan. Tarun and Anup appeared for this test. This test had four sections A, B, C and D each candidate is awarded 2, 3, 5, and 6 marks for solving any questions correctly A, B, C and D respectively. The following table provides information about the marks obtained by each candidate in different sections as percentage of the total marks obtained by them in the test. Assume that the marks are awarded if and only if a candidate solves a question correctly.

Section	Section Rohan		Anup	
Α	34%	32%	50%	
В	18%	18%	10%	
С	20%	20%	15%	
D	28%	30%	25%	

1. What can be the minimum aggregate marks obtained by Rohan, Tarun, and Anup together in the recruitment test? a) 1000 b) 800 c) 900 d) 1200 d) 700

Additional Information for questions 2 to 4:

The aggregate marks obtained by Rohan, Tarun, and Anup is 1900 and the marks obtained by Rohan is not less than the marks obtained by Anup.

- 2. The difference between the marks obtained by Anup in sections C and D is

 a) 120
 b) 45
 c. 60
 d) 90
 d) CND
- 3. If the marks obtained by Tarun is less than the marks obtained by Anup, then which of the following may possible be the marks obtained by Rohan in the recruitment test?
 a) 600 b. 900 c. 800 d) 300 e. 1500
- 4. Which of the following cannot be the marks obtained by Tarun in section B? a) 72 b. 18 c. 126 d) 36 e) None of these
- 5. Which of the following statements is definitely false?
 - a. The ratio of the marks obtained by Tarun and Anup in section A is 2:25.
 - b. The marks obtained by Rohan and Tarun in section A are the same.
 - c. The sum of the marks obtained by Anup in section C and Tarun in section D is 115.
 - d. The ratio of the aggregate marks obtained by Tarun and Anup in the recruitment test is 6:7.
 - e. None of these

Directions for questions 6 to 9: Answer the questions on the basis of the information given below.

The line graph provides information about the weight (in '000 tonnes) of eight different crops namely Rice(R), Wheat(W), Pulse(P), Maize(M), Jowar(J), Potatoes(PO), and Onions(O) produces in India.

The bar graph provides information about the weight (in '000 tonnes) of the crops produces in ten different states of India namely Haryana (HR), Uttar Pradesh(UP), Punjab(PB), West Bengal(WB), Madhya Pradesh(MP), Gujarat(GJ), Tamil Nadu(TN), Andhra Pradesh(AP), Karnataka(KR) and Maharashtra(MR).

Assume that these eight mentioned crops are the only crops produced in India and that these ten mentioned states are the only states in India that produced crops.



- 6. If W, P, B and M are the only crops that are produced in the states of HR, UP, PB and TN, then the weight of the crop P produced in the state GJ as a percentage of the total weight of the crops produced in the state GJ cannot be more than

 a) 88.75%
 b) 80.5%
 c) 86.25%
 d) 81.25%
 e) 85.75%
- 7. If the crops PO and O are produced in exactly 3 states and no other crop is grown in these 3 states, then the state in which the crop PO is definitely not produced is

 a) GJ
 b) MR
 c) MP
 d) UP
 e) HR

Additional Information for questions 8 and 9: Maximum possible number of crops are produced in equal quantities (by weight) by all the given states. Eg. if R is one such crop, exactly 1.3 kgs of R would be produced by each of the states.

- 8. What is the number of crops that are not produced in equal quantities in the given states?
 a) 4 b) 3 c) 5 d) 1 e) 2
- 9. At most what weight (in '000 tonnes) of the crop W can be produced in the state MP? a) 2.4 b) 2.8 c) 3.8 d) 4 e) 4.8

Direction: In a certain board examination, students were to appear for examination in five subjects: English, Hindi, Mathematics, Science, and Social Science. Due to a certain emergency situation, a few of the examinations could not be conducted for some students. Hence, some students missed one examination and some others missed two examinations. Nobody missed more than two examinations.

The board adopted the following policy for awarding marks to students. If a student appeared in all five examinations, then the marks awarded in each of the examinations were on the basis of the scores obtained by them in those examinations.

If a student missed only one examination, then the marks awarded in that examination was the average of the best three among the four scores in the examinations they appeared for.

If a student missed two examinations, then the marks awarded in each of these examinations was the average of the best two among the three scores in the examinations they appeared for.

The marks obtained by six students in the examination are given in the table below. Each of them missed either one or two examinations.

	English	Hindi	Mathematics	Science	Social Science
Alva	80	75	70	75	60
Bithi	90	80	55	85	85
Carl	75	80	90	100	90
Deep	70	90	100	90	80
Esha	80	85	95	60	55
Foni	83	72	78	88	83

The following facts are also known.

- I. Four of these students appeared in each of the English, Hindi, Science, and Social Science examinations.
- II. The student who missed the Mathematics examination did not miss any other examination.
- III. One of the students who missed the Hindi examination did not miss any other examination. The other student who missed the Hindi examination also missed the Science examination.
- 10. Who among the following did not appear for the Mathematics examination? a) Carl b) Alva c) Esha d) Foni

11. Which students did not appear for the English examination?a) Cannot be determinedb) Alva and Bithi

- c) Carl and Deep d) Esha and Foni
- 12. What BEST can be concluded about the students who did not appear for the Hindi examination?
 a) Two among Alva, Deep and Esha
 b) Alva and Esha
 c) Alva and Deep
 d) Deep and Esha
- 13. What BEST can be concluded about the students who missed the Science examination?
 a) Deep and Bithi
 b) Alva and Bithi
 c) Alva and Deep
 c) Bithi and one out of Alva and Deep
- 14. How many out of these six students missed exactly one examination?
- 15. For how many students can we be definite about which examinations they missed?

Direction: The rock band, aero smith, during one of its itineraries of India, staged exactly 5 concerts, one in each of the 5 major cities – Delhi, Mumbai, Calcutta, Hyderabad and Chennai. In each of the concerts, they performed all their biggest hits no. – livin on the edge, falling in love, walk this way, taste of India and love in an elevator. Though they perform the same 5 no.s in each of the 5 concerts, no-no. was performed in the same position (i.e. first, second, third, fourth and fifth) at any two concerts. The following information is also known about the concerts.

- 1. Taste of India was performed as the third no. in the Hyderabad and as the fourth no. in Delhi.
- 2. In all the cities, except Chennai, falling in love was performed before love in elevator.
- 3. In Calcutta, livin on the edge was performed as the third no. where as Taste of India was performed before livin on the edge.
- 16. Which of following was performed as the 1st no. in Mumbai?a) falling in love b) walk this way c) love in an elevator d) CBD
- 17. In how many of the concerts were walking this way performed before fall in love? a) 1 b) 2 c) 3 d) CBD
- 18. In which city was livin on the edge performed as the 5th no.a) Delhib) Mumbaic) Hyderabadd) CBD
- 19. In how many of the concerts was love in an elevator performed immediately after taste of India? a) 0 b) 1 c) 2 d) CBD
- 20. In which city was walk this way performed as the 2nd no.?a) Calcuttab) Mumbaic) Delhid) CBD

<u> DI MIXED – 5</u>

During a particular year, five movies – A through E – were released in the four regions of a country – North, South, East and West. Each movie was ranked from 1 to 5 in each region, in the descending order of the box office collections of the movie in that region. In any region, no two movies had the same box office collections. The bar graph below provides the box office collections of four of the five movies, A, B, C and D, in each the four regions – North, South, East and West. The table adjacent to the bar graph provides the sum of the ranks obtained by these four movies in the four regions.



Movie	Sum of Ranks
A	13
В	10
С	18
D	10

- 21. What is the sum of the ranks obtained by E across the four regions?
- 22. In how many of the four regions was B's rank better, i.e., numerically lower, than that of E?
- 23. Which of the following can be the total box office collections of E in East and South combined?
 a) ₹320 mn
 b) ₹300 mn
 c) ₹260 mn
 d) ₹200 mn
- 24. Which of the following statements is definitely true?
 - a) The box office collections of E across the four regions combined is greater than ₹540 mn.

- b) The box office collections of E across the four regions combined is less than ₹540 mn.
- c) The box office collections of E across the four regions combined is greater than ₹640 mn.
- d) The box office collections of E across the four regions combined is less than ₹640 mn.
- 25. Which of the following can be the box office collections of E in North?
a) ₹170 mnb) ₹150 mnc) ₹135 mnd) ₹70 mn

DIRECTIONS *for questions :* The graphs below give details about the operations of company XYZ from 2014-15 to 2018-19. The company started operations in 2014-15 with liquid assets worth ₹20 million at the beginning of the year.





- Total Cost in a year = Total Fixed Cost in that year + Total Variable Cost in that year
- Profit in a year = Total Revenue from sales in that year Total Cost in that year
- Liquid Assets at the end of a year = Liquid Assets at the beginning of the year + Profit in that year.

26.	At the end of which	year was the	percentage increase in liquid	assets over the previous	year, the highest?
	a) 2015-16	b) 2016-17	c) 2017-18	d) 2018-19	

27. The liquid assets with the company at the end of 2018-19 were ₹

28.	During which y	year was the variable	cost per unit produced,	the highest?
	a) 2015-16	b) 2016-17	c) 2017-18	d) 2018-19

- 29. At the end of which year was the cumulative unsold stock the highest? a) 2017-18 b) 2016-17 c) 2015-16 d) 2014-15
- 30. Had the company sold all the units and only those units it produced in a year in that year itself, the liquid assets (in ₹ million) at the end of 2018-19 would have been approximately
 a) 47
 b) 52
 c) 59
 d) 66

Answer Key

1. A	2. C	3. B	4. D	5. C	6. D	7. E	8. B	9. A	10. A
11. D	12. C	13. C	14. 3	15. 4	16. B	17. C	18. C	19. A	20. A
21. 9	22. One	23. C	24. A	25. A	26. A	27. 42.1	28. C	29. A	30. B