1. If X is a poisson variable such that P(X = 2) = 9P(X = 4) + 90P(X = 6), then the median is \_\_\_\_\_\_\_\_ 1
2. Using Euler's method dy/ dx = 4 + x^2 + y , y(0) = 1 the value of y(0.05) is ---- 1.25
3. The value of y(0.1) becomes --------, when y' = y − x^2 ; y(0) = 1 by Picard's method 1.105
4. If X is a binomial variate with p = 1/5 for the experiment of 50 trials then the standard deviation is \_\_\_\_\_\_\_\_\_.square root 2
5. In a binomial distribution, the relation between p and q is q = 1 – p
6. \_\_\_\_\_ method needs former calculations of higher order derivatives? Taylor's
7. Accurate solution in Taylor series method is obtained if the interval of difference h is small
8. Runge kutta methods are classified according to their Order
9. The Corrector formula is applied to correct the error and improve that value
10. Condition for convergence in Picard's method is f(x,y) and ∂ f / ∂ x are continuous
11. By Runge-Kutta method solve y' = y^2 + xy, y(1) = 1. find y(1.1). 1.2415
12. Given X = B (n,p), the condition under which X tends to poisson distribution are \_\_\_\_\_\_\_\_\_\_\_\_\_. n tends to infinity, p tends to zero and np is fixed
13. The modified Euler method is based on the average of \_\_\_\_. Points
14. Numerical solution of ordinary differential equations with initial conditions are called \_\_\_\_\_ Initial value problems
15. In which of the following method , approximate the curve of solution by tangent in each interval Euler method
16. In the textile industry, a manufacturer is interested in the number of failures or flaws occurring in each 100 feet of material. The probability distribution that has the greatest chance of applying to this situation is the Poisson distribution
17. Truncation error means difference between exact solution and pointwise solution
18. By taylor's series, what is the value of y(1.1) if y' = x + y, y(1) = 0 0.01103
19. The mean of the binomial distribution is np
20. If the mean and variance of a binomial distribution are 12 and 4 then the distribution is (1/3+2/3)^18
21. If the two regression coefficients are -0.4 and -0.9, then the coefficient of correlation is -0.6
22. The variations repeat themselves after every season seasonal variations
23. A complete cycle consists of a period of: Prosperity and recession
24. find the correlation coefficient x 1 3 5 8 9 10 & y 3 4 8 10 12 11 -0.97
25. Which of the following is a non parametric test? Both U test and Kruskal test
26. A sample of population is called a large sample if the sample size n is more than 30
27. The coefficient of correlation is \_\_\_\_\_\_ between the regression coefficients. Geometric mean
28. If the sample size is 20, which test will you use small sample test
29. Which of the following is a non parametric test? kruskal wallis H test
30. Imagine, you are working on a time series dataset. Your manager has asked you to build a highly accurate model. You started to build two types of models, Model 1: Decision Tree model. Model 2: Time series regression model. At the end of evaluation of these two models, you found that model 2 is better than model 1. What could be the possible reason for your inference?

Model 1 couldn t map the linear relationship as good as Model 2

1. The component of time series attached to long term variations is termed as irregular variation
2. Obtain the rank correlation coefficient from the following data. (x, y) (68, 62) (64, 58) (75, 68) (50, 45) (64, 81) (80, 60) (75, 68) (40, 48) (55, 50) (64,70) 0.545
3. A simple random sample of size 100 has mean 15, the population variance being 25. The interval estimate of the population mean with a confidence level of 95% is \_\_\_\_\_\_\_\_ (14.02,15.98)
4. When the number of samples is two, the kruskal s walli s test becomes U-test
5. Conclude the statement: If X is a normal distribution with mean 5 and variance 1, then X-5 is a variate with mean 0 and variance 1. TRUE
6. Moving average method is used for measurement of trend when trend is linear
7. In time series seasonal variations can occur within a period of: One year
8. Chi-square curve is always positively skewed
9. In a partially destroyed record, the following information obtained. variance of x = 9, regression equations 8x - 10y + 66 = 0; 40x - 18y = 214. find the correlation coefficient. 0.6
10. Type II error is H0 false and accept H0