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CDC 02 2022 DILR

Scorecard (procreview.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Accuracy (AccSelectGraph.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Qs Analysis (QsAnalysis.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Video Attempt / Solution (VideoAnalysis.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Solutions (Solution.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Bookmarks (Bookmarks.jsp?sid=aaaN5tjtX0b7WgArBjowyMon Jan 09 00:00:11 IST 2023&qsetId=NhdraSR/axQ=&qsetName=CDC 02 2022 DILR)

Section-1

Sec 1

Directions for questions 1 to 6: Answer the questions on the basis of the information given below.

While there may not be clear guidelines or rules and regulations for choosing an MBA college, there are certain parameters against which you can measure an MBA college. An agency surveyed 10 MBA colleges based on three parameters: Infrastructure (I), Faculty (F), and Placement Record (P). Each of these three parameters is measured on a scale of 1 to 9 (integers only). Then a college is classified on the basis of the total score obtained by adding up the scores of all the three parameters to their annual fee, as shown in the table below:

Total Score	1 to 9	10 to 13	14 to 16	17 to 20	21 to 27
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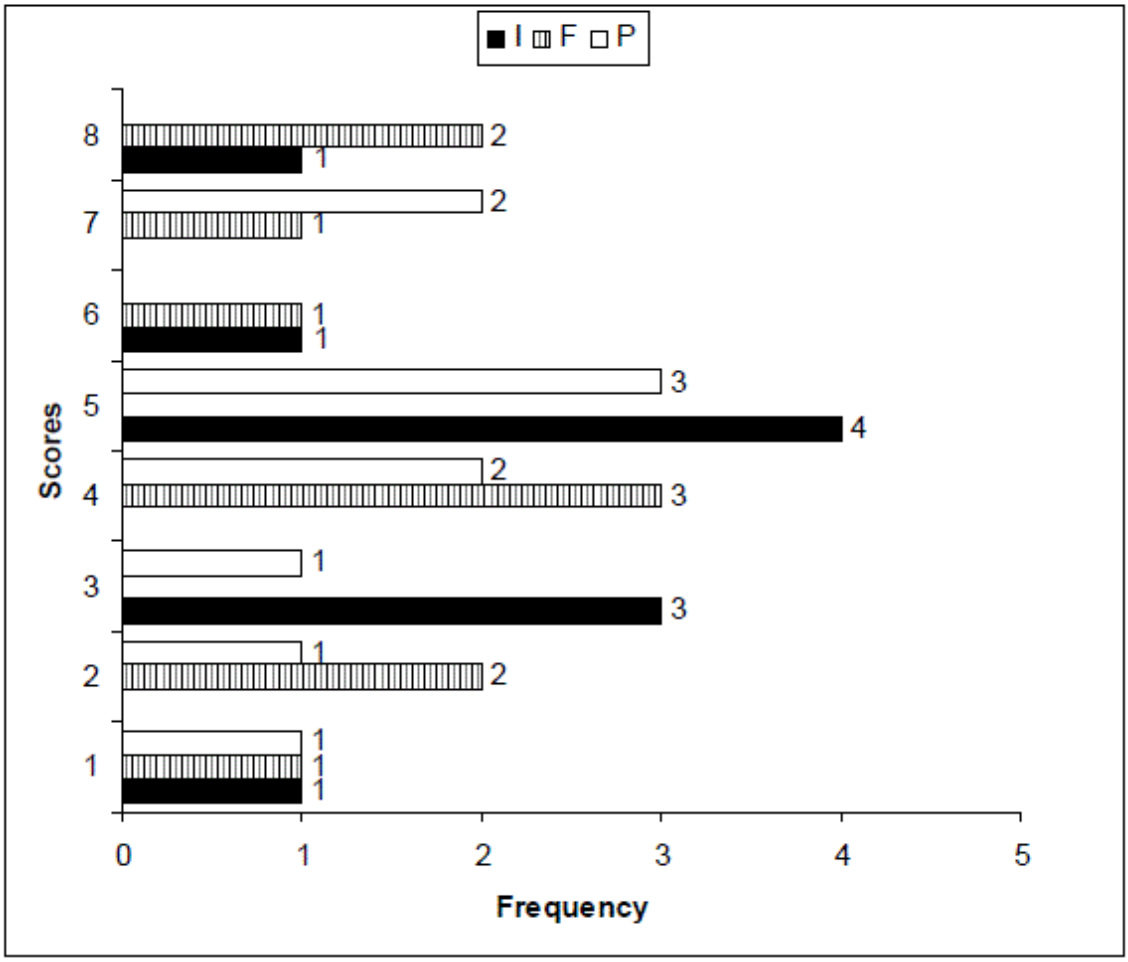
The following bar graph shows the frequency distribution of the scores in I, F and P of 10 MBA colleges – A, B, C, D, E, R, S, T, U, and V.



Further, the following are also known that:
(i) Only college B and college D have the second lowest total score, 9, with identical scores in all the three parameters.
(ii) College R has a total score of 21 with different scores in the three parameters.
(iii) Two colleges whose annual fee (in Rs. lakh) is more than 20 have a score of 8 in exactly one parameter. One of them is college C.

(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.1 [11831809]
What is the score of college D in P?

✖

Solution:
Correct Answer : 4
Your Answer : 2

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
V	5	6	5	16

Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
S/A	1	4	3	8
B	3	2	4	9
E/U	5	4	2	11
U/E	5	1	5	11

The score of college D in P is 4.

Bookmark FeedBack

The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	< 8
S/A	1	4	3	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	8 to 12
U/E	5	1	5	11	
V	5	6	5	16	13 to 15
T	5	8	5	18	16 to 20
R	6	8	7	21	> 20
C	8	7	7	22	

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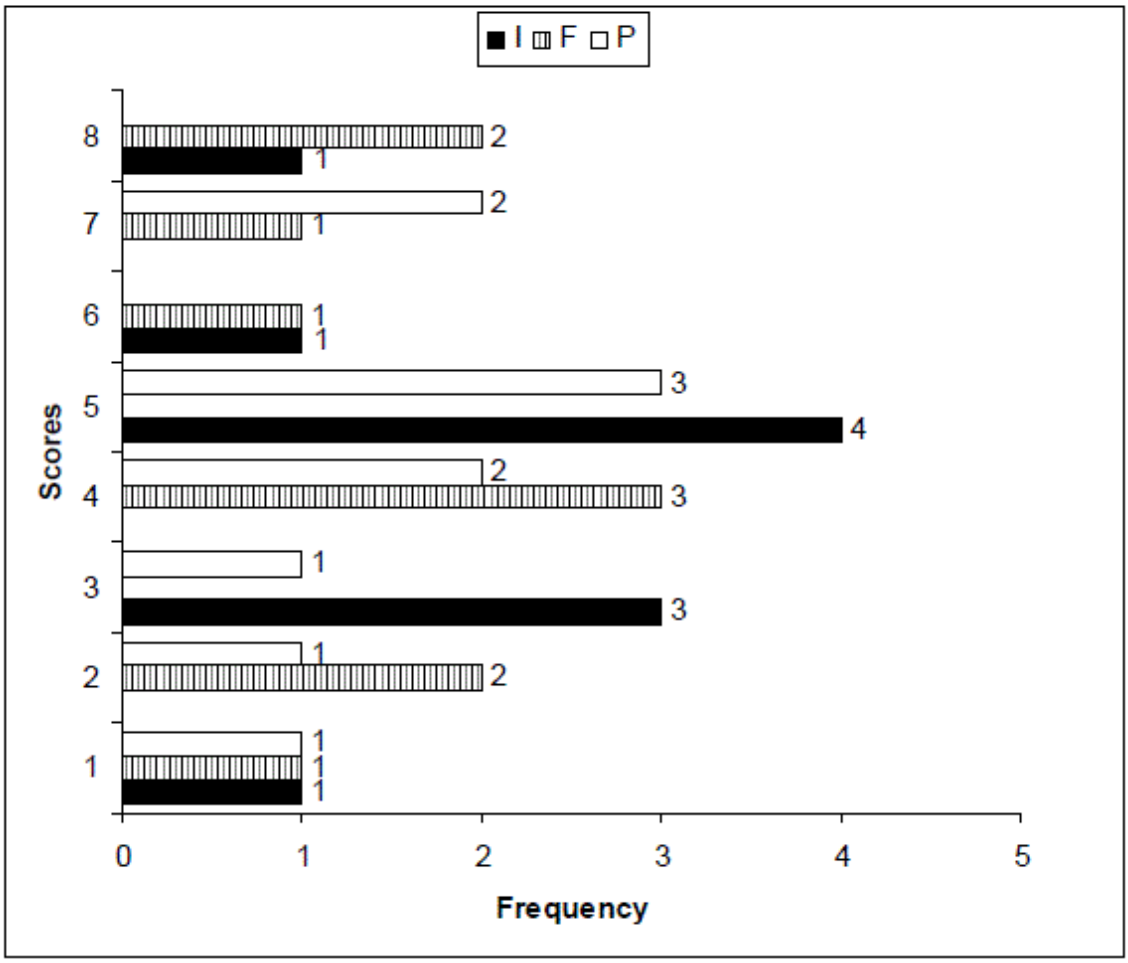

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(iii) Two colleges whose annual fee (in Rs. lakh) is more than 20 have a score of 8 in exactly one parameter. One of them is college C.
(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.2 [11831809]

What is the total score of C?

✖

Solution:
Correct Answer : 22
Your Answer : 13

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
V	5	6	5	16

Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
[illegible]	[illegible]	4	3	8
E/U	5	4	2	11
U/E	5	1	5	11

The total score of C is 22.

Bookmark FeedBack

The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	< 8
S/A	1	4	3	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	8 to 12
U/E	5	1	5	11	
V	5	6	5	16	13 to 15
T	5	8	5	18	16 to 20
R	6	8	7	21	> 20
C	8	7	7	22	

Directions for questions 1 to 6: Answer the questions on the basis of the information given below.

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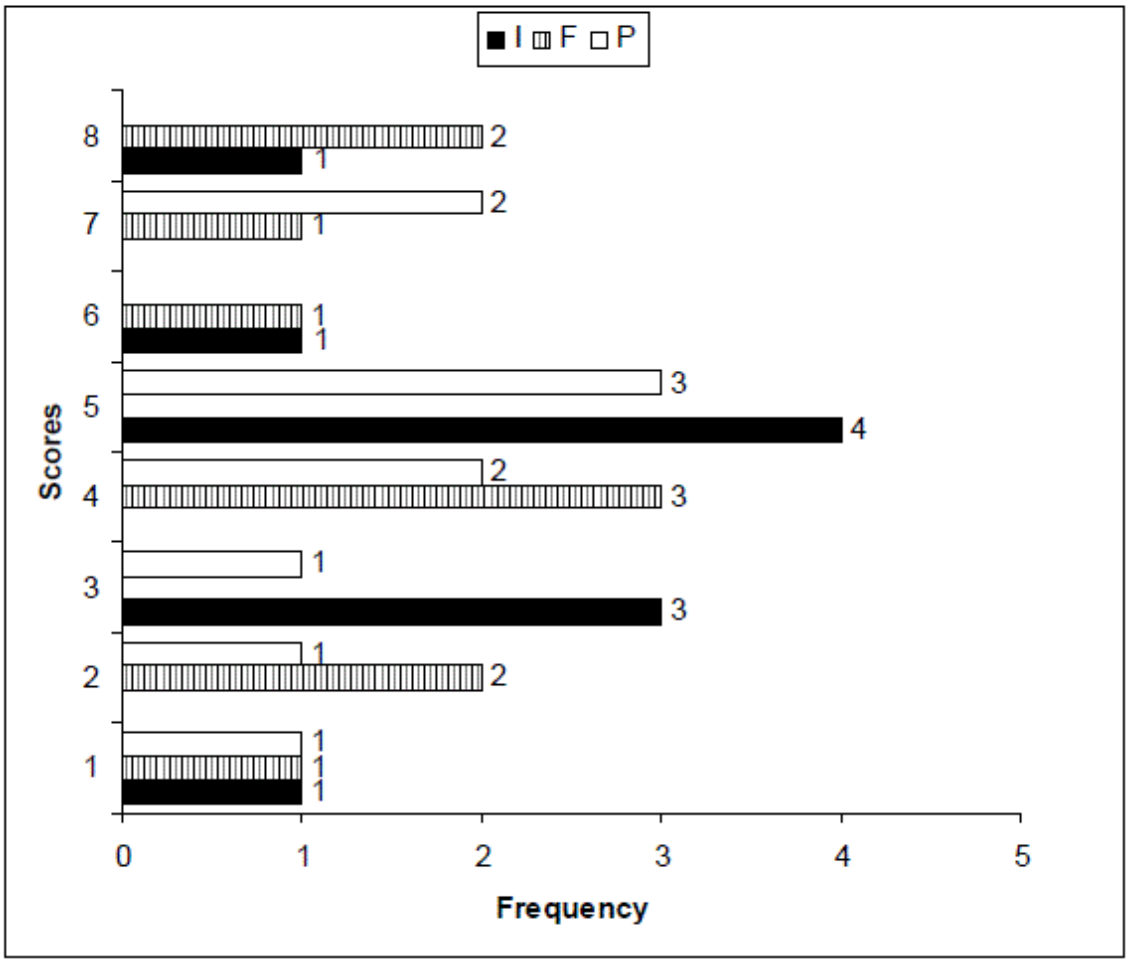

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(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.3 [11831809]

What is the lowest total score among the 10 colleges?

1 ◯ 5

2 ◯ 6

3 ◯ 7

4 ◯ 8

Solution:
Correct Answer : 4

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
V	5	6	5	16

Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
S/A	1	4	3	8
B	3	2	4	9
D	3	2	4	9
E/U	5	4	2	11
U/E	5	1	5	11

The lowest total score among the 10 colleges is 8.

Bookmark FeedBack

The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	< 8
S/A	1	4	3	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	8 to 12
U/E	5	1	5	11	
V	5	6	5	16	13 to 15
T	5	8	5	18	16 to 20
R	6	8	7	21	> 20
C	8	7	7	22	

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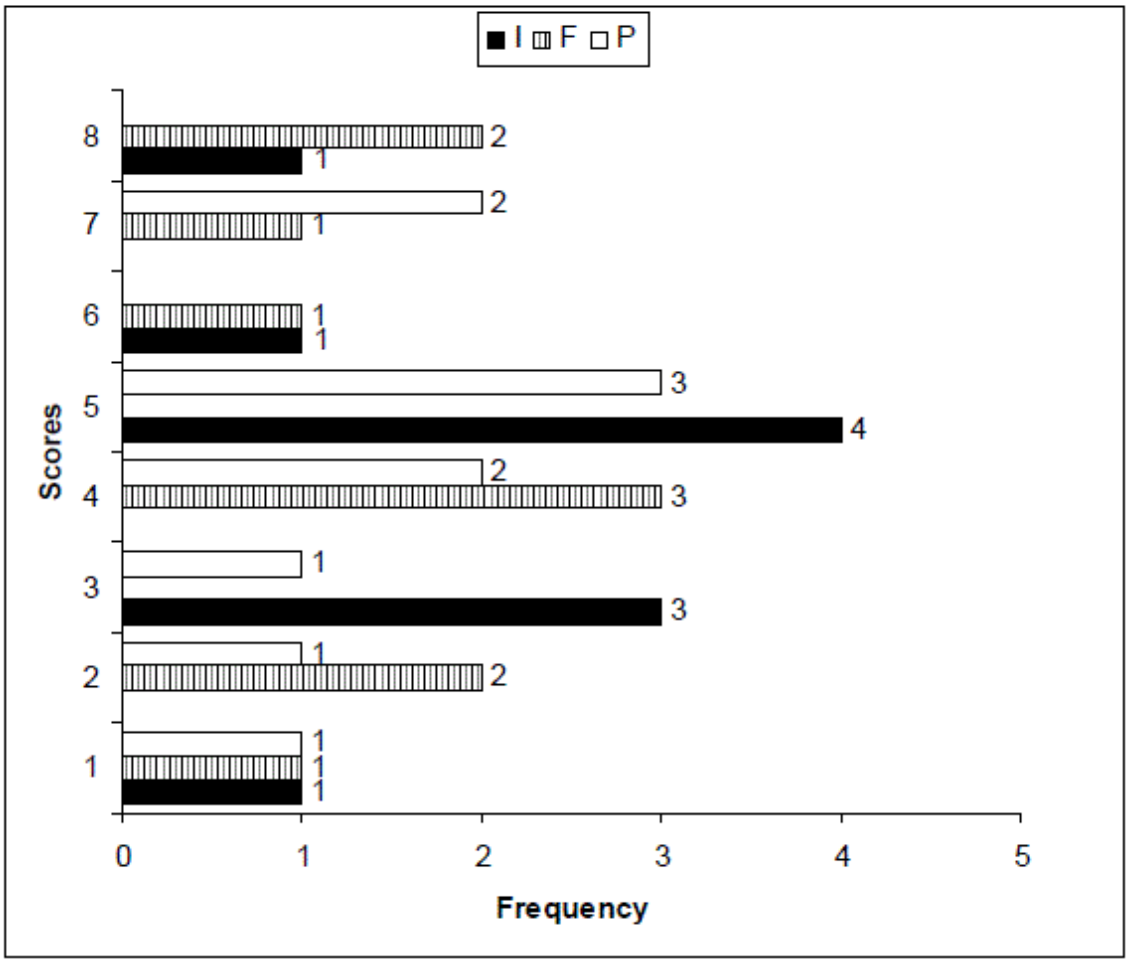

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(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.4 [11831809]

What is the total minimum annual fee (in Rs. Lakh) of colleges E and U?

✖

Solution:
Correct Answer : 16
Your Answer : 3

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
V	5	6	5	16

Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
E/U	5	4	2	11
U/E	5	1	5	11

The total minimum annual fee (in Rs. Lakh) of colleges E and U is 8 + 8 = 16.

Bookmark FeedBack

The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	< 8
S/A	1	4	3	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	8 to 12
U/E	5	1	5	11	
V	5	6	5	16	13 to 15
T	5	8	5	18	16 to 20
R	6	8	7	21	> 20
C	8	7	7	22	

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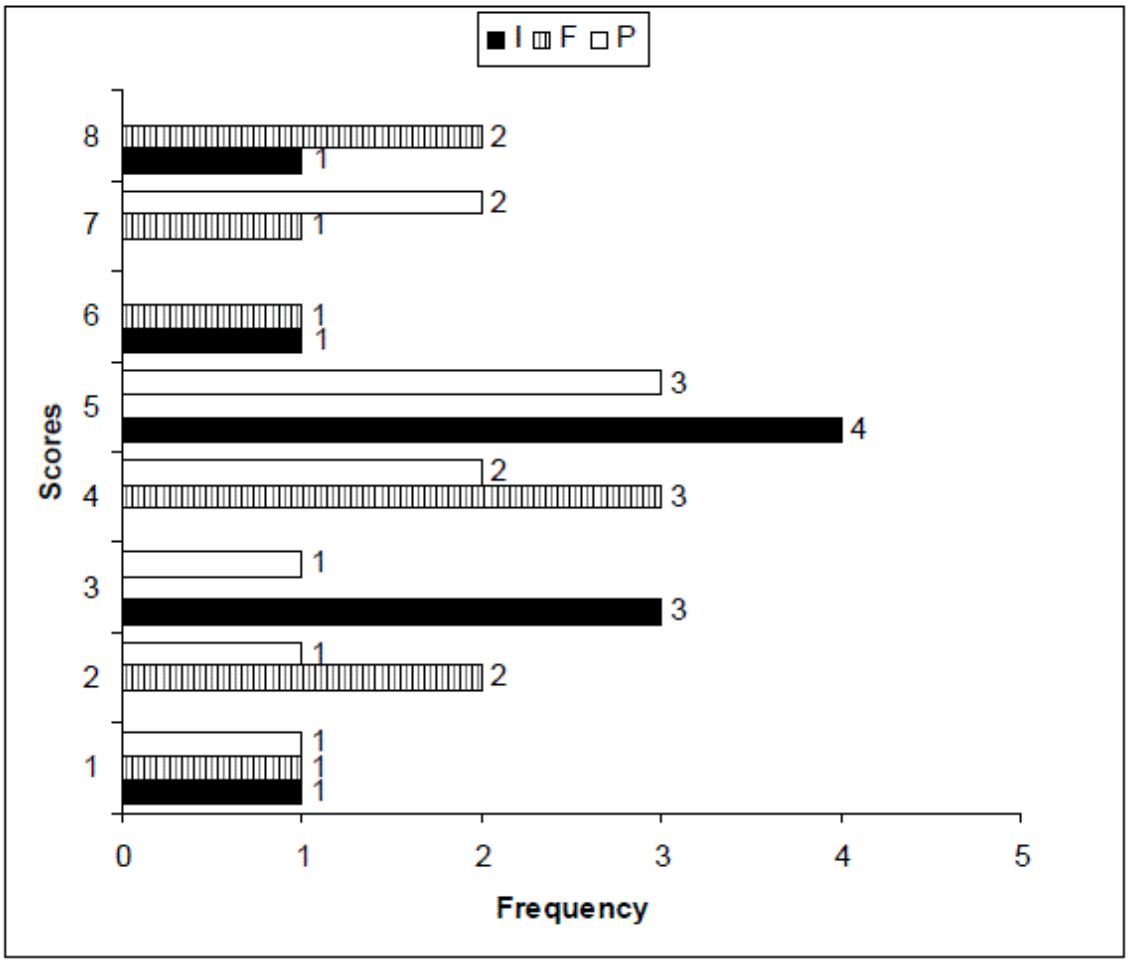

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(ii) College R has a total score of 21 with different scores in the three parameters.
(iii) Two colleges whose annual fee (in Rs. lakh) is more than 20 have a score of 8 in exactly one parameter. One of them is college C.
(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.5 [11831809]

Which of the following statements is/are CORRECT?

I. College T and college R have the same score in F.

II. The total scores of college E and college U are different.

III. The absolute difference between the scores of college C and college V in parameter I is 3.

1 ◯ I only

2 ◯ II & III only

3 ◯ I & III only

4 ◯ All I, II & III

Solution:
Correct Answer : 3

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
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Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
S/A	1	4	3	8
B	3	2	4	9
D	3	2	4	9
E/U	5	4	2	11
U/E	5	1	5	11

The statements I and III are CORRECT. Hence, option (3) is the correct answer.

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The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	< 8
S/A	1	4	3	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	8 to 12
U/E	5	1	5	11	
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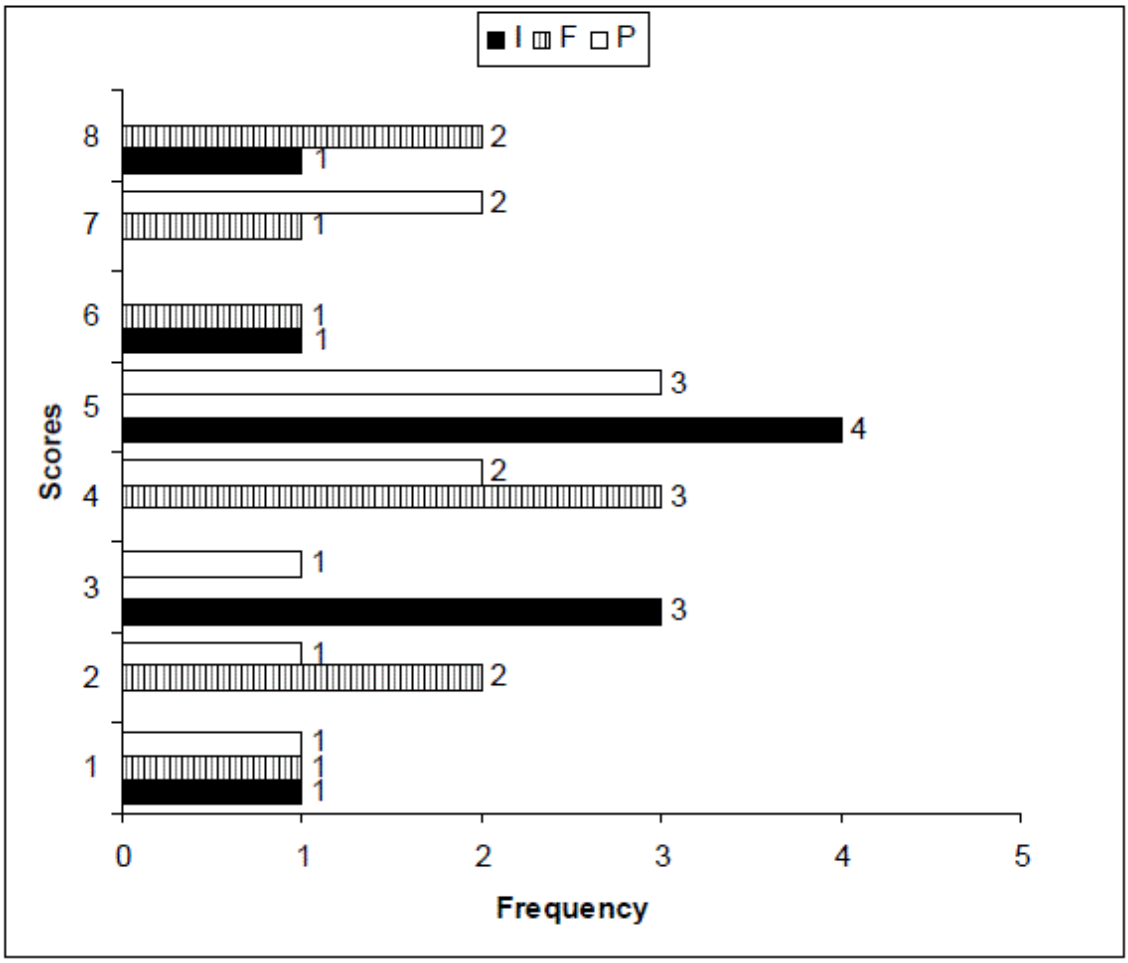

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(iii) Two colleges whose annual fee (in Rs. lakh) is more than 20 have a score of 8 in exactly one parameter. One of them is college C.
(iv) The total scores of college T and college V are 18 and 16 respectively.
(v) Only college A and college S have lowest total score, with same scores in F.

Q.6 [11831809]

Which of the following statements must be FALSE?

1 ◯ College A has a score of 3 in P.

2 ◯ College U has a score of 1 in F.

3 ◯ At least one college has a total score of 11.

4 ◯ College C and college T have the same score in at least one parameter.

Solution:
Correct Answer : 4

Answer key/Solution

Step 1:
From the bar graph, the possible scores of I, F and P in some order are:

I	F	P
1	1	1
3	2	2
3	2	3
3	4	4
5	4	4
5	4	5
5	6	5
5	7	5
6	8	7
8	8	7

From condition (i), total adding up to 9, this will be (3, 2, 4) in this order.

College	I	F	P	Total
B	3	2	4	9
D	3	2	4	9

Step 2:
From condition (ii), total adding up to 21, this can be (6, 8, 7) or (8, 6, 7) in this order.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21

From conditions (ii) and (iii), the annual fee of college R and college C is greater than Rs.20 lakh.

College	I	F	P	Total
R	6	8	7	21
R	8	6	7	21
C	8	6	7	21
C	8	7	7	22

From condition (iv),

College	I	F	P	Total
T	5	8	5	18
V	5	6	5	16

From conditions (ii), (iii) and (iv), since total score of college V is 16. So (8, 6, 7) cannot be score of R and C.

College	I	F	P	Total
R	6	8	7	21
C	8	7	7	22
T	5	8	5	18
V	5	6	5	16

Step 3:
From conditions (i) and (v),

College	I	F	P	Total

A/S	3	4	1	8
B	3	2	4	9
D	3	2	4	9
E/U	5	4	2	11
C/E	5	1	5	11

The statement given in option (4) must be FALSE.

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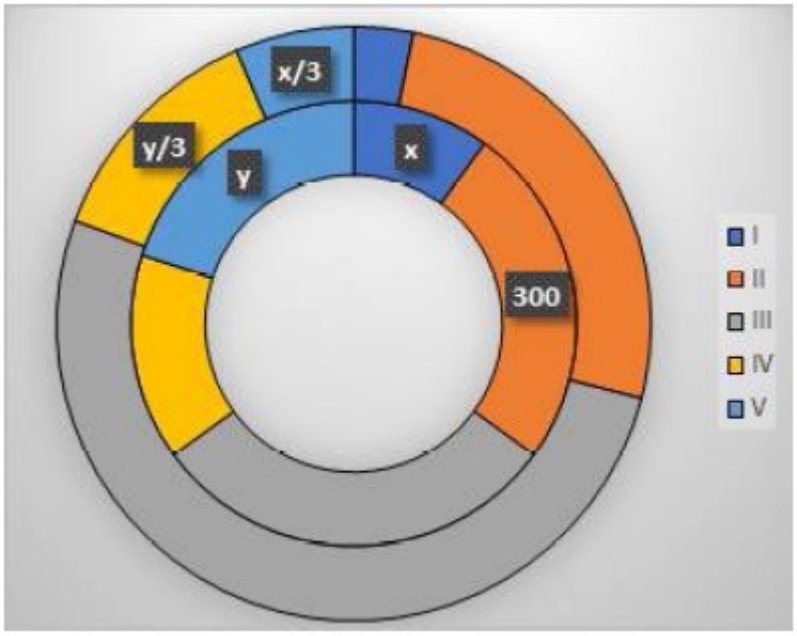
The final table can be shown as:

College	I	F	P	Total	Annual Fee (in Rs. Lakh)
A/S	3	4	1	8	
B	3	2	4	9	
D	3	2	4	9	
E/U	5	4	2	11	
C/E	5	1	5	11	8 to 12
T	5	8	5	18	16 to 20

Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

Every year, Central government, holds teacher eligibility test (TET) two times in a year. One takes place in July and another test takes place in December. Rajesh, runs a coaching center in five different locations – A, B, C, D and E – for TET. From all his coaching centers, total 1200 aspirants take test in July 2021.

The below pie chart is giving the missing data for the aspirants of the five coaching centers. Inner circle represents the aspirants who took the test in July 2021, and outer circle represents the aspirants who retook the test in December 2021, from five centers, in some order. The data of aspirants in the below pie-chart for five coaching centers – A, B, C, D and E is marked as I, II, III, IV and V – in some order.



Some other information known to us is:
(i) The number of aspirants that take the test in July 2021 from coaching centers I, IV, V, II and III form an increasing Arithmetic progression.
(ii) The number of aspirants from each coaching center that retake the test in December 2021 form a Geometric progression.
(iii) The aspirants who did not retake the test in December 2021, qualified the test in July 2021. There were 100 aspirants each that qualified TET from coaching centers E and B only in July 2021. The maximum number of aspirants qualifying for TET were from coaching center D and the minimum number were from coaching center C in July 2021.

Q.7 [11831809]

Which of the following centers was coaching center C?

1 ◯ I

2 ◯ II

3 ◯ III

4 ◯ IV

Solution:
Correct Answer : 3

Answer key/Solution

Step 1:
From condition (i), number of aspirants who took test in July 2021 from coaching centers I, IV, V, II and III was in Arithmetic progression, which gives:
$5x + 10d = 1200$
$\Rightarrow x + 2d = 240$ and $x + 3d = 300$
Therefore, $d = 60$ and $x = 120$
The aspirants who took test in July 2021 from coaching centers I, II, III, IV and V were 120, 300, 360, 180 and 240 respectively.
Step 2:
Number of aspirants who retook the test in December 2021 from coaching centers IV and V were 80 and 40 respectively.
From condition (ii), number of aspirants who retook the test in December 2021 were ..., 20, 40, 80, 160, 320, 640, ... Since the maximum number of aspirants who took the test in July 2021 was 360. Hence, the number of aspirants who retook the test in December 2021 were 20, 40, 80, 160, 320.
From condition (iii), 100 aspirants each qualified from E and B only in July 2021.
The final table looks like:

Coaching center	Aspirants who took the test in July 2021	Aspirants who retook the test in December 2021	Aspirants who qualified in July 2021	Actual coaching center
I	120	20	100	E/B
II	300	160	140	A
III	360	320	40	C
IV	180	80	100	B/E
V	240	40	200	D

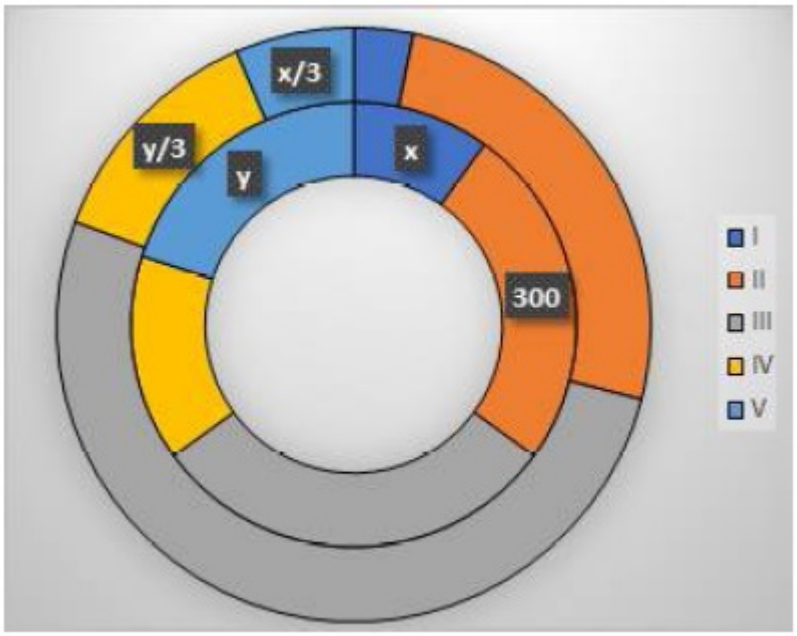
III was coaching center C.

Bookmark FeedBack

Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

Every year, Central government, holds teacher eligibility test (TET) two times in a year. One takes place in July and another test takes place in December. Rajesh, runs a coaching center in five different locations – A, B, C, D and E – for TET. From all his coaching centers, total 1200 aspirants take test in July 2021.

The below pie chart is giving the missing data for the aspirants of the five coaching centers. Inner circle represents the aspirants who took the test in July 2021, and outer circle represents the aspirants who retook the test in December 2021, from five centers, in some order. The data of aspirants in the below pie-chart for five coaching centers – A, B, C, D and E is marked as I, II, III, IV and V – in some order.



Some other information known to us is:
(i) The number of aspirants that take the test in July 2021 from coaching centers I, IV, V, II and III form an increasing Arithmetic progression.
(ii) The number of aspirants from each coaching center that retake the test in December 2021 form a Geometric progression.
(iii) The aspirants who did not retake the test in December 2021, qualified the test in July 2021. There were 100 aspirants each that qualified TET from coaching centers E and B only in July 2021. The maximum number of aspirants qualifying for TET were from coaching center D and the minimum number were from coaching center C in July 2021.

Q.8 [11831809]
The absolute difference between the number of aspirants from coaching centers E and B who retook the test in December 2021 was:

✖

Solution:

Correct Answer : 60

Your Answer : 36

Answer key/Solution

Step 1:

From condition (i), number of aspirants who took test in July 2021 from coaching centers I, IV, V, II and III was in Arithmetic progression, which gives:

$5x + 10d = 1200$

$\Rightarrow x + 2d = 240$ and $x + 3d = 300$

Therefore, $d = 60$ and $x = 120$

The aspirants who took test in July 2021 from coaching centers I, II, III, IV and V were 120, 300, 360, 180 and 240 respectively.

Step 2:

Number of aspirants who retook the test in December 2021 from coaching centers IV and V were 80 and 40 respectively.

From condition (ii), number of aspirants who retook the test in December 2021 were ..., 20, 40, 80, 160, 320, 640, ... Since the maximum number of aspirants who took the test in July 2021 was 360. Hence, the number of aspirants who retook the test in December 2021 were 20, 40, 80, 160, 320.

From condition (iii), 100 aspirants each qualified from E and B only in July 2021.

The final table looks like:

Coaching center	Aspirants who took the test in July 2021	Aspirants who retook the test in December 2021	Aspirants who qualified in July 2021	Actual coaching center
I	120	20	100	E/B
II	300	160	140	A
III	360	320	40	C
IV	180	80	100	B/E
V	240	40	200	D

The absolute difference between the number of aspirants from coaching E and B who retook the test in December 2021 was 60.

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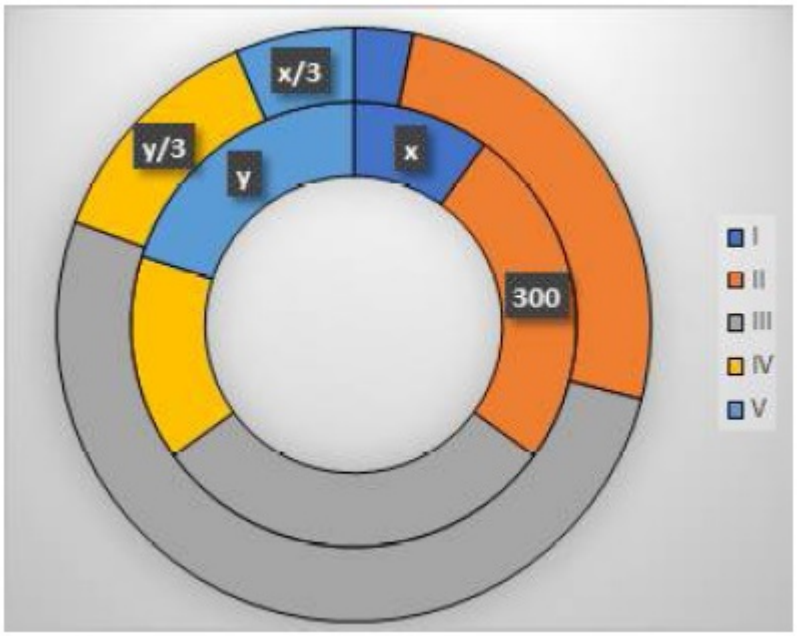
Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

Every year, Central government, holds teacher eligibility test (TET) two times in a year. One takes place in July and another test takes place in December. Rajesh, runs a coaching center in five different locations – A, B, C, D and E – for TET. From all his coaching centers, total 1200 aspirants take test in July 2021.

The below pie chart is giving the missing data for the aspirants of the five coaching centers. Inner circle represents the aspirants who took the test in July 2021, and outer circle represents the aspirants who retook the test in December 2021, from five centers, in some order. The data of aspirants in the below pie-chart for five coaching centers – A, B, C, D and E is marked as I, II, III, IV and V – in some order.



Some other information known to us is:
(i) The number of aspirants that take the test in July 2021 from coaching centers I, IV, V, II and III form an increasing Arithmetic progression.
(ii) The number of aspirants from each coaching center that retake the test in December 2021 form a Geometric progression.
(iii) The aspirants who did not retake the test in December 2021, qualified the test in July 2021. There were 100 aspirants each that qualified TET from coaching centers E and B only in July 2021. The maximum number of aspirants qualifying for TET were from coaching center D and the minimum number were from coaching center C in July 2021.

Q.9 [11831809]
If 10%, 15%, 5%, 20% and 25% of aspirants who retook the test in December 2021 from A, B, C, D and E centers respectively, qualified the test, then minimum how many aspirants were able to qualify December 2021 test?

1 ◯ 63

2 ◯ 46

3 ◯ 57

4 ◯ 51

Solution:
Correct Answer : 3

Answer key/Solution

Step 1:
From condition (i), number of aspirants who took test in July 2021 from coaching centers I, IV, V, II and III was in Arithmetic progression, which gives:
$5x + 10d = 1200$
$\Rightarrow x + 2d = 240$ and $x + 3d = 300$
Therefore, $d = 60$ and $x = 120$
The aspirants who took test in July 2021 from coaching centers I, II, III, IV and V were 120, 300, 360, 180 and 240 respectively.
Step 2:
Number of aspirants who retook the test in December 2021 from coaching centers IV and V were 80 and 40 respectively.
From condition (ii), number of aspirants who retook the test in December 2021 were ..., 20, 40, 80, 160, 320, 640, ... Since the maximum number of aspirants who took the test in July 2021 was 360. Hence, the number of aspirants who retook the test in December 2021 were 20, 40, 80, 160, 320.
From condition (iii), 100 aspirants each qualified from E and B only in July 2021.
The final table looks like:

Coaching center	Aspirants who took the test in July 2021	Aspirants who retook the test in December 2021	Aspirants who qualified in July 2021	Actual coaching center
I	120	20	100	E/B
II	300	160	140	A
III	360	320	40	C
IV	180	80	100	B/E
V	240	40	200	D

If 10%, 15%, 5%, 20% and 25% of aspirants who retook the test in December 2021 from A, B, C, D and E centers respectively, qualified the test, then minimum possible aspirants were able to qualify December 2021 test were:
$160 \times 0.1 + 80 \times 0.15 + 320 \times 0.05 + 40 \times 0.2 + 20 \times 0.25 = 57$.

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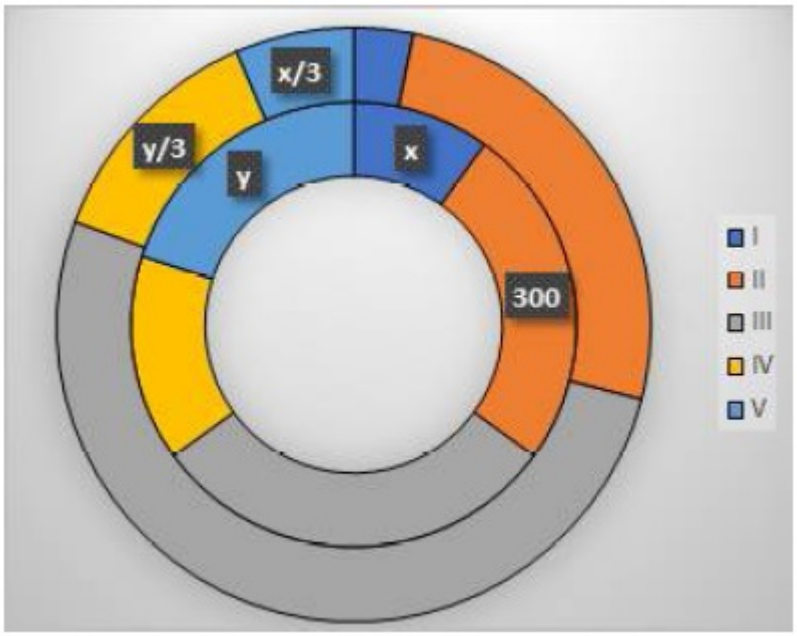
Directions for questions 7 to 10: Answer the questions on the basis of the information given below.

Every year, Central government, holds teacher eligibility test (TET) two times in a year. One takes place in July and another test takes place in December. Rajesh, runs a coaching center in five different locations – A, B, C, D and E – for TET. From all his coaching centers, total 1200 aspirants take test in July 2021.

The below pie chart is giving the missing data for the aspirants of the five coaching centers. Inner circle represents the aspirants who took the test in July 2021, and outer circle represents the aspirants who retook the test in December 2021, from five centers, in some order. The data of aspirants in the below pie-chart for five coaching centers – A, B, C, D and E is marked as I, II, III, IV and V – in some order.



Some other information known to us is:
(i) The number of aspirants that take the test in July 2021 from coaching centers I, IV, V, II and III form an increasing Arithmetic progression.
(ii) The number of aspirants from each coaching center that retake the test in December 2021 form a Geometric progression.
(iii) The aspirants who did not retake the test in December 2021, qualified the test in July 2021. There were 100 aspirants each that qualified TET from coaching centers E and B only in July 2021. The maximum number of aspirants qualifying for TET were from coaching center D and the minimum number were from coaching center C in July 2021.

Q.10 [11831809]
What was the sum of the aspirants who qualified the test in July 2021 from the coaching centers marked as I and II?

✖

Solution:

Correct Answer : 240

Your Answer : 123

Answer key/Solution

Step 1:

From condition (i), number of aspirants who took test in July 2021 from coaching centers I, IV, V, II and III was in Arithmetic progression, which gives:

$5x + 10d = 1200$

$\Rightarrow x + 2d = 240$ and $x + 3d = 300$

Therefore, $d = 60$ and $x = 120$

The aspirants who took test in July 2021 from coaching centers I, II, III, IV and V were 120, 300, 360, 180 and 240 respectively.

Step 2:

Number of aspirants who retook the test in December 2021 from coaching centers IV and V were 80 and 40 respectively.

From condition (ii), number of aspirants who retook the test in December 2021 were ..., 20, 40, 80, 160, 320, 640, ... Since the maximum number of aspirants who took the test in July 2021 was 360. Hence, the number of aspirants who retook the test in December 2021 were 20, 40, 80, 160, 320.

From condition (iii), 100 aspirants each qualified from E and B only in July 2021.

The final table looks like:

Coaching center	Aspirants who took the test in July 2021	Aspirants who retook the test in December 2021	Aspirants who qualified in July 2021	Actual coaching center
I	120	20	100	E/B
II	300	160	140	A
III	360	320	40	C
IV	180	80	100	B/E
V	240	40	200	D

The sum of the aspirants who qualified the test in July 2021 from the coaching centers marked as I and II was equal to 100 + 140 = 240.

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Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.11 [11831809]
The absence of which of the following persons from the BALH team will not affect the skill set requirements of the team?

1 ◯ Tanushri

2 ◯ Ekta

3 ◯ Zulfikar

4 ◯ Ruchika

✖

Solution:

Correct Answer : 3

Your Answer : 4

Answer key/Solution

Step 1:

From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:

From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

The absence of Zulfikar will not affect the 4 new skill sets that are required for the BALH team.

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Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.12 [11831809]
Which of the following persons does not get any leave between Monday and Saturday?

1 ◯ Nachiket

2 ◯ Ekta

3 ◯ Ruchika

4 ◯ Tanushri

✔

Solution:

Correct Answer : 2

Your Answer : 2

Answer key/Solution

Step 1:

From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:

From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

Since Ekta works in all three serials, she does not get leave from Monday to Saturday.

Bookmark FeedBack

Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.13 [11831809]
If absence from work calls for a penalty, then which of these pairs can go out for lunch on Wednesday such that neither is penalized?

1 ◯ Tanushri and Zulfikar

2 ◯ Nachiket and Ekta

3 ◯ Zulfikar and Ruchika

4 ◯ Ekta and Ruchika

✔

Solution:

Correct Answer : 3

Your Answer : 3

Answer key/Solution

Step 1:

From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:

From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

Zulfikar and Ruchika do not have work on Wednesday, so they will not be penalized for their absence from work.

Bookmark FeedBack

Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.14 [11831809]
Which of the following pairs of skill sets was not a requirement for the recruitment of new personnel for one of these serials?

1 ◯ VE and CG

2 ◯ CW and SM

3 ◯ MC and SD

4 ◯ VE and CW

✔

Solution:

Correct Answer : 1

Your Answer : 1

Answer key/Solution

Step 1:

From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:

From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

We can see from the above table that the skills VE and CG were not required for the MCKJ team.

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Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.15 [11831809]
What are the total number of skill sets in serials BALH and PJAD for which the new recruits do not have a team and have to work alone?

1 ◯ Four

2 ◯ Five

3 ◯ Six

4 ◯ Three

Solution:
Correct Answer : 2

Answer key/Solution

Step 1:
From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:
From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

There are two such skill sets in BALH and three skill sets in PJAD where the new recruits work alone. Hence, there are a total of five skill sets where the new recruits work alone.

Bookmark FeedBack

Directions for questions 11 to 16: Answer the questions on the basis of the information given below.

There are three TV serials - BALH, MCKJ and PJAD - being produced at Balajee Telefilms. The production house already has an existing workforce but requires specific skill sets in each serial team which are not there in the existing serial team. It recruits some new team members based on these skill set requirements and these members can work in one or more than one serial. Five new persons - Ekta, Nachiket, Ruchika, Tanushri and Zulfikar - are recruited by the production house to work in one or more serials. Each of them possesses a different pair of skills from among Video Editing (VE), Content Writing (CW), Set Designing (SE), Cinematography (CG), Makeup/Costume (MC) and Sound/Music (SM).
The table shows the skill sets that each person has.

Person	VE	CW	SD	CG	MC	SM
Ekta			Yes		Yes	
Nachiket				Yes	Yes	
Ruchika	Yes					Yes
Tanushri		Yes			Yes	
Zulfikar			Yes			Yes

A team is said to have a particular skill set if at least one of its members has that skill set. Further, it is also known that:
(i) Each serial team recruits an equal number of new members and requires exactly four skill sets.
(ii) MC and SD are required for all three Serials. CW and SM are required by exactly two Serials and the other skill sets by exactly one Serial.
(iii) Ruchika is recruited in the BALH team and Nachiket is recruited in the PJAD team. None of the serials include both Nachiket and Ruchika.
(iv) Zulfikar and Tanushri are recruited for exactly two serials. One new member works in all three serials.
(v) Shooting for BALH is done on Monday and Thursday, for MCKJ on Tuesday and Friday and for PJAD on Wednesday and Saturday. Sunday is a holiday for everyone.

Q.16 [11831809]
Select the combination of persons for which exactly one among the two is present from Monday to Saturday.

1 ◯ Ruchika and Nachiket

2 ◯ Nachiket and Tanushri

3 ◯ Zulfikar and Tanushri

4 ◯ Nachiket and Zulfikar

✔

Solution:

Correct Answer : 4

Your Answer : 4

Answer key/Solution

Step 1:

From condition (v), we can fill the column of working days for each serial.
From conditions (iii) and (iv), we can conclude that it is possible for only Ekta to work in all three serials.
Further from condition (iii), we can fill the table as follows.

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta	-	Ekta	Ruchika	Monday and Thursday
MCKJ	-		Ekta	-	Ekta		Tuesday and Friday
PJAD	-		Ekta	Nachiket	Ekta Nachiket	-	Wednesday and Saturday

Step 2:

From conditions (i) and (ii), we know that recruitment for CW is done only for MCKJ and PJAD. Also, only Tanushri possesses the skill set CW along with MC.
Also, from condition (ii), we know that recruitment for VE and CG are done only for one serial each, which has already been filled by Ruchika and Nachiket respectively. Recruitment for SM is done for two serials, which has to be BALH and MCKJ.
From condition (iv), we can fill the places for Tanushri and Zulfikar as follows:

Serial	VE	CW	SD	CG	MC	SM	Days
BALH	Ruchika	-	Ekta Zulfikar	-	Ekta	Ruchika Zulfikar	Monday and Thursday
MCKJ	-	Tanushri	Ekta Zulfikar	-	Ekta Tanushri	Zulfikar	Tuesday and Friday
PJAD	-	Tanushri	Ekta	Nachiket	Ekta Nachiket Tanushri	-	Wednesday and Saturday

We can see that Zulfikar is present on Monday, Tuesday, Thursday and Friday whereas Nachiket is present on Wednesday and Saturday. So between them exactly one person is present on each working day of the week. This is not true for the other pairs of persons.

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Directions for questions 17 to 20: Answer the questions on the basis of the information given below.

Kaveri Seed Company Limited is looking to recruit some Horticulture graduates. After taking the written test, the company interviews five candidates, Aadi, Balaram, Chandra, Daksha and Eshan, on the basis of rating in five different skills (S1 to S5) as given below:

S1	Education & Work Experience
S2	Strengths
S3	Aspirations
S4	Motivation
S5	Prioritization

Based on the interview, the company assigns ratings to each of these skills – 5 (Excellent), 4 (Good), 3 (Average), 2 (Below Average), and 1 (Poor). The total score of the candidates consists of two parts - the marks in the written test and the average rating in the interview. If a candidate gets a rating poor in any skill, he is not eligible to get selection. A candidate needs to obtain an excellent rating in at least one of the skills to be eligible for selection.
The partial information related to the ratings in the interview of the candidates in different skills and the total score structure is given in the table below:
(Average rating in the interview of any candidate is the simple average of rating obtained by him or her in S1, S2, S3, S4 and S5.)

	S1	S2	S3	S4	S5	Marks in written Test (Out of 300)	Marks in Interview (Out of 100)
Aadi			3			75%	20 × Average rating
Balaram					2	68%	20 × Average rating
Chandra	3					72%	20 × Average rating
Daksha				2		78%	20 × Average rating
Eshan		4				76%	20 × Average rating

The following additional facts are known.
(i) No candidate has got the same rating in three skills.
(ii) Chandra and Eshan are rated excellent in exactly one of the skills.
(iii) Balaram is rated excellent in exactly two of the skills.

Q.17 [11831809]
If Daksh is not selected, then what is the maximum possible value of his average rating in the interview?

1 ○ 3.2

2 ○ 3.4

3 ○ 3.6

4 ◯ 3.8

✔

Answer key/Solution

Solution:
Correct Answer : 2
Your Answer : 2
Since Daksh is not selected, then his maximum possible value of his average rating in the interview = (5 + 5 + 4 + 2 + 1)/5 = 17/5 = 3.4.

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Directions for questions 17 to 20: Answer the questions on the basis of the information given below.

Kaveri Seed Company Limited is looking to recruit some Horticulture graduates. After taking the written test, the company interviews five candidates, Aadi, Balaram, Chandra, Daksha and Eshan, on the basis of rating in five different skills (S1 to S5) as given below:

S1	Education & Work Experience
S2	Strengths
S3	Aspirations
S4	Motivation
S5	Prioritization

Based on the interview, the company assigns ratings to each of these skills – 5 (Excellent), 4 (Good), 3 (Average), 2 (Below Average), and 1 (Poor). The total score of the candidates consists of two parts - the marks in the written test and the average rating in the interview. If a candidate gets a rating poor in any skill, he is not eligible to get selection. A candidate needs to obtain an excellent rating in at least one of the skills to be eligible for selection.
The partial information related to the ratings in the interview of the candidates in different skills and the total score structure is given in the table below:
(Average rating in the interview of any candidate is the simple average of rating obtained by him or her in S1, S2, S3, S4 and S5.)

	S1	S2	S3	S4	S5	Marks in written Test (Out of 300)	Marks in Interview (Out of 100)
Aadi			3			75%	20 × Average rating
Balaram					2	68%	20 × Average rating
Chandra	3					72%	20 × Average rating
Daksha				2		78%	20 × Average rating
Eshan		4				76%	20 × Average rating

The following additional facts are known.
(i) No candidate has got the same rating in three skills.
(ii) Chandra and Eshan are rated excellent in exactly one of the skills.
(iii) Balaram is rated excellent in exactly two of the skills.

Q.18 [11831809]
If Aadi is selected, what are the minimum possible marks obtained by him in the interview?

1 ◯ 68

2 ◯ 64

3 ◯ 60

4 ◯ 56

✔

Answer key/Solution

Solution:
Correct Answer : 3
Your Answer : 3
Since Aadi is selected, the minimum possible marks obtained by him in the interview = 20 × (5 + 3 + 3 + 2 + 2)/5 = 60.

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Directions for questions 17 to 20: Answer the questions on the basis of the information given below.

Kaveri Seed Company Limited is looking to recruit some Horticulture graduates. After taking the written test, the company interviews five candidates, Aadi, Balaram, Chandra, Daksha and Eshan, on the basis of rating in five different skills (S1 to S5) as given below:

S1	Education & Work Experience
S2	Strengths
S3	Aspirations
S4	Motivation
S5	Prioritization

Based on the interview, the company assigns ratings to each of these skills – 5 (Excellent), 4 (Good), 3 (Average), 2 (Below Average), and 1 (Poor). The total score of the candidates consists of two parts - the marks in the written test and the average rating in the interview. If a candidate gets a rating poor in any skill, he is not eligible to get selection. A candidate needs to obtain an excellent rating in at least one of the skills to be eligible for selection.
The partial information related to the ratings in the interview of the candidates in different skills and the total score structure is given in the table below:
(Average rating in the interview of any candidate is the simple average of rating obtained by him or her in S1, S2, S3, S4 and S5.)

	S1	S2	S3	S4	S5	Marks in written Test (Out of 300)	Marks in Interview (Out of 100)
Aadi			3			75%	20 × Average rating
Balaram					2	68%	20 × Average rating
Chandra	3					72%	20 × Average rating
Daksha				2		78%	20 × Average rating
Eshan		4				76%	20 × Average rating

The following additional facts are known.
(i) No candidate has got the same rating in three skills.
(ii) Chandra and Eshan are rated excellent in exactly one of the skills.
(iii) Balaram is rated excellent in exactly two of the skills.

Q.19 [11831809]
What is the maximum possible total marks of Chandra including written test and interview?

1 ◯ 300

2 ◯ 276

3 ◯ 284

4 ◯ 292

✔

Answer key/Solution

Solution:
Correct Answer : 4
Your Answer : 4
Maximum possible total marks obtained by Chandra
= 0.72 × 300 + 20 × (3 + 5 + 4 + 4 + 3)/5
= 216 + 20 × 3.8 = 216 + 76 = 292.

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Directions for questions 17 to 20: Answer the questions on the basis of the information given below.

Kaveri Seed Company Limited is looking to recruit some Horticulture graduates. After taking the written test, the company interviews five candidates, Aadi, Balaram, Chandra, Daksha and Eshan, on the basis of rating in five different skills (S1 to S5) as given below:

S1	Education & Work Experience
S2	Strengths
S3	Aspirations
S4	Motivation
S5	Prioritization

Based on the interview, the company assigns ratings to each of these skills – 5 (Excellent), 4 (Good), 3 (Average), 2 (Below Average), and 1 (Poor). The total score of the candidates consists of two parts - the marks in the written test and the average rating in the interview. If a candidate gets a rating poor in any skill, he is not eligible to get selection. A candidate needs to obtain an excellent rating in at least one of the skills to be eligible for selection.
The partial information related to the ratings in the interview of the candidates in different skills and the total score structure is given in the table below:
(Average rating in the interview of any candidate is the simple average of rating obtained by him or her in S1, S2, S3, S4 and S5.)

	S1	S2	S3	S4	S5	Marks in written Test (Out of 300)	Marks in Interview (Out of 100)
Aadi			3			75%	20 × Average rating
Balaram					2	68%	20 × Average rating
Chandra	3					72%	20 × Average rating
Daksha				2		78%	20 × Average rating
Eshan		4				76%	20 × Average rating

The following additional facts are known.
(i) No candidate has got the same rating in three skills.
(ii) Chandra and Eshan are rated excellent in exactly one of the skills.
(iii) Balaram is rated excellent in exactly two of the skills.

Q.20 [11831809]
What is the absolute difference between the maximum possible total marks of Balaram and the minimum possible total marks of Eshan if both of them are selected?

1 ○ 8

2 ○ 0

3 ○ 4

4 ◯ 6

✔

Answer key/Solution

Solution:
Correct Answer : 1
Your Answer : 1
Maximum possible total marks of Balaram
= 0.68 × 300 + 20 × (5 + 5 + 4 + 4 + 2)/5
= 204 + 20 × 4 = 204 + 80 = 284
Minimum possible total marks of Eshan
= 0.76 × 300 + 20 × (5 + 4 + 2 + 2 + 3)/5
= 228 + 20 × 3.2 = 228 + 64 = 292
Hence, required absolute difference = 292 – 284 = 8.

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