RBI PHASE 1 RECAP

9th August ’18

QUANT – DATA INTERPRETATION (Time and Work)
I.) Study the following pie chart and bar graph and answer the questions that follow:
Q.1) Bhaibhav and kanha started doing the work. After working for 5 days they left the work for Tilak. He did the work for 10 days until the lunch time. Now the remaining work was completed by Aryan in 7.5 days. In how many days can Aryan complete whole work?
[a] 22 days
[b] 20 days
[c] 24 days
[d] cannot be determined

Solution (c)
We can solve this question by LCM method as well as by percent method. For this question percent method is more suitable.

Bhaibhav’s 6 days’ work = 15%
His 5 days’ work = 15 x 5 /6 = 12.5 %
Kanha 3 days’ work = 15%
His 5 days’ work = 15 x 5 / 3 = 25%
Tilak did 5 whole day work
Tilak’s 4 days’ work = 25%
His 5 days’ work = 25 x 5 / 4 = 31.25%
% of Work done by them all = 12.5 + 25 + 31.25 = 68.75 %
Remaining work = 100-68.75 = 31.25 %
Aryan done 31.25% work in 7.5 days
So, he can do 100% work in = 7.5 x 100 / 31.25 = 24 days
I.)) Study the following pie chart and bar graph and answer the questions that follow:
Q.2) Tilak did not join the work due to any reason but Ishan took his place, who can complete the work in 25 days. He did Tilak’s part of work. After that Kanha joined the work but worked for same number of days as Ishan. If remaining work was completed by Bana who is 300% more efficient than Deepak, then in how many days was the whole work completed?

[a] 16 days
[b] 20 days
[c] 15 days
[d] 63/2

Solution (a)

Ishan completes 100% work in 25 days
As he did Tilak’s part of work which is 25% so, 25% work is done in = 25 x 25 / 100 = 6.25 days
As kanha also worked for 6.25 days.
Kanha completes 15% work in 3 days. So, % of work he completes in 6.25 days = 15 x 6.25 / 3 = 31.25%
Remaining work = 100 – (25 + 31.25) = 43.75 %
It is completed by Bana who is 300% more efficient than Deepak
(100+300) % of Bana = Deepak
Deepak can complete 25% work in 8 days
Bana can complete 100% work in 8 days
100% work in 8 days
43.75 % work in = 8 x 43.75 / 100 = 3.5 days
Total work completes in = 6.25 + 6.25 + 3.5 = 16 days
(ans.)
I.)) Study the following pie chart and bar graph and answer the questions that follow:
Q.3) Manav took 5 less days to complete the work than Vivek. Gagan is 60% more efficient than Bhabhav. They worked together for 5 days and left the work, after which the remaining work was completed Tilak in?
[a] 22/3 days
[b] 21/4 days
[c] 42/5 days
[d] 44/5 days

Solution (d)
Vivek completes 20% work in 5 days
100% work will complete in = 5 x 100 / 20 = 25 days
Manav completes the work in 20 days
100% work = 20 days
In 5 days = 100 x 5 / 20 = 25% work by Manav
Bhabhav completes the work in = 6 x 100 / 15 = 40 days
Gagan is 60% more efficient so,
He can complete the work in = 40 / 160 x 100 = 25 days
100% work in 25 days
In 5 days = 20% works is done by Gagan
Manav and Gagan complete the work together in 5 days
= 25 + 20 = 45%
Remaining work = 55%
Tilak completes 25% in 4 days
He completes 55% in = 4 x 55 / 25
= 44/5 days(ans.)
I.) Study the following pie chart and bar graph and answer the questions that follow:
Q.4) Deepak and Bhaibhav decided to complete the work in 28 days. Starting with Lakha they worked alternatively for total 20 days. After that Bhaibhav left the work but Deepak did it for 2 more days. After that he also left the work. Now, Gurpreet completed the remaining work on time. Then find how much time Gurpreet will take to complete the whole work?

[a] 16 days  
[b] 15 days  
[c] 12 days  
[d] none of these

Solution (a)
Deepak completes 25% work in 8 days  
Deepak’s one day work = 25/8 = 3.125 %  
Deepak works for 12 days so, his total work = 3.125 x 12 = 37.5%  
Bhaibhav completes 15% work in 6 days  
Bhaibhav’s one day work = 15/6 = 2.5%  
Bhaibhav works for 10 days so, his total work = 2.5 x 10 = 25%  
Total work they done altogether in 22 days = 37.5 + 25 = 62.5%  
Remaining work = 100 - 62.5 = 37.5 %  
Remaining days = 6  
Gurpreet done 37.5 % in 6 days  
So, he can complete 100 % in = 6 x 100 / 37.5 = 16 days (ans.)
I.) Study the following pie chart and bar graph and answer the questions that follow:
Q.5) Deepak and Tilak are in team A and Kanha and Vivek in team B. If both the team decided to complete the same amount of work separately then find out which team is more efficient and by how much days?

[a] Team B by 0.45 days  
[b] Team B by 4.5 days  
[c] Team A by 0.45 days  
[d] Team A by 4.5 days

Solution (c)

One day work of Deepak = \( \frac{25}{8} = 3.125 \% \)
One day work of Tilak = \( \frac{25}{4} = 6.25\% \)
Together they complete work in one day = \( 3.125 + 6.25 = 9.375\% \)

One day work = 9.375%
They complete 100% work in = 10.66 days

One day work of Kanha = \( \frac{15}{3} = 5\% \)
One day work of Vivek = \( \frac{20}{5} = 4\% \)
Together they complete work in one day = 9%
They complete 100% work in = 11.11 days

Hence, team A complete the work in 10.66 days
Team B complete the work in 11.11 days
So, team ‘A’ is more efficient as it completes the work in less days
Team ‘A’ is more efficient by = \( 11.11 – 10.66 = 0.45 \) days