PSC Divisional Accountant - Kerala Water Authority - Part iii - Arithmetic and Mensuration Examination
Previous Year Question Paper

Exam Name: ***Divisional Accountant - Kerala Water Authority - Part iii - Arithmetic and Mensuration***

Date of Test : 19.11.2016

Question Paper Code: 156/2016

Medium of Questions: English

156/2016

Question Booklet Serial Number: 100217

Maximum Marks : 200 Time : 3 Hours

1. A buys a certain number of oranges at 8 for Rs. 10 and an equal number at 10 for Rs. 15. If he sells them at 15 for Rs. 20, does he gain or lose at what percentage ? 8

2. The hour hand of a clock is 6 cm long. Find the area swept by it between 9.15 am and 9.50 am in cm^2. 8

3. A product was sold at a profit of 20%. If it was sold at a price that was 15% lower, the profit would have been Rs. 420. What is the Cost price of the product ? 8

4. A man gets back the amount he had invested in buying 100 mangoes by selling 80 of them. What is his profit percentage ? 8

5. A student secures 35% of the total marks in an exam and gets 25 marks more than the pass mark. Another student secures 24% of the total marks in the same exam and fails by 30 marks. What is the passmark as a percentage of the total marks ? 8

6. A person travels 250 km in 5 hours in two parts. He travels first part of the journey by bus at an average speed of 45 kmph, and the second part by car at an average speed of 70 kmph. Find the distance travelled by him by bus ? 8

7. A person bought a certain number of oranges for Rs. 70. If the price of each orange was Rs. 2 less, he would have bought 4 more oranges for the same amount. Find the number of oranges he bought originally. 8

8. A, B and C together can earn Rs. 3240 in 18 days. A and C can earn Rs. 1200 in 10 days whereas B and C can earn Rs. 1820 in 14 days. Find the daily earnings of C. 5

9. The difference between the compound interest and the simple interest for two years on a certain sum at a certain rate of interest is Rs. 64. Find the principal if the compound interest for two years is Rs. 704. 8

10. A and B working separately complete a work in 8 days and 12 days respectively. They work on alternate days starting with A on the first day. In how many days will the work be completed ? 8

11. A team of two people A and B who can complete a piece of work together in 40 days, begin the work. C joins them after 8 days and the work gets completed in 24 days after C joins them. In how many days can C alone complete the work ? 8

{P.T.O.}

12. A pipe is filling a tank of 200 litres capacity at 5 litres/hr. Because of a leak 80 hrs more to fill the tank. What is the rate in litres/hr at which water is leaking ? 8

13. A tank is full of water. A drain pipe which can empty the full tank in 60 minutes is opened. 18 minutes later another pipe which can fill the empty tank in 30 minutes is opened. After how much time in total, is the tank full again ? 8

14. In a 500 m race A beats B by 25 m or 5 seconds, what is A's speed ? 8

15. A 3-digit number is 11 times the 2-digit number formed by using the hundreds and the unit digit of the 3-digit number respectively, in the tens and units place of the 2-digit number.
    (a) If the difference between the digit in tens place and the digit in hundreds place is 8. What is the digit in the units place ? 5
    (b) From (a) if the difference between the digit in tens place and that in the units place of the 3-digit number is 1, what is the 3-digit number ? 5
    (c) If the difference between the digit in tens place and that in the units place of the 3-digit number is same as the difference between the digit in tens place and the digit in hundreds place find the total number of such 3-digit numbers. 5

16. The amount used to purchase one litre of petrol can be used to purchase 3 litres of diesel or 5 litres of kerosene. Out of a certain amount, Rs. 510 is spent on diesel.
    (a) How much is spent on kerosene if equal volumes of the 3 liquids are purchased with the total amount ? 2
    (b) What will be the amount spent on petrol if the total amount is spent to purchase equal volumes of petrol and kerosene only ? 2
    (c) What will be the total amount to purchase 4 litres of each of the 3 liquids at the above rate ? 4

17. A bag contains coins of four different denominations, viz 1-rupee, 50-paise, 25-paise and 10-paise. There are as many 50-paise coins as the value of 25-paise coins in rupees. The value of 1-rupee coins in is 5 times the value of 50-paise coins. The ratio of the number of 10-paise coins to that of 1-rupee coins is 4:3, while the total number of coins in the bag is 325.
    (a) How many 10-paise coins are there ? 5
    (b) What is the value of 50-paise coins ? 5
    (c) What is the total value of the coins in the bag ? 5

18. A train crosses two bridges 430 m and 550 m long in 30 seconds and 36 seconds respectively. Find the speed of the train in kmph. 8

19. A man rows a distance of 12 km in 1 hr in still water and in 80 minutes against the current. Find the time taken by him to row 45 km with the current and return to the starting point. 8

20. 3 cows are each tied to 3 corners of a square plot of side 28 m with ropes 14 m long. Find the area not grazed by the cows in the plot. 8

21. While painting the inside of an auditorium, the painter places his ladder against a wall such that the top of the ladder is touches the wall at a height of 24 feet. After the work on the wall was over, keeping the foot of the ladder fixed at the same point, it leans against the wall on the opposite side and the top of the ladder touches the wall at a height of 20 feet. If the distance between the walls is 22 feet, what is the length of the ladder ? 8

22. A contract was to be completed in 40 days and 24 men were put to work. After 28 days, 11 more men were engaged and the work was completed just in time. Had no extra men been engaged, how many days would the work have taken ? 7

23. If 30 men working 5 hrs a day can make a road 300 metres long in 12 days. How long will it take 20 men to make the road 100 metres long working 8 hrs a day ? 7

24. At an election 6% of the total voters did not cast their votes and 580 votes were declared invalid. There were two contestants in the poll A and B. A defeated B by 600 votes. It was found that A secured 55% of the total legal polled votes. Find the total number of voters. 7

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