GNM CLASS

Date - TEST- HANDOUT

Name - TW + TSD

Roll number -

section - , **Time – 40 minutes**

Marking Scheme (+4 / -1)

1. Tap A takes 4 hours to fill a tank. Tap B takes 6 hours to fill the tank. If both the taps were opened simultaneously, what fraction of the tank is filled by the tap A …….

2. A boy is trying to cover a distance of 100 m up a ramp. He takes a jump forward and covers 2m, but every time he jumps forward, he also slips backwards by 1 m. In all, how many jumps would be required to cover the distance?

   a) 99 b) 100 c) 98 d) none of these

3. Three taps P, Q and R can fill a tank in 8, 10 and 12 hours respectively. Tap P is opened at 8 am, tap Q at 10 am and tap R at 11 am. At what time would the tank be full ……

4. A and B can do a piece of work in 12 days, B and C can do it in 16 days. All of them started the work together. After working for 5 days, A left. B worked for another 2 days and left. C completed the remaining work after having worked for a total of 13 days. In how many days can C complete the work?

a) 22 b) 23 c) 24 d) none

5. A group of 25 workers are assigned a task of 330 units. Each worker can do 1 unit / day. They start the task. After every day one more worker joins the group. The task is completed on which day?

a) 9 b) 10 c) 11 d) 12

6. 30 men working 7 hours per day can do a piece of work in 18 days. In how many days can 21 men working 8 hours a day do the same piece of work?

7. Pipes X and Y can fill a tank in 12 minutes and 18 minutes respectively. Pipe Z can empty it in 24 minutes. All the pipes were opened simultaneously. After 1 minute, Z was closed. The tank would have been filled in another (in minutes)

a) 5 b) 5.5 c) 6.5 d) 6.33

8. A, B and C working individually can complete a piece of work in 10, 15 and 20 days respectively. They completed the work in 4 days with the help of D. If they earned Rs 3750 for the entire work, how much did D earn for his work (in Rs) ?

9. A work was started by a certain number of men, who completed the work in 15 days. Had there been 4 men less, they would have taken 3 more days to complete the work. Find the number of men?

a) 24 b) 28 c) 32 d) 35

10. While travelling from office to home, Riya took 25% more time due to traffic jam. Her speed is what part of the usual speed?

a) 3/4 b) 4/5 c) 5/4 d) CND

11. Car A left P for Q at 8 am. Car B left Q for P at 9 am. If the speeds of A and B are 60 km/h and 40 km/h respectively and the distance between P and Q is 360 km, at what time will they meet?

12. Cars X and Y started from A with speeds in the ratio 4:5 at 9 am and 10 am respectively. If both the cars travelled in the same direction, find the ratio of the distances that X and Y would have covered before meeting?

a) 1:1 b) 4:5 c) 5:4 d) CND

13. In a race of 200 m, A gives B a start of 10 m and beats him by 10 m. find the ratio of the speeds of A and B.

a) 7:6 b) 5:3 c) 10:9 d) 20:19

14. A bus covered a distance of 160 km in 4 hours, covering a part of it at 30 km/h and the remaining at 70 km/h. For how much time did the bus travel at 70 km/h?

15. A man swims from A to B and back in 4.5 hours. A block of wood when allowed to go with the stream from A to B takes 6 hours. What is ratio of the speed of the man in still water to that of the stream?

a) 2:1 b) 3:1 c) 4:1 d) 5:1

16. A person took 15 seconds to walk up an ascending escalator. He took 75 seconds to walk down the escalator. Find the time he would take to walk up or down the escalator when the escalator is switched off (in seconds)?

17. Ramu starts from P towards Q at a speed of 30 km/h and after every 12 minutes increase his speed by 5 km/h. If the distance between P and Q is 51 km, then how much minutes does he take to cover the distance?

a) 60 b) 72 c) 90 d) 120

18. A train, 180 m long, crossed a 120 m long platform in 20 second, and another train travelling at the same speed crossed an electric pole in 10 seconds. In how much time will they cross each other when travelling in the opposite direction (in seconds)?

19. A and B run towards each other from P and Q respectively with respective speeds of 36 km/h and 45 km/h. After meeting each other if A reaches Q in 5 hours, in how many hours does B reach P?

20. Amir takes 10 minutes to travel from A to B whereas Simran take 15 minutes to travel the same distances. Amir and Simran start from A to B and B to A respectively at 8 am. At what time will they meet?

a) 8:03 am b) 8:06 am c) 8:09 am d) 8:12 am