Assignment 8

The due date for completing this assignment has passed. Due on 2021-03-17, 23:59 IST

Please enter your responses to the following questions:

1. The speed of a wind turbine is __________ m/s. (1 point)

2. A wind turbine integrated to civic operation at a minimum wind speed is called __________. (1 point)

3. The relationship between power in the wind and wind speed is __________. (1 point)

4. The maximum efficiency is __________. (1 point)

5. The power in the wind is __________. (1 point)

6. The power in the wind is __________. (1 point)

7. The maximum efficiency is __________. (1 point)

8. The power in the wind is __________. (1 point)

9. The power in the wind is __________. (1 point)

10. Estimate the number of hours per year that the wind speed will be between 3 and 7 m/s during the year. (1 point)

11. Assuming the wind turbine is operating completely, calculate the energy produced by the wind turbine. (2 points)

12. Assume that the wind turbine can start from rest and reach a maximum speed of 20 m/s in 10 seconds. Calculate the power generated by the wind turbine. (2 points)

13. Assume that the wind turbine can start from rest and reach a maximum speed of 20 m/s in 10 seconds. Calculate the power generated by the wind turbine. (2 points)

14. Assume that the wind turbine can start from rest and reach a maximum speed of 20 m/s in 10 seconds. Calculate the power generated by the wind turbine. (2 points)

15. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)

16. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)

17. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)

18. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)

19. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)

20. Calculate the ratio of the cost of a wind turbine to the power output. (1 point)