DILR CAT 2019 – Slot 2

SET 1: Rifle Shooting

Ten players, as listed in the table below, participated in a rifle shooting competition comprising of 10 rounds. Each round had 6 participants. Players numbered 1 through 6 participated in Round 1, players 2 through 7 in Round 2,..., players 5 through 10 in Round 5, players 6 through 10 and 1 in Round 6, players 7 through 10, 1 and 2 in Round 7 and so on.

Player No.	Player Name	Points after Round 6	Points after Round 10
1	Amita	8	18
2	Bala	2	5
3	Chen	3	6
4	David	6	6
5	Eric	3	10
6	Fatima	10	10
7	Gordon	17	17
8	Hansa	1	4
9	Ikea	2	17
10	Joshin	14	17

The top three performances in each round were awarded 7, 3 and 1 points respectively. There were no ties in any of the 10 rounds. The table below gives the total number of points obtained by the 10 players after Round 6 and Round 10.

The following information is known about Rounds 1 through 6:
1. Gordon did not score consecutively in any two rounds.
2. Eric and Fatima both scored in a round.

The following information is known about Rounds 7 through 10:
1. Only two players scored in three consecutive rounds. One of them was Chen. No other player scored in any two consecutive rounds.
2. Joshin scored in Round 7, while Amita scored in Round 10.
3. No player scored in all the four rounds.

1. What were the scores of Chen, David, and Eric respectively after Round 3?
A) 3, 0, 3   B) 3, 3, 0   C) 3, 3, 3   D) 3, 6, 3

2 . Which three players were in the last three positions after Round 4?
A) Hansa, Ikea, Joshin   B) Bala, Chen, Gordon
C) Bala, Ikea, Joshin   D) Bala, Hansa, Ikea

3. Which player scored points in maximum number of rounds?
A) Joshin   B) Chen
C) Ikea   D) Amita

4. Which players scored points in the last round?
A) Amita, Bala, Chen   B) Amita, Chen, David
C) Amita, Eric, Joshin   D) Amita, Chen, Eric

SET 2: Languages spoken

In the table below, the check marks indicate all languages spoken by five people: Paula, Quentin, Robert, Sally and Terence. For example, Paula speaks only Chinese and English.

	Arabic	Basque	Chinese	Dutch	English	French
Paula			✔		✔	
Quentin				✔	✔	
Robert	✔					✔
Sally		✔			✔	
Terence			✔			✔

These five people form three teams, Team 1, Team 2 and Team 3. Each team has either 2 or 3 members. A team is said to speak a particular language if at least one of itsmembers speak that language.
 The following facts are known.
(1) Each team speaks exactly four languages and has the same number of members.
(2) English and Chinese are spoken by all three teams, Basque and French by exactly two teams and the other languages by exactly one team.
(3) None of the teams include both Quentin and Robert.
(4) Paula and Sally are together in exactly two teams.
(5) Robert is in Team 1 and Quentin is in Team 3.

1. Who among the following four is not a member of Team 2?
A) Sally   B) Paula   C) Quentin   D) Terence

2 .Who among the following four people is a part of exactly two teams?
A) Sally   B) Quentin   C) Robert   D) Paula

3. Who among the five people is a member of all teams?
A) No one   B) Terence   C) Sally   D) Paula

4. Apart from Chinese and English, which languages are spoken by Team 1?
A) Basque and French   B) Arabic and French
C) Basque and Dutch   D) Arabic and Basque

SET 3: Students & Proposals

Students in a college are discussing two proposals --
A: a proposal by the authorities to introduce dress code on campus, and
B: a proposal by the students to allow multinational food franchises to set up outlets on college campus.
A student does not necessarily support either of the two proposals.
In an upcoming election for student union president, there are two candidates in fray: Sunita and Ragini. Every student prefers one of the two candidates.
A survey was conducted among the students by picking a sample of 500 students. The following information was noted from this survey.
1) 250 students supported proposal A and 250 students supported proposal B.
2) Among the 200 students who preferred Sunita as student union president, 80% supported proposal A.
3) Among those who preferred Ragini, 30% supported proposal A.
4) 20% of those who supported proposal B preferred Sunita.
5) 40% of those who did not support proposal B preferred Ragini.
6) Every student who preferred Sunita and supported proposal B also supported proposal A.
7) Among those who preferred Ragini, 20% did not support any of the proposals.

1. Among the students surveyed who supported proposal A, what percentage preferred Sunita for student union president?
[TITA]

2. What percentage of the students surveyed who did not support proposal A Preferred Ragini as student union president?
[TITA]

3. What percentage of the students surveyed who supported both proposals A and B preferred Sunita as student union president?
A) 25   B) 50   C) 40   D) 20

4. How many of the students surveyed supported proposal B, did not support proposal A and preferred Ragini as student union president?
A) 40   B) 210   C) 200   D) 150

SET 4: MT & ET

The first year students in a business school are split into six sections. In 2019 the Business Statistics course was taught in these six sections by Annie, Beti, Chetan, Dave, Esha, and Fakir. All six sections had a common midterm (MT) and a common endterm (ET) worth 100 marks each. ET contained more questions than MT. Questions for MT and ET were prepared collectively by the six faculty members. Considering MT and ET together, each faculty member prepared the same number of questions.
Each of MT and ET had at least four questions that were worth 5 marks, at least three questions that were worth 10 marks, and at least two questions that were worth 15 marks. In both MT and ET, all the 5-mark questions preceded the 10-mark questions, and all the 15-mark questions followed the 10-mark questions.

 The following additional facts are known.

 ii. Annie prepared the fifth question for both MT and ET. For MT, this question carried 5 marks.
iii. Annie prepared one question for MT. Every other faculty member prepared more than one questions for MT.
iv. All questions prepared by a faculty member appeared consecutively in MT as well as ET.
v. Chetan prepared the third question in both MT and ET; and Esha prepared the eighth question in both.
vi. Fakir prepared the first question of MT and the last one in ET. Dave prepared the last question of MT and the first one in ET.

 1. The second question in ET was prepared by:
A) Esha   B)Chetan   C) Dave   D)Beti

2 . How many 5-mark questions were there in MT and ET combined?
A)   Cannot be determined   B) 12
C) 10   D) 13

3. Who prepared 15-mark questions for MT and ET?
A) Only Dave, Esha and Fakir   B) Only Beti, Dave, Esha and Fakir
C) Only Esha and Fakir   D) Only Dave and Fakir

4. Which of the following questions did Beti prepare in ET?
A) Ninth question   B) Tenth question
C) Fourth question   D) Seventh question

SET 5: Three doctors

Three doctors, Dr. Ben, Dr. Kane and Dr. Wayne visit a particular clinic Monday to Saturday to see patients. Dr. Ben sees each patient for 10 minutes and charges Rs. 100/-. Dr. Kane sees each patient for 15 minutes and charges Rs. 200/-, while Dr. Wayne sees each patient for 25 minutes and charges Rs. 300/-.

The clinic has three rooms numbered 1, 2 and 3 which are assigned to the three doctors as per the following table.

Room no.	Monday & Tuesday	Wednesday & Thursday	Friday & Saturday
1	Ben	Wayne	Kane
2	Kane	Ben	Wayne
3	Wayne	Kane	Ben

The clinic is open from 9 a.m. to 11.30 a.m. every Monday to Saturday.

On arrival each patient is handed a numbered token indicating their position in the queue, starting with token number 1 every day. As soon as any doctor becomes free, the next patient in the queue enters that emptied room for consultation. If at any time, more than one room is free then the waiting patient enters the room with the smallest number. For example, if the next two patients in the queue have token numbers 7 and 8 and if rooms numbered 1 and 3 are free, then patient with token number 7 enters room number 1 and patient with token number 8 enters room number 3.

1. What is the maximum number of patients that the clinic can cater to on any single day?

A)   15   B) 30   C) 31   D)12

2 . The queue is never empty on one particular Saturday. Which of the three doctors would earn the maximum amount in consultation charges on that day?

A) Dr. Kane   B) Dr. Wayne   C) Dr. Ben   D)Both Dr. Wayne and Dr. Kane

3. Mr. Singh visited the clinic on Monday, Wednesday, and Friday of a particular week, arriving at 8:50 a.m. on each of the three days. His token number was 13 on all three days. On which day was he at the clinic for the maximum duration?

A) Friday   B) Wednesday   C) Same duration on all three days   D) Monday

4. On a slow Thursday, only two patients are waiting at 9 a.m. After that two patients keep arriving at exact 15 minute intervals starting at 9:15 a.m. -- i.e. at 9:15 a.m., 9:30 a.m., 9:45 a.m. etc. Then the total duration in minutes when all three doctors are simultaneously free is

A) 30   B) 10   C) 15   D) 0

SET 6: Rainfall

To compare the rainfall data, India Meteorological Department (IMD) calculated the Long Period Average (LPA) of rainfall during period June-August for each of the 16 states. The figure given below shows the actual rainfall (measured in mm) during June-August, 2019 and the percentage deviations from LPA of respective states in 2018. Each state along with its actual rainfall is presented in the figure.
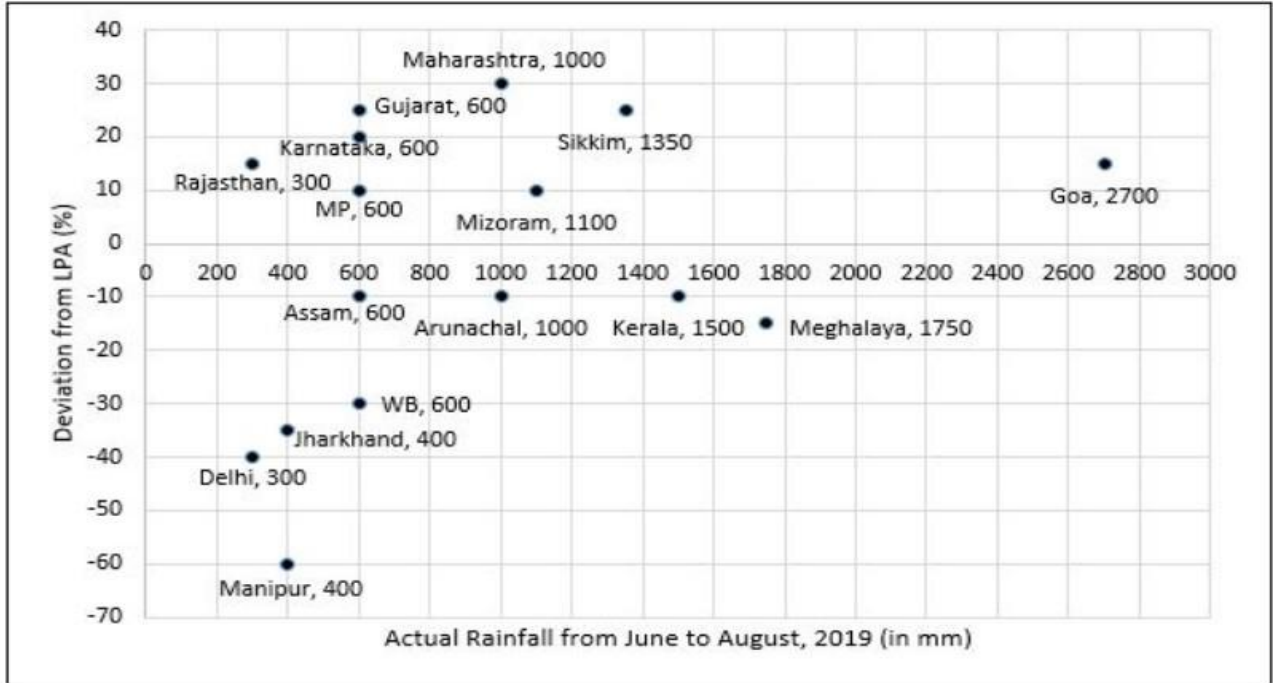
1. If a 'Heavy Monsoon State' is defined as a state with actual rainfall from June-August, 2019 of 900 mm or more, then approximately what percentage of 'Heavy Monsoon States' have a negative deviation from respective LPAs in 2019?
A)   75.00   B) 57.14   C) 42.86   D) 14.29

2. If a 'Low Monsoon State' is defined as a state with actual rainfall from June-August, 2019 of 750 mm or less, then what is the median 'deviation from LPA' (as defined in the Y-axis of the figure) of 'Low Monsoon States'?
A)   -30%   B) 10%   C) -20%   D) -10%

3. What is the average rainfall of all states that have actual rainfall of 600 mm or less in 2019 and have a negative deviation from LPA?
A)   450 mm   B) 367 mm   C) 460 mm   D) 500 mm

4. The LPA of a state for a year is defined as the average rainfall in the preceding 10 years considering the period of June-August. For example, LPA in 2018 is the average rainfall during 2009-2018 and LPA in 2019 is the average rainfall during 2010-2019. It is also observed that the actual rainfall in Gujarat in 2019 is 20% more than the rainfall in 2009. The LPA of Gujarat in 2019 is closest to
A) 475 mm   B) 490 mm   C) 505 mm   D) 525 mm

SET 7: Three pouches
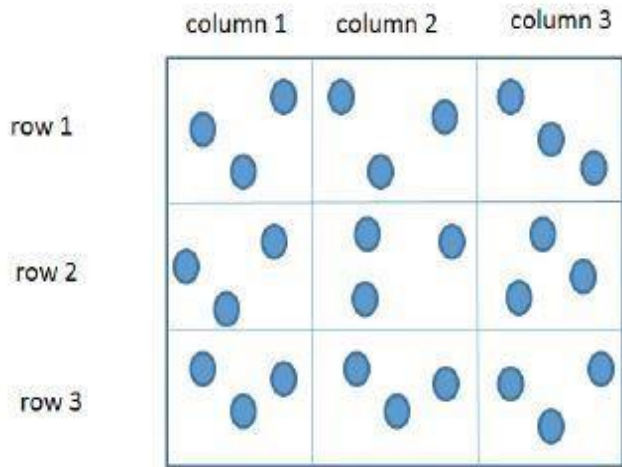
	Column 1	Column 2	Column 3
Row 1	(2,4)	(6, 8)	(1, 3)
Row 2	(3,5)	(1,1)	(6, 20)
Row 3	(1,2)	(1,2)	(2,5)

Three pouches (each represented by a filled circle) are kept in each of the nine slots in a 3 × 3 grid, as shown in the figure. Every pouch has a certain number of one-rupee coins. The minimum and maximum amounts of money (in rupees) among the three pouches in each of the nine slots are given in the table. For example, we know that among the three pouches kept in the second column of the first row, the minimum amount in a pouch is Rs. 6 and the maximum amount is Rs. 8. There are nine pouches in any of the three columns, as well as in any of the three rows. It is known that the average amount of money (in rupees) kept in the nine pouches in any column or in any row is an integer. It is also known that the total amount of money kept in the three pouches in the first column of the third row is Rs. 4

1. What is the total amount of money (in rupees) in the three pouches kept in the first column of the second row?
[TITA]

2 . How many pouches contain exactly one coin?
[TITA]

4. What is the number of slots for which the average amount (in rupees) of its three pouches is an integer?
*[TITA]*

5. The number of slots for which the total amount in its three pouches strictly exceeds Rs. 10 is
[TITA]

SET 8: Revenue & Cost

A large store has only three departments, Clothing, Produce, and Electronics. The following figure shows the percentages of revenue and cost from the three departments for the years 2016, 2017 and 2018. The dotted lines depict percentage levels. So for example, in 2016, 50% of store's revenue came from its Electronics department while 40% of its costs were incurred in the Produce department.
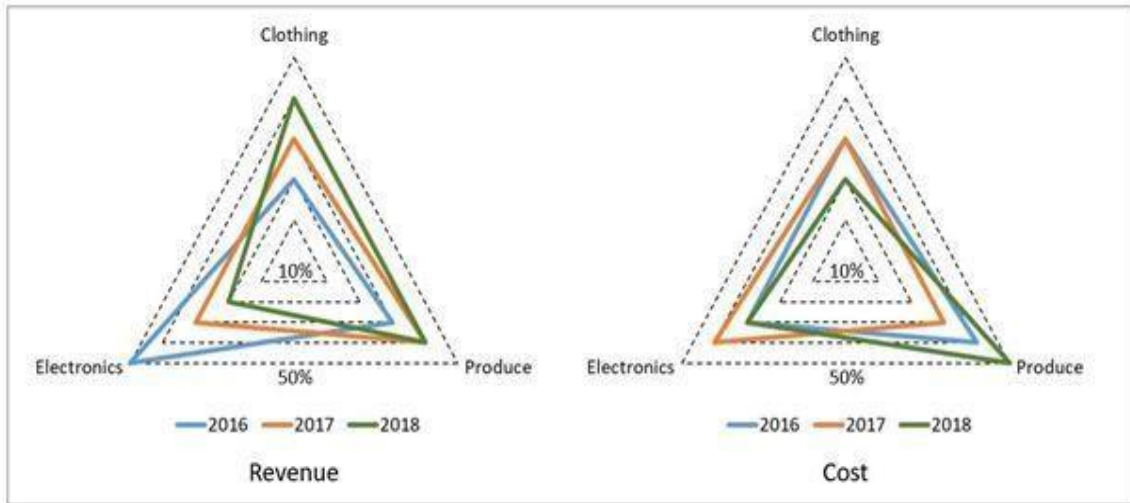
Revenue

Cost

In this setup, Profit is computed as (Revenue – Cost) and Percentage Profit as Profit/Cost × 100%.
 It is known that
1. The percentage profit for the store in 2016 was 100%.
2. The store's revenue doubled from 2016 to 2017, and its cost doubled from 2016 to 2018.
3. There was no profit from the Electronics department in 2017.
4. In 2018, the revenue from the Clothing department was the same as the cost incurred in the Produce department.

1. What was the percentage profit of the store in 2018?
[TITA]

2 . What was the ratio of revenue generated from the Produce department In 2017 to that in 2018?
A) 8 : 5   B) 16 : 9   C) 4 : 3   D) 9 : 16

3. What percentage of the total profits for the store in 2016 was from the Electronics department?
[TITA]

4. What was the approximate difference in profit percentages of the store in 2017 and 2018?
A) 8.3   B) 33.3   C) 25.0   D) 15.5

Solution 35:
After Round 3, the scored of Chen, David and Eric were 3, 3 and 3 points respectively.
Answer: (3, 3, 3)

Solution 36:
The three players who were in the last position after Round 4 were Joshin (0 points), Ikea (1 point) and Hansa (1 point).
Answer: (Hansa, Ikea, Joshin)

Solution 37:
Ikea scored in the maximum number of rounds (5 rounds).
Answer: (Ikea)

Solution 38:
The players who scored in the last round are Amita. Chen and Eric.
Answer: (Amita, Chen, Eric)

Solution for Question 39 to 42
From (1) and (5), the persons in Team 1 speak English. Chinese. Arabic and French. (Robert speaks both Arabic and French).
From (1) and (5), the persons in Team 3 speak. English, Chinese and Dutch. (Quentin speaks Dutch and English). Since each person speaks two languages and each team speaks exactly four languages, we need to find one person for Team 3. who speaks one language among English, Chinese and Dutch and a different language apart from these three. Since, Paula and Sally together speak Basque, Chinese and English and they are together in exactly two teams, they cannot be in Team 1. They must be in Teams 2 and 3.
Hence, from (5) and the above, Paula, Quentin and Sally, (Basque. Chinese. Dutch and English) are in Team 3. Since there are three persons in Team 3. Teams 1 and 2 should also have three persons each. Team 1 speaks, English, Chinese, Arabic and French.
Robert (Arabic and French) is one of the team members. Now, two more persons, who speak languages among the above four are to be selected. It is possible only with Paula and Terence.
From (2) Basque and French are spoken by two teams. Hence, Team 2 speaks these two languages. Paula and Sally are there in Team 2 (Basque, Chinese and English). We need to find one more person, who speaks one of these three languages and French. It is possible with only Terence.

Team	1	2	3
Persons	Robert, Paula, Terence	Paula, Sally, Terence	Quentin, Paula, Sally
Languages	Arabic, Chinese, English, French	Basque, Chinese, English, French	Basque, Chinese, Dutch, English

Solution 39:
Quentin is not a member of Team 2.
Answer: (Quentin)

Solution 40:
Sally is part of exactly two teams.
Answer: (Sally)

Solution 41:
Paula is a member of all the teams.
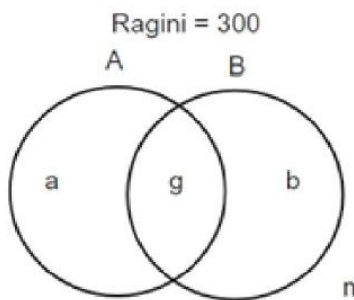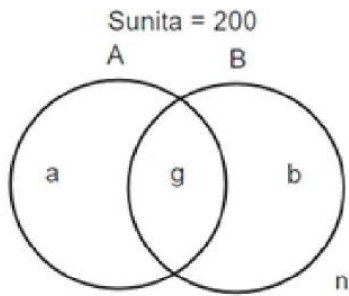Answer: (Paula)

Solution 42:
Apart from Chinese and English, Team 1 speaks Arabic and French.
Answer: (Arabic and French)

Solution for Question 43 to 46
The set of students who like Sunita and Ragini are disjoint sets.
Hence, the Venn diagram can be drawn as follows

Sunita = 200

Ragini = 300

There are 500 students in all.
From statement (2)
Sunita = 200. Hence, Ragini = 300.
From statement (1) A (Sunita) + A (Ragini) = 250 and B (Sunita) + B (Ragini) = 250.
From (2), A (Sunita) = 160. Hence, A (Ragini) = 90.

From (4), B (Sunita) = 20 % of 250 = 50. Hence, B (Ragini) = 200.
From (6), g (Sunita) = 50 and hence, b (Sunita) = 0 and a (Sunita) = 110. Hence, n (Sunita) =
40.
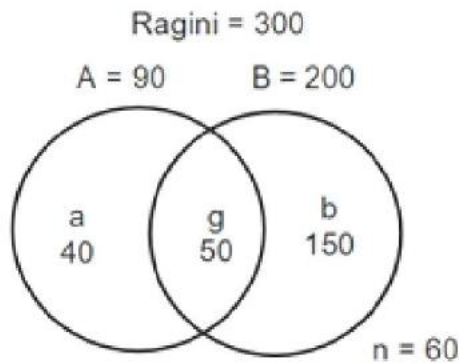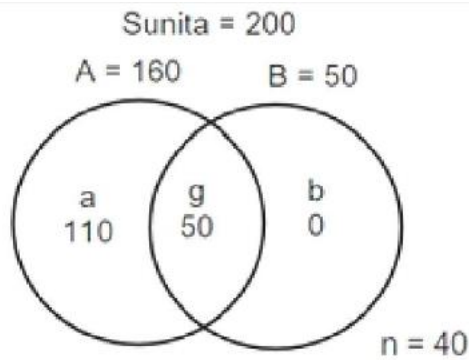From (7), n (Ragini) = 60
It is given that 250 support B, hence the other 250 do not support B.
From (5), (a + n) of Ragini = 40 % of 250 = 100. Hence, a (Ragini) = 40.
Thus, the final solution is as follows.
Solution 43:

Sunita = 200

A = 160   B = 50

a
110

g
50

b
0

n = 40

Ragini = 300

A = 90   B = 200

a
40

g
50

b
150

n = 60

Solution 43:

The required value is $\dfrac{160}{250} \times 100 = 64$

Solution 44:

The required answer is $\dfrac{210}{250} \times 100 = 84$.

Solution 45:

The required answer is $\dfrac{50}{250} \times 100 = 50$.

Solution 46:

The students who supported proposal *B* but not *A* are b (Sunita) and b (Ragini). Among them those supported Ragini are *b* (Ragini)   150. Ans: (150)

Solution for Question 47 to 50

In the following the names of the faculties are referred by first letter of their names. Given that each of MT and ET carries 100 marks. Each of MT and ET has at least four

questions of 5 marks (4 x 5 = 20), at least three questions of 10 marks (3 x 10 =30) and atleast two questions of 15 marks (2 x 15 = 30). These together add up to 80 marks. Theremaining 20 marks can be of the following possible combinations. (Four questions of 5marks) or (two questions of 10 marks) or (one question of 5 marks and 1question of 15marks)or (two questions of five marks and one question of ten marks). Hence, the total number of questions in MT or ET can be 11 or 12 or 13. It is given that ET has morenumberof questions than in MT. Hence, MT has 11 or 12 questions.

It is given that the number of questions given by any faculty in both MT and ET together is the same. If MT has 12 questions and ET has 13 questions, or if MT has 11 questions and ET has 12 questions, this condition cannot be satisfied. Hence, MT has 11 (Five 5 marks, three 10 marks and three 15 marks) questions and ET has 13 questions (eight 5 marks, three ten marks and two 15 marks). This implies, each faculty has given four questions in MT and ET together. Since it is given that faculty A has given only one question in MT and each of the other faculties has given more than one question, each of the faculties B, C, D, E and F has given two questions in MT. This implies faculty A has given three questions in ET and all other faculties have given two questions each in ET. From the given data we get the following.

Q No.	MT (Faculty name/Marks)	ET (Faculty name/Marks)
1	F	D
2		
3	C	C
4		
5	A / 5	A
6		
7		
8	E	E
9		
10		
11	D	
12	No 12th question in MT	
13	No 13th question in MT	F

Except A, every other faculty gave at least two questions for MT and all the questions of a faculty appeared consecutively. Hence, 2nd question in MT is given by F, 4th by C, 10th by D. B also has given two questions and both appeared consecutively. Hence, 6th and 7th questions

are given by B and the 9th question is given by E. In each test first all 5 marks questions appeared followed by 10 marks questions and then 15 marks questions. It can be understood that MT has five 5 marks, three 10 marks and three 15 marks. Hence, in MT questions 1 to 5 carry 5 marks each, 6 to 8 carry 10 marks each and 9 to 11 carry 15 marks each.

It can be understood that A has given three questions for ET and each of the others has

given two questions. Hence, the 2nd question of ET is given by D, the 4th question by C, 6th and 7th questions by A, 9th by E, 10th and 11th by B and 12th by F. Since ET has eight 5marks questions, three ten marks questions and two 15 marks questions, questions 1 to 8 of ET carry 8 marks each, 9 to 11 carry ten marks each, 12 and 13 carry 15 marks each. Thus, we get the following:

Q No.	MT (Faculty name/Marks)	ET (Faculty name/Marks)
1	F/5	D/5
2	F/5	D/5
3	C/5	C/5
4	C/5	C/5
5	A / 5	A/5
6	B/10	A/5
7	B/10	A/5
8	E/10	E/5
9	E/15	E/10
10	D/15	B/10
11	D/15	B/10
12	No 12th question in MT	F/15
13	No 13th question in MT	F/15

Solution 47:
The second question in ET was prepared by Dave.
Ans: (Dave)

Solution 48:
In MT and ET together, there are 13 questions
Ans: (13)

Solution 49:
The 15 marks question in MT and ET are prepared by Esha, Dave and Fakir only.
Ans: (Only Dave, Esha and Fakir)

Solution 50:
Beti prepared 10thquestion in ET.
Ans: (Tenth question)

Solution 51:
From 9-11: 30, we have 150 minutes. Doctors Ben, Kane and Wayne take 10,15 and 20 minutes respectively for each patient. Therefore Ben, Kane and Wayne can see 150/10=15, 150/15=10 and 150/25=6 respectively. Therefore Ben, Kane and Wayne can see a maximum of 15,10 and 6 patients respectively every day. Sum =31

Solution 52:
Given, on Saturday, the queue is not empty.
=> Each doctor sees the maximum number of patients on a day.
Given Ben, Kane and Wayne charge Rs.100, 200 and 300 respectively.
=> Ben earns 15 (100)= Rs.1500,Kane earns 10(200)
= Rs .2000, Wayne earns 6(300)= Rs .1800
Therefore, Kane earns the maximum amount.
Ans: (Dr. Kane)

Solution 53:
Mr. Singh takes maximum duration when he enters Dr. Wayne's room, who sees each patient for 25 minutes.

Monday – timings / token numbers					
Ben	9:10 (4)	9:20 (6)	9:30 (8)	9:40 (10)	9:50 (12)
Kane	9:15 (5)		9:30 (9)	9:45 (11)	
Wayne	9:25 (7)				9:50 (13)

He was at the clinic for 85 minutes.
Similarly On Wednesday, he would meet Ben and he would be at the clinic for 70 minutes.
On Friday, he would meet Ben and he would be at the clinic for 70 minutes.
Therefore, Singh stays at the clinic for the maximum duration on Monday
Ans: (Monday)

Solution 54:

Thursday					
Wayne – Room no 1	9-9:25 – Token 1	(Free 9:25-9:30)	9:30-9:55-Token 5	(Free 9:55-10:00)	10-10:25 – Token 9
Ben – Room no 2	9-9:10 – Token 2 (Free 9:10-9:15)	9:15-9:25-Token 3 (Free 9:25-9:30)	9:30-9:40-Token 6 (Free 9:40-9:45)	9:45-9:55-Token 7 (Free 9:55 to 10:00)	10-10:10 – Token 10
Kane – Room no 3	(Free 9-9:15)	9:15-9:30-Token 4	(Free 9:30-9:45)	9:45-10:00-Token 8	(Free 10:00-10:15)

The above pattern continues.
Hence, there is no time where all the doctors are simultaneously free.
Ans: (0)
Solution for Question 55 to 58
The actual rainfall in 2019 and the Long Period
Average (LPA) for the different states are as follows.

SI No.	State	Actual	LPA
1.	Maharashtra	1000	770
2.	Gujarat	600	480
3.	Sikkim	1350	1080
4.	Karnataka	600	500
5.	Rajasthan	300	260
6.	MP	600	545
7.	Mizoram	1100	1000
8.	Goa	2700	2350
9.	Assam	600	665
10.	Arunachal	1000	1110
11.	Kerala	1500	1665
12.	Meghalaya	1750	2060
13.	WB	600	855
14.	Jharkhand	400	615
15.	Delhi	300	500
16.	Manipur	400	1000

Solution 55:
The heavy monsoon states are Maharashtra, Sikkim, Mizoram, Goa, Arunachal, Kerala and Meghalaya. Among these, Arunachal, Kerala and Meghalaya have a negative

deviation from respective LPAs in 2019 . The required percentage $= \dfrac{3}{7} \times 100 = 42.86\%$

Solution 56:

The Low monsoon states are Gujarat, Karnataka, Rajasthan, MP, Assam, WB, Jharkhand, Delhi and Manipur. The deviation from LPA for these states are 25,20,15 , 10,-10,-30,-35,-40
and -60. The median value is -10

Solution 57:
The states which have a negative deviation from LPA and have an actual rainfall of 600 mm or less are Assam, WB, Jharkhand, Delhi and Manipur. The average rainfall in these

states is $\dfrac{2300}{5} = 460 \ mm$

Solution 58:
The actual rainfall in Gujarat in 2019 is 600 mm. The rainfall in Gujarat in 2009 was 500 mm. As the value of 500 is replaced by 600 in calculating the LPA, the LPA would increase by 10 as it is the average of 10 years.
Ans: (490 mm)

Solution for Question 59 to 62
The minimum and maximum and possible number of coins (overall) in each slot would be as follows.

(2, 4) 8/9/10	(6, 8) 20/21/22	(1, 3) 5/6/7
(3, 5) 11/12/13	(1, 1) 3	(6, 20) 32 – 46
(1, 2) 4 (given)	(1, 2) 4/5	2, 5 9/10/11/12

It is given that the average amount of money kept in the nine pouches in any column or any row is an integer (a multiple of nine).

The total amount of money in the first column must be either 18 or 27. The minimum value of the sum of money in the three slots is $8+11+ 4 = 23$ and the maximum value is $10+13+ 4 = 27$.

∴ The number of coins in the first column of the three rows are $10(2 + 4 + 4), 13(3+ 5 + 5)$ and $4(1+ 2 +1)$ Similarly in the third row, the sum must be 18 and in the second column, the sum must be 27.

∴ The number of coins in the second column is $20(6 + 6 + 8) + 3(1+1+1)$ and $4(1+1+ 2)$

The third column in the first row would be $6(1+ 2 + 3)$ and the third column in the third row would be $10(2 + 3 +5)$ ⏺   ⏺   ⏺   ⏺

In the last column, the value in the second row would be 54   16   38(6   12   20)
We have the following figure for the number of coins in the pouches in each slot.

(2, 4, 4)	(6, 6, 8)	(1, 2, 3)
(3, 5, 5)	(1, 1, 1)	(6, 12, 20)
(1, 1, 2)	(1, 1, 2)	(2, 3, 5)

Solution 59:
The total amount of money in the three pouches in the first column of the second row is 13.
Ans: (13)

Solution 60:
Eight pouches contain exactly one coin.
Ans: (8)

Solution 61:
Only in two slots (row 2, column 2) and (row 1, column 3) is the average amount in the three pouches an integer.
Ans: (2)
In three slots (row 2, column 1), (row 1, column 2) and (row 2, column 3), the amount in the three pouches strictly exceeds 10.

Solution 62:
The percentage share in Revenue and cost in the different years are as follows.

	Year					
	2016		2017		2018	
	Revenue	Cost	Revenue	Cost	Revenue	Cost
Clothing	20	30	30	30	40	20
Produce	30	40	40	30	40	50
Electronics	50	30	30	40	20	30

Solution for Question 63 to 66

Assume the cost of the store in 2016 to be 100.

As the profit percentage that year was 100, the revenue of the store in that year would be 200 .

$\therefore$ Revenue in 2017 would be 400 and cost of the store in 2018 would be 200 . Given that in $2017, 30\%$ of $400 = 40\%$ of cost