

DI table Chart Questions for SBI PO Mains, IBPS PO Mains and RBI Grade B Exams.

DI Table Chart No. 108

Directions: Study the following tab le chart carefully and answer the questions given beside.

Some blood samples of COVID-19 from three districts A, B and C were taken. District A, B and C had 160, 200 and 240 villages, respectively and from each village of each district 100 blood samples were taken. Samples taken from were divided in 3 age groups which were below 20 years (20), 20 years to 40 years (20-40) and above 40 years (40). Out of total samples, 20% were of category 20, 50% were of category 20-40 and rest were of category 40.

The samples were further divided in two groups based on whether the samples were tested in government hospital (GH) or private hospital (PH). The table below gives the number of samples from different categories which were tested in government hospital.

Distr	ricts	Category 20	Category 20- 40	Cate	egory 40
A	 I 	2840	4200		3650
В	2	2450	6600		1800
C		800	4800		4250

The Question Bank

It is also known that:

• 17.5% of total samples were of category 20 from C. From C, number of samples tested in PH for category 20-40 and number of samples tested in PH for category 40 were same.

• From A, for the category 40, number of samples tested in GH was 82.5% more than number of samples tested in PH.

• Ratio of number of samples tested for category 20 from A to number of samples tested for category 20 from B was 19 : 20.

1. Find the difference between samples tested of category 20-40 in PH from A and samples tested of category 20-40 in PH from B.

A. 4165 B. 4325 C. 4175 D. 4425 E. 4215

2. If out of samples tested for category 40 in PH from B, 20% were found positive. How many samples were negative for category 40 in PH from B?

A. 185 B. 175 C. 220 D. 240 E. 135

3.	category 40 from A?											
A. 40 :	93	B. 80 : 113	C. 65 : 111	D. 32 : 59	E. 16 : 37							
4.	Number of	•	ested for category 2	•	es were of females. t percent of samples							
A. 280	%	B. 220%	C. 300%	D. 250%	E. 350%							
5.		erence between nui I three categories.	mber of samples tes	ted in PH and num	per of samples tested							
A. 264	-80	B. 23520	C. 28610	D. 25840	E. 29720							
Correc	ct Answers:		2 3 4 A B D		da hk							
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Common Explanations :

Sample taken from district A = $160 \times 100 = 16000$

Sample taken from district $B = 200 \times 100 = 20000$

Sample taken from district $C = 240 \times 100 = 24000$

Total samples = 16000 + 20000 + 24000 = 60000

Total samples of category 20 = 20% of 60000 = 12000

Total samples of category 20-40 = 50% of 60000 = 30000

Total samples of category 40 = 30% of 60000 = 18000

	Category 20			Category 20-40			Category 40			Grand		
Districts	GH	PH	Total	GH	PH	Total	GH	PH	Total	Total		
А	2840			4200			3650			16000		
В	2450			6600			1800			20000	÷.	
С	800			4800			4250			24000		
Total	6090		<mark>120</mark> 00	15600		30000	9700		18000	J		C

In C, total samples of category 20 = 17.5% of 24000 = 4200 Uestion Bank

Samples tested in PH for category 20 from C = 4200 - 800 = 3400

Rest samples from C which were tested in PH = 24000 - 4200 - 4800 - 4250 = 10750

Samples tested in PH for category 20-40 from C = Samples tested in PH for category 40 from C 10750 5

$$=\frac{10750}{2}=537$$

From condition (2),

Since, from A, for the category 40, number of samples tested in GH was 82.5% more than number of samples tested in PH.

Let samples tested for the category 40 from A in PH = x

Samples tested for the category 40 from A in GH = 182.5% of x = 1.825x

So, 1.825x = 3650

x = 2000

Samples tested for the category 40 from A in PH = 2000

Total samples tested for the category 40 from A = 3650 + 2000 = 5650

From condition (3), Number of samples tested for category 20 from A and number of samples tested for category 20 from B together = 12000 – 4200 = 7800

Samples tested for category 20 from A = $\frac{7800}{39} \times 19 = 3800$

Samples tested for category 20 from B = $\frac{7800}{39} \times 20 = 4000$

Samples tested in PH for category 20 from A = 3800 - 2840 = 960

Samples tested in PH for category 20 from B = 4000 - 2450 = 1550

After using all three conditions, table will be

	Ca	tegory	20	Category 20-40			Ca	Grand		
Districts	GH	PH	Total	GH	PH	Total	GH	PH	Total	Total
А	2840	960	<mark>38</mark> 00	4200			3650	2000	5650	16000
В	2450	1550	4000	6600			1800			20000
С	800	3400	4200	4800	5375	10175	4250	5375	9625	24000
Total	6090	5910	12000	19600		30000	9700		18000	

Total samples tested for category 40 from B = 18000 - 5650 - 9625 = 2725Samples tested for category 40 in PH from B = 2725 - 1800 = 925Total samples tested for category 20-40 from A = 16000 - 3800 - 5650 = 6550Samples tested for category 20-40 in PH from A = 6550 - 4200 = 2350Total samples tested for category 20-40 from B = 20000 - 4000 - 2725 = 13275

Samples tested for category 20-40 in PH from B = 13275 - 6600 = 6675

Final table :

	Category 20			Cat	Category 20-40			Category 40			
Districts	GH	PH	Total	GH	PH	Total	GH	PH	Total	Total	
А	2840	960	3800	4200	2350	6550	3650	2000	5650	16000	
В	2450	1550	4000	6600	6675	13275	1800	925	2725	20000	
С	800	3400	4200	4800	5375	10175	4250	5375	9625	24000	
Total	6090	5910	12000	15600	14400	30000	9700	8300	18000		

Answers :

1. From common explanation, we have

Difference = 6675 - 2350 = 4325

Hence, option B is correct.

2. From common explanation, we have

Samples found negative for category 40 in PH from B = 20% of 925 = 185

Hence, option A is correct.

3. From common explanation, we have

Ratio = 4000 : 5650 = 80 : 113

Hence, option B is correct.

4. From common explanation, we have The Question Bank

Number of samples of males tested for category 20-40 from C = 10175 – 5175 = 5000

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$$Percent = \frac{5000}{2000} \times 100 = 250\%$$

Hence, option D is correct.

5. From common explanation, we have

Number of samples tested in GH = 6090 + 15600 + 9700 = 31390

Number of samples tested in PH = 60000 - 31390 = 28610

Hence, option C is correct.

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