

IPMAT/JIPMAT/IIM-B PYQ Practice Sheet: Time & Work

Q1 (IIM-B (BBA-DBE) 2024 Slot 1): 81 equally efficient people could complete a piece of work in 15 days. Initially 45 such people started working together. But after they worked together for 6 days their employer wanted that the work should be completed in a total of 21 days. However any new worker who joins is only 60% as efficient as any of the 45 people already working. How many new workers did the employer hire to work alongside the initial 45 people to meet the deadline?

- (a) 30
- (b) 36
- (c) 18
- (d) 27

Q2 (IIM-B (BBA-DBE) 2024 Slot 1): Sahil can complete a job in 20 days when working alone. Manoj is twice as fast as Sahil and three times as fast as Ashish in the same job. The collaborative work arrangement involves Sahil and Manoj working on the first day, Sahil and Ashish on the second day, and Manoj and Ashish on the third day. This three-day cycle continues till the work is complete. What fraction of the total work will then be done by Ashish till the job is completed?

- (a) $\frac{7}{40}$
- (b) $\frac{6}{41}$
- (c) $\frac{7}{45}$
- (d) $\frac{6}{49}$

Q3 (IIM-B (BBA-DBE) 2024 Slot 2): A, B and C work in a workshop for creating identical idols. A can craft 10 idols in 150 days. Similarly, B and C can individually create 16 idols in 192 days and 320 days, respectively. B works every day, A works only on alternate days starting from the first day, i.e. 1st March, and C also works only on alternate days starting from the second day, i.e. 2nd March. On which date will the construction of 2 idols be completed?

- (a) 16 March
- (b) 15 March
- (c) 14 March
- (d) 13 March

Q4 (IIM-B (BBA-DBE) 2025): A and C together can complete a certain work in 30 days. B is 20% more efficient than C. A, B and C together can do the same work in 20 days. C alone completed one fourth of the work and the remaining work was completed by A and B together. In how many days was the entire work completed?

- (a) $37 \frac{10}{13}$
- (b) $38 \frac{10}{13}$

- (c) $38 \frac{1}{2}$
- (d) $37 \frac{1}{2}$

Q5 (IIMBUGAT Sample Paper): A can complete a piece of work alone in 120 hours, B can complete it alone in 180 hours, while C can complete it alone in 216 hours. In every cycle of three days, only A works on Day 1, only B works on Day 2, and only C works on Day 3. In the n^{th} cycle, each of A, B, and C work for n hours. An exception is made on the last day, if the work is completed mid cycle. What is the total number of days needed for the work to be completed? (Note: if on the final day of work, the person working is supposed to work for p hours, but the work gets over after just q hours, that should be considered as only q/p day.)

- (a) 29.8
- (b) 29.2
- (c) 29.4
- (d) 29.6

Q6 (IIMBUGAT PYP 2025): Alice can complete a certain work in 24 days. Bob is twice as efficient as Alice. Both of them worked together for x days and stopped. The remaining work was completed by Carol working alone for $(x+1)$ days. If Carol is 25% less efficient than Bob, then the total number of days it took to complete the whole work was

- (a) 10
- (b) 9
- (c) 11
- (d) 5

Q7 (IPMAT Indore 2020): Three workers working together need 1 hour to construct a wall. The first worker, working alone, can construct the wall twice as fast as the third worker, and can complete the task an hour sooner than the second worker. Then, the average of time taken in hours by three workers, when working alone, to construct the wall is

- (a) $(\sqrt{33} + 4) / 3$
- (b) $(\sqrt{33} + 5) / 3$
- (c) $(\sqrt{33} + 6) / 3$
- (d) $(\sqrt{33} + 7) / 3$

Q8 (IPMAT Indore): There are two taps, T1 and T2, at the bottom of a water tank, either or both of which may be opened to empty the water tank, each at a constant rate. If T1 is opened keeping T2 closed, the water tank (initially full) becomes empty in half an hour. If both T1 and T2 are kept open, the water tank (initially full) becomes empty in 20 minutes. Then, the time (in minutes) it takes for the water tank (initially full) to become empty if T2 is opened while T1 is closed is

[Integer type]

Q9 (IPMAT Indore 2023): Amisha can complete a particular task in twenty days. After working for four days she fell sick for four days and resumed the work on the ninth day but with half of her original work rate. She completed the task in another twelve days with the help of a co-worker who joined her from the ninth day. The number of days required for the co-worker to complete the task alone would be

[Integer type]

Q10 (IPMAT Indore 2025): Arpita and Nikita, working together, can complete an assigned job in 12 days. If Arpita works initially to complete 40% of the job, and the remaining job is completed by Nikita alone, then it takes 24 days to complete the job. The possible number of days that Nikita requires to complete the entire job, working alone, is

[Integer type]

Q11 (IPMAT Rohtak 2019): Two pipes P and Q can fill a tank in 20 hrs and 25 hrs respectively while a third pipe R can empty the tank in 30 hrs. If all the pipes are opened together for 10 hrs and then pipe R is closed, then in what time the tank can be filled?

- (a) $400/23$ hrs
- (b) $400/27$ hrs
- (c) $200/23$ hrs
- (d) $200/27$ hrs

Q12 (IPMAT Rohtak 2019): Work done by P in one day is double the work done by Q in one day and work done by Q in one day is thrice the work done by R in one day. If P, Q, and R together can complete the work in 30 days, then in how many days P alone can do the work?

- (a) 52 days
- (b) 42 days
- (c) 30 days
- (d) 50 days

Q13 (JIPMAT 2021): A contractor undertakes to do a piece of work in 40 days. He engages 100 men at the beginning and 100 more after 35 days and completes the work in stipulated time. If he had not engaged the additional men, how many days behind schedule would it be finished?

- (a) 3
- (b) 5
- (c) 6
- (d) 8

Q14 (JIPMAT 2021): 4 men and 6 women finish a job in 8 days, while 3 men and 7 women finish it in 10 days. In how many days will 10 women finish it?

- (a) 24

- (b) 32
- (c) 36
- (d) 40

Q15 (JIPMAT 2022): If A can do $\frac{1}{4}$ of a work in 3 days and B can do $\frac{1}{6}$ of the same work in 4 days, how much will A get if both work together and are paid Rs. 180 in total?

- (a) 36
- (b) 60
- (c) 108
- (d) 120

Q16 (JIPMAT 2023): Statement (I): 4 boys and 8 girls completed $\frac{1}{3}$ of work in 5 days. After that 3 boys and 3 girls increased, and they completed another $\frac{1}{3}$ of work in 3 days. If the remaining work is to be completed in 2 days, then the number of girls that should be increased is 32.

Statement (II): The ratio of time taken by A and C to do a work is 1:2 respectively. B is $166\frac{2}{3}\%$ more efficient than C. Time taken by A to complete 6% of work is 6 days. Then, the time taken by B and C together to complete the whole work is $54\frac{6}{11}$ days. In light of the above statements, choose the most appropriate answer from the options given below.

- (a) Both Statement (I) and Statement (II) are true.
- (b) Both Statement (I) and Statement (II) are false.
- (c) Statement (I) is true but Statement (II) is false.
- (d) Statement (I) is false but Statement (II) is true.

Q17 (JIPMAT 2024): A is 40% less efficient than B who can do the same work in 20% less time than C. If A and B together can complete 80% work in 12 days, then in how many days 60% work can be completed by B and C together?

- (a) 2 days
- (b) 4 days
- (c) 8 days
- (d) 16 days

Q18 (JIPMAT 2025): 40 men can complete a work in 48 days. 64 men started and did the same work for x days. After x days, 32 men increased, so, the remaining work is completed in $16\frac{2}{3}$ days, then the value of x is

- (a) 5
- (b) 8
- (c) 10
- (d) 6

Answer Key

Time & Work

Q1: (a)

Q4: (b)

Q7: (a)

Q10: 20 or 24

Q13: (b)

Q16: (c)

Q2: (a)

Q5: (d)

Q8: 60

Q11: (a)

Q14: (d)

Q17: (b)

Q3: (b)

Q6: (a)

Q9: 24

Q12: (d) 50 days

Q15: (d)

Q18: (a)



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* Q1 TSD Sheet 2: calculated 46 kmph (not in options) — please verify against official key.