

## DI MixedChart Questions for SBIPOMains, IBPS PO Mains and RBI Grade B Exams.

## DI Mixed Chart No.78

Directions : Study the following tableand bar chart carefully and answer the questions given beside.

Directions : Study the following pie, line and table chart carefully and answer the questions given beside.

A person travels daily for eight hours for 5 days to cover a certain distance. The following pie chart shows the percentage of total distance travelled by him in 5 different modes on day1 (M1, M2, M3, M4, and M5) and the percentage of distance travelled by him with the same modes remained the same as shown in the pie diagram, from day 1 to day 5.



Further, the below data table gives the information about the percentage of total time taken on each day to travel by Mode 5 (M5).

Day	Day1	Day2	Day3	Day4	Day5
Time	6.25%	12.5%	3.125%	8.33%	16.67%

1.	What is the days?	e sum of	the tota	al dista	nce trav	velled b	by the pe	erson during the give five	j
A. 203	$3\frac{1}{3}$ km	B. 2063 $\frac{1}{3}$	km	C. 21	$33\frac{1}{3}$ km		D. 2163 $\frac{1}{3}$	km E. None of these	
2.	What is dif days and th	ference k ne total d	between istance t	the to ravelle	tal dista d by Mo	ance tra ode 3 (N	avelled b //3) in th	by Mode2 (M2) in the five the five days?	j
A. 213	$\frac{1}{3}$ km	B. 223 $\frac{1}{3}$	ĸm	C. 30	$3\frac{1}{3}$ km		D. 323 $rac{1}{3}$ k	E. None of these	
3.	The averag	e speed the avera	of the p	erson o d of the	during t e persor	he first during	two da the last	ays is approximately what t three days?	t
A. 58.	33%	B. 53.33%	6	C. 48	.67%		D. 51.33%	E. Can't be determined	I
4.	Suppose, th the averag than the av	ne persor e speed o verage spo	n spends of M1 du eed of N	25% of uring tl 15 durin	f the tot he five ng the fi	tal time days is ive days	on each approxi ;?	n day to travel by M1 ther imately what percent less	ו 5
A. 45%	6	B. 50%		C. 65	%		D. 75%	E. None of these	
5.	What woul five days ar	d have be nd the av	een the o erage sp	differer eed of	nce betv M4 dur	ween th ing the	e averag five day	ge speed of M3 during the s?	è
A. 21	$\frac{1}{3}$ km	B. 23 $\frac{1}{3}$ kr	n	C. 20	$\frac{1}{3}$ km	ues	D. 60 $\frac{4}{15}$ ki	m Ban E. None of these	
Correc	ct Answers:		1	2 E	<b>3</b>	<b>4</b>	5 F		
			~	L	D		-		

## **Explanations :**

1.

Day	Day1	Day2	Day3	Day4	Day5
Time	6.25% of 8 hrs = 30 minutes	12.5% of 8 hours = 1 hour	3.125% of 8 hours = 15 minutes	8.33% of 8 hours = 1/12 of 8 hours=2/3 hours = 40 minutes	16.67% of 8 hours = 1/6 of 8 hours = 4/3 hours = 1 hour 20 minutes

Let from day1 to day 5 he travels a, b, c, d, and e km respectively From the line graph, Distance = speed × time 15% of a =  $40 \times \frac{1}{2}$  = 20 km

 $A = \frac{20 \times 100}{15} \text{ km}$ 

Day2, 15% of b = 60 × 1 = 60 km

 $B = \frac{60 \times 100}{15} \text{km}$ 

Day3, 15% of c =  $\frac{1}{4} \times 68$  $C = \frac{1700}{15} \text{ km}$ 

Day4,

15% of d =  $\frac{2}{3} \times 72$ 

 $D = \frac{4800}{15}$  km

Day5, 15% of e =  $\frac{4}{3} \times 120$ 

 $E = \frac{16000}{15}$  km

 $Sum = \frac{2000}{15} + \frac{6000}{15} + \frac{1700}{15} + \frac{4800}{15} + \frac{16000}{15}$  $=\frac{30500}{15}=\frac{6100}{3}\,\mathrm{km}=2033\,\frac{1}{3}\,\mathrm{km}$ Hence, option A is correct

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**2.** The total distance travelled by M3 in the five days

$$= 25\% \text{ of } \frac{2000}{15} + 25\% \text{ of } \frac{6000}{15} + 25\% \text{ of } \frac{1700}{15} + 25\% \text{ of } \frac{4800}{15} + 25\% \text{ of } \frac{16000}{15}$$
$$= \frac{6100}{12} = \frac{1525}{3} \text{ km}$$

The total distance travelled by M2 in the five days

$$= 35\% \text{ of } \frac{2000}{15} + 35\% \text{ of } \frac{6000}{15} + 35\% \text{ of } \frac{1700}{15} + 35\% \text{ of } \frac{4800}{15} + 35\% \text{ of } \frac{16000}{15}$$

$$=\frac{2135}{12}$$
 km

The reqd. difference =  $\frac{2135}{3} - \frac{1525}{3} = \frac{610}{3}$  km

Hence, option E is correct.

**3.** The total distance travelled by the person in the first two days

$$=\frac{2000}{15} + \frac{6000}{15} = \frac{400}{3} + \frac{1200}{3} = \frac{1600}{3} \text{ km}$$

Total time =  $8 \times 2 = 16$  hours

Average speed =  $\frac{1600}{3 \times 16} = \frac{100}{3}$  km per hour

The total distance travelled by the person in the first two days

$$=\frac{1700}{15}+\frac{4800}{15}+\frac{16000}{15}=\frac{22500}{15}=\frac{4500}{3}=1500 \text{ km}$$

Average speed = 
$$\frac{1500}{8 \times 3} = \frac{250}{4} = \frac{125}{2}$$
 km per hour

The reqd. % = 
$$\frac{\frac{100}{3}}{\frac{125}{2}} \times 100 = \frac{160}{3} = 53.33\%$$

Hence, option B is correct.

**4.** The total time travelled by man in 5 days =  $8 \times 5 = 40$  hours

The total time spent to travel by M1 = 25% of 40 = 10 hours

The total distance travelled by M1 in 5 days = 10% of  $\frac{6100}{3} = \frac{610}{3}$  km

The average speed of M1 during the five days

$$=\frac{610}{3 \times 10}=\frac{61}{3}$$
 km per hour

The total distance travelled by M5 in 5 days

= 15% of 
$$\frac{6100}{3}$$
 = 305 km

The total time = 30 mins + 1 hr + 15 min + 40 mins + 1 hr 20 mins = 3 hrs 45 mins = 15/4 hr

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The average speed = 
$$\frac{305 \times 4}{15} = \frac{244}{3}$$
 km per hour

The reqd. % = 
$$\frac{\left(\frac{244}{3} - \frac{61}{3}\right)}{\frac{244}{3}} \times 100 = 183 \times \frac{100}{244} = 75\%$$

Hence, option D is correct.

**5.** Since we could not find the time spend by the person to travel by mode3 or mode 4 therefore, it is not possible to get the answer.

Hence, option E is correct.

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