**3.3 Tables**

Practice Exercise – Easy

**Directions (Q. Nos. 1 – 5):** *Answer the questions based on the following information.*

In a decathlon event, ten events are distributed in five groups - Track, Cycle, Jumping, Pool and Throwing. In each of the events the score is given to the athelets out of 10. The final score of an athlete is calculated in the following manner: First the group scores are calculated by averaging scores of the events within a group. The final score is simple average of the group scores. The table below shows the data of 10 athletes who took part in this event.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Athlete** | **Track** | | | **Cycle** | **Jumping** | | **Pool** | | **Throw** | | **Final Score** |
| **T1** | **T2** | **T3** | **J1** | **J2** | **P1** | **P2** | **Th1** | **Th2** |
| **A1** | 9.8 | 9.6 | 9.7 | 9.8 | 9.5 | 9.3 | 9.4 | 9.6 | 9.6 | 9.8 | 9.62 |
| **E1** | 9.7 | 9.9 | 9.5 | 9.7 | 9.5 | 9.6 | 9.4 | 9.4 | 9.6 | 9.8 | 9.61 |
| **E2** | 9.8 | 9.8 | 9.8 | 9.5 | 9.6 | 9.5 | 9.6 | 9.4 | 9.6 | ?? | 9.60 |
| **E3** | 9.7 | 9.8 | 9.9 | 9.6 | 9.6 | 9.8 | 9.4 | 9.7 | 9.2 | 9.4 | 9.59 |
| **E4** | 9.5 | 9.6 | 9.7 | 9.8 | 9.7 | 9.6 | 9.3 | 9.3 | 9.5 | 9.6 | 9.58 |
| **A2** | 9.6 | 8.9 | 8.5 | 10 | 9.7 | 9.8 | 9.4 | 9.5 | 9.6 | 9.5 | 9.55 |
| **E5** | 9.0 | 9.4 | 9.8 | 10 | 9.4 | 9.7 | 9.0 | 9.2 | 9.4 | 9.5 | 9.50 |
| **E6** | 9.6 | 9.9 | 9.6 | 9.9 | 9.5 | 9.6 | 8.2 | 9.3 | 9.2 | 9.3 | 9.43 |
| **E7** | 9.8 | 9.8 | 9.5 | 9.8 | 8.3 | 9.5 | 9.0 | 9.3 | 9.4 | 9.4 | 9.39 |
| **A3** | 9.6 | 9.8 | 9.7 | 9.9 | 8.5 | 9.4 | 9.2 | 9.1 | 8.7 | 9.6 | 9.37 |

A - Athletes from Asia

E - Athetes from Europe

1. What was the score of athlete E2 in the event Th2?

a. 9.4

b. 9.65

c. 9.7

d. 9.8

2. How many European athletes have atleast 9.5 points in atleast one event of each group?

a. 1

b. 2

c. 3

d. 4

3. Suppose E5, E6, E7 and A3 have a group score of 10 in the events of Jumping, then their standing in increasing order of score would be:

a. E6 < A3 < E5 < E7

b. A3 < E6 < E5 < E7

c. E5 < E6 < A3 < E7

d. A3 < E5 < E7 < E6

4. The winner of decathlon is decided in a peculiar way. The athletes who have a group score of 9.3 or above in each group are short listed. Now the athlete with the higest group score in the track group is awarded the gold medal. Who got the gold medal?

a. E2

b. E3

c. A1

d. Cannot be determined

5. The organizers decided to give 1 chance to each of the athletes to improve their score in exactly 1 event of their choice. Each athlete got a score of 10 in that event they choose (in order to maximize their final score). Who will have the highest final score now?

a. A1

b. E3

c. E2

d. None of these

**Directions (Q. Nos. 6 – 8):** *Answer the questions based on the following information.*

A company stores information about its employees in a hard disk. Due to virus some of the data is lost and only the following data could be recovered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Qualification** | | | **Total** |
|  | **UG** | **Grad.** | **PG** |
| DTP's |  |  | 50 |  |
| SME's |  |  |  | 96 |
| **Total** |  | 54 |  |  |

Sunil remembered the following points about the data as well:

I. One third of the DTP operators are UG.

II. 40% of the employees are SME's.

III. Half of the total number of employees are PG.

6. How many DTP operators are Grad's?

a. 48

b. 46

c. 54

d. None of these

7. What is the number of SME's who are Grad's?

a. 28

b. 8

c. 60

d. 50

8. What fraction of PG employees are SME's?

a. 60%

b. 48.25%

c. 37.5%

d. 58.33%

**Directions (Q. Nos. 9 – 12):** *Answer the questions based on the following information.*

The table below shows the trend of pollution in India in terms of 3 different variants viz. Air pollution, Water pollution and Noise pollution. The total pollution in the country is the total of these 3 pollution types.

All the values are given in million particles per cm cube (mpcc).

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Air** | **Water** | **Noise** |
| **1901** | 1.91 | 0.83 | - |
| **1911** | 4.80 | 2.22 | - |
| **1921** | 8.37 | 4.23 | 0.19 |
| **1931** | 14.94 | 6.95 | 0.51 |
| **1941** | 19.47 | 8.69 | 0.78 |
| **1951** | 22.56 | 11.73 | 1.10 |
| **1961** | 28.17 | 12.74 | 1.47 |
| **1971** | 32.31 | 15.11 | 1.73 |
| **1981** | 35.69 | 16.70 | 2.03 |
| **1991** | 45.91 | 18.13 | 2.37 |

9. In the next decade the air pollution increase by 20%, water pollution by 30% and the noise pollution by 15%, then the total pollution in mpcc is:

a. 78.32

b. 90.66

c. 81.38

d. None of these

10. In which year the percentage share of water pollution in the total pollution is the least?

a. 1941

b. 1911

c. 1961

d. None of these

11. Which of the following statements is false?

a. Percentage share of air pollution in total pollution was highest in 1901.

b. Noise pollutions percentage share has increased till 1981.

c. In 1951, the percentage share of water pollution in total pollution was highest.

d. None of these

12. Which of the following statements is/are true?

I. Air pollution showed a GR of 2300 (approx.)% from 1901 to 1991.

II. From 1931 to 1961 total increased by 69.91%.

III. The annual growth rate of TP is 25.81%.

a. Only I

b. I and III

c. II and III

d. None of them is true.

**Directions (Q. Nos. 13 – 15):** *Answer the questions based on the following information.*

Trident Exports Limited manufactures towels for one of the leading retail chain on the world. It has 8 manufacturing facilities viz. MU1 to MU8, 6 warehouses viz. WH1 to WH6 and 8 airports viz. AP1to AP8. The towels are manufactured in the manufacturing facilities and then transported in trucks to the warehouses. From the warehouses they are packed and again transported to the airports for shipping it to the retail chain.

The Table 1 below shows the cost of a truck for transporting towels from each manufacturing unit to each warehouse. Table 2 shows the cost of a truck for transporting the towels from each warehouse to each of the airports.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 1** | | | | | | |
|  | **WH1** | **WH2** | **WH3** | **WH4** | **WH5** | **WH6** |
| **MU1** | 6483.21 | 5589.85 | 7819.51 | 6671.23 | 9045.40 | 5177.73 |
| **MU2** | 4545.57 | 8380.60 | 8348.36 | 6800.37 | 9343.92 | 8750.71 |
| **MU3** | 8870.75 | 4339.55 | 2860.23 | 9340.36 | 788.98 | 8452.11 |
| **MU4** | 5394.11 | 3540.41 | 5867.66 | 3195.53 | 4308.90 | 7700.79 |
| **MU5** | 1582.80 | 3476.12 | 5367.39 | 9305.17 | 6805.56 | 558.44 |
| **MU6** | 4907.78 | 826.85 | 9265.64 | 6771.98 | 5210.73 | 2692.81 |
| **MU7** | 1925.97 | 2336.94 | 6407.70 | 1978.29 | 7784.85 | 7112.09 |
| **MU8** | 3474.69 | 6769.92 | 2222.28 | 6405.99 | 8576.69 | 8988.94 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 2** | | | | | | |
|  | **WH1** | **WH2** | **WH3** | **WH4** | **WH5** | **WH6** |
| **AP1** | 7680.56 | 4351.79 | 9240.63 | 1639.98 | 5766.20 | 2573.87 |
| **AP2** | 6371.23 | 4076.77 | 317.50 | 8506.97 | 6499.79 | 9170.00 |
| **AP3** | 3756.51 | 4651.46 | 7388.66 | 7011.34 | 8991.36 | 2749.10 |
| **AP4** | 5739.36 | 9807.40 | 3867.32 | 2260.85 | 3956.82 | 2921.79 |
| **AP5** | 4976.79 | 4152.06 | 646.73 | 4952.54 | 7308.14 | 5340.85 |
| **AP6** | 4634.25 | 7514.23 | 9863.22 | 2226.02 | 3364.58 | 7877.44 |
| **AP7** | 6202.52 | 9981.14 | 7740.76 | 4800.79 | 1786.42 | 8980.75 |
| **AP8** | 3833.38 | 2628.00 | 8605.47 | 6643.53 | 953.79 | 7384.39 |

13. What is the least cost of sending a truck of towels from any manufacturing unit to any warehouse?

a. 472.66

b. 558.44

c. 788.98

d. None of these

14. How many different ways are there to transport one truck from a manufacturist to airport?

a. 384

b. 512

c. 216

d. None of these

15. What is the least cost of sending a truck from any a warehouse to an airport?

a. 317.50

b. 519.63

c. 646.73

d. 208.66

**Directions (Q. Nos. 16 – 20):** *Answer the questions based on the following information.*

The table below shows the number of one day international matches played by 30 cricketers against 9 different nations and all the matches played against other nations apart from these 7 have been listed under the column of others. The table also shows the total number of matches played by these 30 cricketers.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Australia** | **India** | **England** | **South Africa** | **Sri Lanka** | **West Indies** | **New Zealand** | **Pakistan** | **Zimbabwe** | **Bangladesh** | **Total** |
| Sachin (Ind) | 71 | − | 37 | 57 | 84 | 39 | 42 | 69 | 34 | 12 | 463 |
| Mahela (SL) | 56 | 87 | 47 | 42 | − | 22 | 50 | 67 | 29 | 26 | 446 |
| Sanath (SL) | 47 | 89 | 35 | 44 | − | 30 | 47 | 82 | 34 | 22 | 445 |
| Sangakkara (SL) | 44 | 76 | 44 | 43 | − | 20 | 47 | 56 | 21 | 31 | 402 |
| Afridi (Pak) | 44 | 67 | 26 | 40 | 72 | 41 | 38 | − | 31 | 21 | 396 |
| Inzamam (Pak) | 34 | 67 | 28 | 37 | 63 | 48 | 45 | − | 26 | 16 | 378 |
| Ponting (Aus) | − | 59 | 39 | 48 | 46 | 45 | 51 | 35 | 21 | 14 | 375 |
| Akram (Pak) | 49 | 48 | 32 | 24 | 59 | 64 | 38 | − | 28 | 6 | 356 |
| Murali (SL) | 40 | 63 | 18 | 32 | − | 27 | 41 | 65 | 31 | 17 | 350 |
| Dravid (Ind) | 43 | − | 30 | 36 | 46 | 40 | 31 | 58 | 32 | 10 | 344 |
| Azhar (Ind) | 43 | − | 24 | 33 | 53 | 43 | 40 | 64 | 22 | 7 | 334 |
| Kallis (SA) | 50 | 37 | 38 | − | 36 | 40 | 45 | 42 | 14 | 7 | 328 |
| Waugh (Aus) | − | 53 | 30 | 47 | 24 | 50 | 60 | 43 | 14 | 2 | 325 |
| Vass (SL) | 40 | 61 | 30 | 34 | − | 20 | 35 | 56 | 25 | 12 | 322 |
| Dilshan (SL) | 41 | 70 | 34 | 27 | − | 13 | 34 | 41 | 18 | 24 | 312 |
| Ganguly (Ind) | 35 | − | 26 | 29 | 44 | 27 | 32 | 53 | 36 | 10 | 311 |
| De Silva (SL) | 36 | 58 | 15 | 27 | − | 28 | 37 | 75 | 16 | 10 | 308 |
| Pollock (SA) | 45 | 33 | 30 | − | 35 | 35 | 43 | 36 | 19 | 8 | 303 |
| Lara (WI) | 51 | 42 | 29 | 37 | 25 | − | 28 | 48 | 25 | 7 | 299 |
| Boucher (SA) | 40 | 33 | 32 | − | 35 | 36 | 39 | 33 | 19 | 9 | 295 |
| Yuvraj (Ind) | 41 | − | 34 | 23 | 54 | 28 | 31 | 36 | 15 | 13 | 293 |
| Vettori (NZ) | 58 | 36 | 25 | 39 | 36 | 24 | − | 30 | 13 | 19 | 291 |
| Yousuf (Pak) | 29 | 44 | 26 | 34 | 43 | 25 | 29 | − | 24 | 18 | 288 |
| Gilchrist (Aus) | − | 46 | 35 | 44 | 30 | 25 | 43 | 24 | 15 | 12 | 287 |
| Malik (Pak) | 26 | 52 | 26 | 16 | 53 | 46 | 43 | − | 13 | 3 | 283 |
| Fleming (NZ) | 47 | 40 | 19 | 40 | 34 | 29 | − | 35 | 23 | 4 | 280 |
| Border (Aus) | − | 38 | 43 | 15 | 23 | 61 | 52 | 34 | 5 | 1 | 273 |
| Kumble (Ind) | 29 | − | 28 | 40 | 43 | 26 | 31 | 34 | 23 | 4 | 271 |
| Ranatunga (SL) | 33 | 56 | 18 | 16 | − | 22 | 35 | 67 | 15 | 4 | 269 |
| Atapattu (SL) | 27 | 52 | 20 | 34 | − | 14 | 30 | 48 | 28 | 10 | 268 |

Aus - Australia Ind - India Eng - England SA - South Africa SL - Sri Lanka

WI - West Indies NZ - New Zealand Pak - Pakistan Zim - Zimbabwe Ban - Bangladesh

Oth - Others

16. How many payers have played more than 40 matches against Pakistan and less than 30 matches against West Indies?

a. 8

b. 9

c. 11

d. 13

17. Who played the highest number of matches against others?

a. Mahela

b. Boucher

c. Kallis

d. None of these

18. What is the difference in number of players of the countries which have highest and lowest number of players included in this 30 player list?

a. 4

b. 6

c. 8

d. None of these

19. All Indian players are grouped together, Sri Lankans are grouped together, Pakistanis are grouped together and so on. Which of the following is the correct order of the average number of matches played by players of each group?

a. SL > Ind > Pak

b. Ind > SL > Pak

c. Pak > SL > Ind

d. SL > Pak > Ind

20. What is difference in number of matches played by these players against India and Australia?

a. 208

b. 235

c. 148

d. None of these

Practice Exercise – Medium

**Directions (Q. Nos. 1 – 4):** *Answer the questions based on the following information.*

The Dean's office recently scanned student results into the Central computer system. When their character reading software cannot read something, it leaves the space blank. The scanner output reads as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Fin.** | **Mktg.** | **Stats.** | **Stra.** | **Ops.** | **GPA** |
| Aparna |  | B | F |  |  | 1.4 |
| Bikas | D | D | F | F |  |  |
| Chandra |  | D | A | F | F | 2.4 |
| Deepak | A | B |  | D | D | 3.2 |
| Fazal | D | F | B |  | D | 2.4 |
| Gowri | C | C | A |  | B | 3.8 |
| Hari |  | B | A |  | D | 2.8 |
| Ismet |  |  | B |  | A |  |
| Jagdeep | A | A | B |  | C | 3.8 |
| Kunal | F |  | A | F | F | 1.8 |
| Leena | B | A |  | B | F | 3.2 |
| Manab |  |  | A | B | B |  |
| Nisha | A | D | B | A | F | 3.6 |
| Osman | C |  | B | B | A | 4.6 |
| Preeti | F | D |  | D |  | 3.2 |
| Rahul | A | C | A |  | F | 4.2 |
| Sameer |  | C | F | B |  |  |
| Tara | B |  |  |  |  | 2.4 |
| Utkarsh |  |  | F | C | A | 3 |
| Vipul | A |  | C | C | F | 2.4 |

Fin. = Finance, Mktg. = Marketing, Stats. = Statistics,

Stra. = Strategy, Ops. = Operations

In the grading system, A, B, C, D, and F grades fetch 6, 4, 3, 2, and 0 grade points respectively. The Grade Point Average (GPA) is the arithmetic mean of the grade points obtained in the five subjects. For example Nisha's GPA is (6 + 2 + 4 + 6 + 0) / 5 = 3.6. Some additional facts are also known about the students' grades. These are:

(a) Vipul obtained the same grade in Marketing as Aparna obtained in Finance and Strategy.

(b) Fazal obtained the same grade in Strategy as Utkarsh did in Marketing.

(c) Tara received the same grade in exactly three courses.

**[CAT 2004]**

1. What grade did Preeti obtain in Statistics?

a. A b. B c. C d. D

2. In operations, Tara could have received the same grade as

a. Ismet b. Hari c. Jagdeep d. Manab

3. In Strategy, Gowri's grade point was higher than that obtained by

a. Fazal b. Hari c. Nisha d. Rahul

4. What grade did Utkarsh obtain in Finance?

a. B b. C c. D d. F

**Directions (Q. Nos. 5 – 8):** *Answer the questions based on the following information.*

The table below presents the revenue (in million rupees) of four firms in three states. These firms, Honest Ltd., Aggressive Ltd., Truthful Ltd. And Profitable Ltd. Are disguised in the table as A, B, C and D, in no particular order.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **States** | **Firm A** | **Firm B** | **Firm C** | **Firm D** |
| **UP** | 49 | 82 | 80 | 55 |
| **Bihar** | 69 | 72 | 70 | 65 |
| **MP** | 72 | 63 | 72 | 65 |

Further, it is known that:

• In the state of MP, Truthful Ltd. Has the highest market share.

• Aggressive Ltd.’s aggregate revenue differs from Honest Ltd.’s by Rs. 5 million.  **[CAT 2005]**

5. What can be said regarding following two statements?

Statement 1: Profitable Ltd. Has the lowest share in MP market.

Statement 2: Honest Ltd.’s total revenue is more than Profitable Ltd.

a. If Statement 1 is true then Statement 2 is necessarily true.

b. If Statement 1 is true then Statement 2 is necessarily false.

c. Both Statement 1 and Statement 2 are true.

d. Neither Statement 1 nor Statement 2 is true.

6. What can be said regarding the following two statements?

Statement 1: Aggressive Ltd.’s lowest revenues are from MP.

Statement 2: Honest Ltd.’s lowest revenues are from Bihar.

a. If Statement 2 is true then Statement 1 is necessarily false.

b. If Statement 1 is false then Statement 2 is necessarily true.

c. If Statement 1 is true then Statement 2 is necessarily true

d. None of the above.

7. What can be said regarding the following two statements?

Statement 1: Honest Ltd. Has the highest share in the UP market.

Statement 2: Aggressive Ltd. Has the highest share in the Bihar market.

a. Both statements could be true.

b. At least one of the statements must be true.

c. At most one of the statements is true.

d. None of the above.

8. If Profitable Ltd.’s lowest revenue is from UP, then which of the following is true?

a. Truthful Ltd.’s lowest revenues are from MP.

b. Truthful Ltd.’s lowest revenues are from Bihar.

c. Truthful Ltd.’s lowest revenues are from UP.

d. No definite conclusion is possible.

**Directions (Q. Nos. 9 – 12):** *Answer the questions based on the following information.*

A health-drink company’s R&D department is trying to make various diet formulations, which can be used for certain specific purposes. It is considering a choice of 5 alternative ingredients (O, P, Q, R, and S), which can be used in different proportions in the formulations. The table below gives the composition of these ingredients. The cost per unit of each of these ingredients is O: 150, P: 50. Q: 200, R: 500, S: 100. **[CAT 2007]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Ingredient | Composition | | | |
| Carb % | Pro % | Fat % | Mine % |
| O | 50 | 30 | 10 | 10 |
| P | 80 | 20 | 0 | 0 |
| Q | 10 | 30 | 50 | 10 |
| R | 5 | 50 | 40 | 5 |
| S | 45 | 50 | 0 | 5 |

Carb = Carbohydrate, Pro = Protein, Mine = Minerals

9. For a recuperating patient, the doctor recommended a diet containing 10% minerals and at least 30% protein. In how many different ways can we prepare this diet by mixing at least two ingredients?

a. One

b. Two

c. Three

d. None

10. Which among the following is the formulation having the lowest cost per unit for a diet having 10% fat and at least 30% protein? (The diet has to be formed by mixing two ingredients).

a. P and Q

b. P and S

c. P and R

d. Q and S

11. In what proportion P, Q and S should be mixed to make a diet having at least 60% carbohydrate at the lowest cost per unit?

a. 4:1:2

b. 2:1:4

c. 3:1:2

d. 4:1:1

12. The company is planning to launch a balanced diet required for growth needs of adolescent children. This diet must contain at least 30% each of carbohydrate and protein, no more than 25% fat and at least 5% minerals. Which one of the following combinations of equally mixed ingredients is feasible?

a. R and S

b. P and S

c. Q and R

d. O and S

**Directions (Q. Nos. 13 – 15):** *Answer the questions based on the following information.*

The table below shows annual statistics related to coffee production in the top 14 coffee producing countries of the World for the year 2014.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Country | Total Area  (million sq. km) | % Area (Under Coffee cultivation) | Production  (million tons) | Population  (millions) |
| Brazil | 8.51 | 20 | 2.72 | 203.99 |
| Vietnam | 0.33 | 60 | 1.65 | 90.73 |
| Colombia | 1.14 | 20 | 0.69 | 48.02 |
| Indonesia | 1.90 | 60 | 0.41 | 255.46 |
| Ethiopia | 1.10 | 50 | 0.39 | 90.07 |
| India | 3.16 | 80 | 0.30 | 1267.98 |
| Mexico | 1.96 | 80 | 0.27 | 121.01 |
| Guatemala | 0.10 | 60 | 0.24 | 15.80 |
| Peru | 1.28 | 80 | 0.21 | 31.15 |
| Honduras | 0.11 | 40 | 0.16 | 8.72 |
| Uganda | 0.24 | 70 | 0.15 | 34.85 |
| Côte d’Ivoire | 0.32 | 50 | 0.14 | 22.671 |
| Costa Rica | 0.05 | 70 | 0.10 | 4.77 |
| El Salvador | 0.02 | 80 | .08 | 6.40 |

13. Which two countries account for the highest productivity of coffee (tons produced per sq. km of coffee cultivation)?

a. Guatemala & El Salvador

b. El Slavador & Vietnam

c. Colombia & Guatemala

d. None of these

14. How many countries have a per capita coffee production (defined as total coffee production divided by its population) greater than Guatemala?

a. 3

b. 5

c. 7

d. None of thes

15. A country is said to be coffee classic state if its annual coffee production per million of population is at least 10,000 tons, then how many states are coffee classic countries?

a. 4

b. 7

c. 8

d. 12

**Directions (Q. Nos. 16 – 20):** *Answer the questions based on the following information.*

A cold storage has been opened by a leading fast food giant to keep the lettuce leaves it uses in burgers. The storage was opened in January. At end of each month some of the lettuce leaves are taken to the outlets for burger production and some fresh lettuce leaves are kept in the storage. All the transactions regarding taking out or adding fresh lettuce leaves are done only at the end of the months. The cold storage has been divided into 5 floors. The table below shows the data about the lettuce leaves for 6 consecutive months.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Floors** | | | | | | | | | |
| **1st**  **(6474)** | | **2nd**  **(8272)** | | **3rd**  **(5027)** | | **4th**  **(6975)** | | **5th**  **(4814)** | |
| **A** | **S** | **A** | **S** | **A** | **S** | **A** | **S** | **A** | **S** |
| **Feb** | 6160 | 2500 | 3810 | 1060 | 3150 | 3130 | 8560 | 3960 | 310 | 8160 |
| **Mar** | 9530 | 4540 | 6570 | 9960 | 7000 | 6610 | 1630 | 2740 | 7730 | 4260 |
| **Apr** | 3690 | 4480 | 4300 | 5360 | 2950 | 4800 | 9370 | 3470 | 1910 | 8420 |
| **May** | 3920 | 3220 | 2340 | 8080 | 2100 | 4640 | 9430 | 7130 | 9470 | 3150 |
| **Jun** | 20 | 6660 | 7610 | 4800 | 2140 | 1900 | 7480 | 8570 | 3930 | 7330 |
| **July** | 6180 | 7730 | 7600 | 5600 | 2650 | 6180 | 1040 | 1280 | 1990 | 5370 |
| **Aug** | 4460 | 480 | 5220 | 5460 | 6950 | 8130 | 1540 | 9030 | 1510 | 4590 |

A - Added amount (in kgs)

S - Amount taken to outlets (in kgs)

The bracket shows the initial amount of lettuce on each floor.

16. How much lettuce was present on the 2nd floor of the cold storage at the end of June?

a. 3642

b. 5642

c. 8394

d. 1287

17.Which floor had the maximum amount of lettuce kept at the end of July?

a. 1st

b. 2nd

c. 4th

d. 5th

18. The amount of lettuce on 3rd floor at the end of March is what percent of lettuce on the 5th floor at the end of May?

a. 18.19%

b. 75.22%

c. 54.18%

d. None of these

19. What was the total amount of lettuce present in the cold storage at the end of August?

a. 22819

b. 26312

c. 28189

d. 23157

20. What is the change in the amount of lettuce on 4th floor at the end of June with respect to the initial amount of lettuce on the 4th floor?

a. 10600

b. 9150

c. 12147

d. 11080

Practice Exercise – Difficult

**Directions (Q. Nos. 1 – 4):** *Answer the questions based on the following information.*

The year is 2089. Beijing, London, New York, and Paris are in contention to host the 2096 Olympics. The eventual winner is determined through several rounds of voting by members of the IOC with each member representing a different city. All the four cities in contention are also represented in IOC.

1) In any round of voting, the city receiving the lowest number of votes in that round gets eliminated. The survivor after the last round of voting gets to host the event.

2) A member is allowed to cast votes for at most two different cities in all rounds of voting combined. (Hence, a member becomes ineligible to cast a vote in a given round if both the cities (s)he voted for in earlier rounds are out of contention in that round of voting.)

3) A member is also ineligible to cast a vote in a round if he city (s)he represents is in contention in that round of voting.

4) As long as the member is eligible, (s)he must vote and vote for only one candidate city in any round of voting.

The following incomplete table shows the information on cities that received the maximum and minimum votes in different rounds, the number of votes cast in their favour, and the total votes that were cast in those rounds.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Round** | **Total Votes** | **Maximum Votes Cast** | | **Eliminated** | |
| **City** | **Votes** | **City** | **Votes** |
| 1 |  | London | 30 | New York | 12 |
| 2 | 83 | Paris | 32 | Beijing | 21 |
| 3 | 75 |  |  |  |  |

It is also known that:

● All those who voted for London and Paris in round, 1 con tinued to vote for the same cities in subsequent rounds as long as these cities were in contention. 75% of those who voted for Beijing in round 1, voted for Beijing in round 2 as well.

● Those who voted for New York in round 1, voted either for Beijing or Paris in round 2.

● The difference in votes cast for the two contending cities in the last round was 1.

● 50% of those who voted for Beijing in round 1, voted for Paris in round 3. **[CAT 2005]**

1. What percentage of members from among those who voted for New York in round 1, voted for Beijing in round 2?

a. 33.33

b. 50

c. 66.67

d. 75

2. What is the number of votes cast for Paris in round 1?

a. 16

b. 18

c. 22

d. 24

3. What percentage of members from among those who voted for Beijing in round 2 and were eligible to vote in round 3, voted for London?

a. 33.33

b. 38.10

c. 50

d. 66.67

4. Which of the following statements must be true?

I. IOC member from New York must have voted for Paris in round 2.

II. IOC member from Beijing voted for London in round 3.

a. Only I

b. Only II

c. Both I and II

d. Neither I nor II

**Directions (Q. Nos. 5 – 7):** *Answer the questions based on the following information.*

The table below shows the data about the SSC test given by the candidates in two different years.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Years** | **A** | **B** | **C** | **D** | **E** |
| **2012** | Graduates | 68508 | 66501 | 725 | 205 |
| Post Graduates | 22706 | 18504 | 156 | 65 |
| **2013** | Graduates | 72587 | 69249 | 705 | 179 |
| Post Graduates | 44809 | 39615 | 468 | 115 |

A - Qualification

B - Number of students who have filled application forms

C - Number of students appeared for first stage

D - Number of students clearing first stage and moving to second stage

E - Number of students clearing second stage

Each question is based on the data above and there are two statements A and B, either of which can be true or false on the basis of the data given in the table.

Mark your answer as:

a. If only I is true

b. If only II is true

c. If both I and II are true

d. If neither A nor B is true

5. **Statement I:** The success rate of moving from first stage to the second stage for graduates was worse than the post graduates in 2013.

**Statement II:** The success rate of moving from first stage to second stage for post graduates was better in 2012 than in 2013.

6. **Statement I:** In 2012, the number of post graduates finally selected as a proportion of those who filled the application form, was higher that the corresponding proportion of graduates.

**Statement II:** In 2012, among those who appeared in the second stage, graduates had a greater success rate than post graduates.

7. **Statement I:** The percentage of students who filled the form but did not appeared for the first stage among post graduates decreased from 2012 to 2013.

**Statement II:** The percentage of students who filled the form but did not appeared for the first stage among graduates was larger than among post graduates in 2013.

**Directions (Q. Nos. 8 – 12):** *Answer the questions based on the following information.*

The table below shows the amount of currency recieved by exchanging 1 Euro in 5 different months of the year 2015.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | USD | GBP | AUD | AED | SAR | KWD | CHF |
| Jan | 1.372 | 0.827 | 1.539 | 5.045 | 5.151 | 0.391 | 1.219 |
| Feb | 1.374 | 0.829 | 1.541 | 5.047 | 5.154 | 0.387 | 1.227 |
| Mar | 1.380 | 0.824 | 1.546 | 5.069 | 5.176 | 0.387 | 1.214 |
| Apr | 1.386 | 0.820 | 1.495 | 5.093 | 5.200 | 0.389 | 1.219 |
| May | 1.368 | 0.797 | 1.441 | 5.024 | 5.130 | 0.385 | 1.213 |

USD = US Dollar GBP = British Pound

AUD = Australian Dollar AED = UAE Dirham

SAR = Saudi Riyal KWD = Kuwaiti Dinar

CHF = Swiss Franc

8. The rate of 1 Australian Dollar against Euro in the month of March is:

a. 0.652

b. 0.649

c. 0.646

d. 0.650

9. Which currency shows the highest percentage change at the end of this 5 month period in its value?

a. AED

b. SAR

c. CHF

d. None of these

10. Andrew has 1000 Euros with him, he first converts them to USD in month of January, then converts those USD's to AUD in month of March and finally converts these AUD's back to Euro's in the month of May. What is his gain or loss in this transaction?

a. 5.17% loss

b. 6.62% gain

c. 3.15% loss

d. 4.51% gain

11. Christina possess 1000 USD, 900 GBP, 800 AUD, 700 SAR and 600 CHF. She converts all the currencies into Euro's in the month of April. What will be the amount of Euro's that she will possess after this exchange?

a. 3600

b. 3100

c. 2785

d. 2981

12. If all the currencies have the same monthly in change in their exchange rates for the month of June as well, then what will be the difference in the amount of Euro's that can be purchased in for 1 SAR and 1 KWD in the month of June?

a. 1.861

b. 2.393

c. 1.428

d. 2.115

**Directions (Q. Nos. 13 – 16):** *Answer the questions based on the following information.*

TRAI the body for regulating the telecom sector has recently received a proposal from the union of telecom operators regarding the new pricing regime. The table below shows the cost of one minute while calling from one operator’s network to another operator’s network (row wise). All the costs are in paisa. For e.g.:- When Airtel customer calls someone using Airtel number then the cost will be 30 paisa, if any Airtel customer calls any BSNL customer then he will be charged 80 paisa.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | AT | VF | ID | AC | BS | RL | Tata | MT | SP | MS |
| AT | 30 | 100 | 120 | 60 | 80 | 150 | 200 | 60 | 150 | 200 |
| VF | 120 | 20 | 210 | 70 | 90 | 190 | 110 | 140 | 170 | 220 |
| ID | 160 | 100 | 50 | 140 | 100 | 140 | 90 | 170 | 190 | 180 |
| AC | 70 | 120 | 160 | 60 | 110 | 180 | 160 | 210 | 80 | 140 |
| BS | 80 | 100 | 140 | 200 | 40 | 160 | 110 | 50 | 180 | 80 |
| RL | 220 | 110 | 120 | 80 | 170 | 80 | 120 | 80 | 110 | 140 |
| Tata | 130 | 80 | 120 | 130 | 220 | 170 | 110 | 250 | 130 | 200 |
| MT | 110 | 90 | 120 | 140 | 160 | 220 | 160 | 80 | 240 | 130 |
| SP | 280 | 160 | 170 | 220 | 220 | 230 | 170 | 180 | 160 | 150 |
| MS | 140 | 140 | 170 | 100 | 170 | 270 | 140 | 130 | 110 | 90 |

AT - Airtel VF - Vodafone ID - Idea

AC - Aircel BS - BSNL RL -Reliance

MT - MTNL SP - Spice MS - MTS

The calling costs are proposed for the first 3 months of the year 2010, *i.e.* from January 2010 to March 2010. From April 1, 2010 to June 30, 2010 the firms plan to form a cartel named PSU, where in BSNL and MTNL decides that calls among themselves *i.e.* any call from BSNL to BSNL or BSNL to MTNL or MTNL to MTNL or MTNL to BSNL will be charged as 50 paisa and the remaining service providers forms another cartel named Service and decides to slash charges by 20% whenever there is a call from one service provider to another but the charges of calls inside one service providers network remain the same. Whenever there is a call between the two cartels *i.e.* one service provider of one cartel and another from the second one then the call charges remain the same. After June 30, Tata and Reliance breaks out of Service and they both form Quality. So for the remaining year there are 3 cartels PSU, Service and Quality. PSU and Service continue the rates and Quality gives a discount of 40% among themselves, while the other two cartels continue in the same way.

13. In any month of 2010, customer of Aircell made total calls of 10.00,000 lakh minutes out of which 60% were to customer of Aircell, 20% to Vodafone, 10% to Airtel and 10% to BSNL. What was the total revenue that Aircell earned for those 10,00,000 minutes?

a. Rs. 7.8 lakhs

b. Rs. 6.46 lakhs

c. Rs. 7.5 lakhs

d. Cannot be determined

14. During the 2nd quarter *i.e.* April to June, how many service providers are there whose customers are charged less for at least one other provider than what they are charged for calls to the same provider?

a. 0

b. 2

c. 6

d. Cannot be determined

15. For the month of November, if MTS customers can call only the MTS customer then what will be loss/profit incurred by MTS if there 50% of minutes have been to MTS and 50% to Aircell?

a. Profit of 5.26%

b. Loss of 5.26%

c. No profit no loss

d. Cannot be determined

16. If in July 2010, Airtel received Rs. 20 lakh in revenue from the customers calling. Out of the total minutes called 40% of the revenue was made to Airtel itself. Then what can be the maximum number of minutes that Airtel can have knowing that out of the remaining 60% revenue; 30% of the revenue was gained by call to customers of x subscriber, 20% to customers of y subscriber and 10% to customers of z subscriber?

a. 8333333

b. 7333333

c. 9333333

d. None of these

**Directions (Q. Nos. 17 – 20):** *Answer the questions based on the following information.*

Honda Motors manufactures cars in their Chennai plant. The performance of the plant for 10 consecutive years is given below. The plant when started the operations in year Y1 has a cash surplus of 10 million rupees and no stock was there in the plant. It is also know that for every unit of car manufacture 2 units of body and 3 units of engine are used.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** | **Y6** | **Y7** | **Y8** | **Y9** | **Y10** |
| PR | 15 | 13 | 20 | 18 | 25 | 12 | 17 | 18 | 16 | 15 |
| SA | 12 | 10 | 22 | 15 | 24 | 19 | 15 | 15 | 15 | 19 |
| SP | 20 | 20 | 22 | 23 | 24 | 30 | 28 | 28 | 28 | 28 |
| FC | 60 | 65 | 65 | 67 | 70 | 70 | 73 | 75 | 75 | 80 |
| CB | 15 | 20 | 30 | 37.5 | 38 | 60 | 40 | 42 | 41 | 35 |
| CE | 20 | 30 | 40 | 41 | 41.5 | 70 | 50 | 47 | 45 | 37.5 |

PR - Production (000 units) SA - Sales (000 units)

SP - Selling price (000 Rs./unit) FC - Fixed Cost (Rs. Million)

CB - Cost of body (00 Rs./unit of body)

CE - Cost of engine (00 Rs./unit of engine)

17. At end of which year did the cash surplus touched the lowest point?

a. 2009

b. 2008

c. 2005

d. 2004

18. At end of which year did the cumulative stock was the lowest?

a. 2001

b. 2006

c. 2007

d. 2010

19. At end of which year did Honda motors earned the highest profit?

a. 2010

b. 2006

c. 2003

d. 2001

20. Which year saw the highest percentage increase in the cumulative stock? (except 2001)

a. 2002

b. 2004

c. 2007

d. 2008