PRACTICE QUESTIONS

Section A: ADVANCE EXCEL

1. Identify the chart that can be used to compare the individual item in a group of items.   a) pie chart   b) line chart c) area chart d) bar chart

2. Which one of the following report formats is used to organise the data in a rectangular array of rows and columns.   a) textual b) tabular c) graphical d) hierarchical

3. Which of the following drop down buttons in the clipboard group contains the option to embed the content of the worksheet as non-editable image? a) cut b) copy c) paste d) format painter

4. Which of the following tools of Microsoft Excel that allow you to find an unknown value on the basis of set of known values.   a) treadline   b) scenario manager c) goal seek d) sparkline

5. Identify the operator that is used for concatenation in Microsoft excel.   a) +   b) & c) ++ d) &&

6. Which of the following is not a tool provided in the field of information analysis to automate the task of analysing information or creating a business report?   a) Tally b) SAP   c) Data   d) Microsoft Excel

7. Identify the correct cell of referencing technique in which the cell references contained in formula change even if you copy the formula to another location.   a) Mixed referencing b) 3-d referencing   c) relative referencing   d) absolute referencing

8. Which one of the following type of trendline represent a steady growth or steady fall of a data? a) Linear b) Non linear   c) Exponential d) None of the above option is correct

9. Identify the Microsoft excel feature that allow you to create certain rules to restrict the data to be entered into a cell. a) Data validation   b) Group c) Sort d) Conditional formatting

10. On the special occasion of Christmas, your store decides to give 9% discount to the customer who make purchase of more than $15,000. Otherwise, 4% discount should be given. If the D column in the worksheet contains the total bill amount, identify the formula that you will use to calculate the discount amount in the E7 cell. a)

=IF(D7>15000, D7*(9/100), D7*(4/100) b) =AND(D7>15000, D7/(9/100) ,D7*(4/100)

c) =AND(D7>15000, D7*(4/100) ,D7*(9/100)d) =IF(D7>15000,D7*(4/100), D7*(9/100)

Section B: STATISTICS

1. which of the following forms represents the expontential regression? a) Y=k/e^Bx   b) Y=kx/e^B c) Y=K/ex^B d) Y=k*e^BX

2. Jane found that the R-square value of the regression she had used is 0.25 which one of the following options do you conclude about her regression model? a) Jane should check for residual errors   b) Jane should re-evaluate the regression c) Jane should reject the regression d) Jane should accept the regression

3. Which one of the following tests applies in case the null hypothesis is as is and alternative hypothesis is in the form > value. a) Single-tailed test b) Right –tailed test c) Left – tailed test d) Two-tailed test

4. which of the following options is the probability of a type I error? a) $1-\beta$ b) β c) α d) $1-\alpha$

5. A batsman has scored runs as 2,5,3,1,4,6, 9,8 and 7in his last nine matches, what is the median of the runs scored by him? a) 2 b) 4 c) 8 d) 5

6. A new electronic product was launched in Nigeria. A retail sold 20 products in the past 10days. The details of sales per day are 0, 2, 2, 4, 2, 4, 2, 1, 3 and 0. The company wishes to compute the averange median and mode of this data. What set of values would it obtain? a) 2,2 and 2 b) 2,2 and 3 c) 2,0 and 0 d) 2,3, and 4

7. given an actual demand of 105, a previous forecast value of 101, and an alpha 0f 0.2, which one of the following option represents the exponential smoothing forecast for the next period. a) 100.6 b) 101.8 c) 102.4 d) 104.2

8. Which of the following options is the third stage of hypothesis testing? a) State the hypothesis b) Compute the test statistic   c) Set the criteria for a decision   d) Make a decision

9. The regression equation for predicting insurance policies sold (y) from information about insurance agents age (x) is y=-0.25(x)+12.43. How many policies would a 15 years old insurance agent sell? a) 12.4 policies b) 25.5 policies c) 6.86 d) 8.68

10. The value of sample SD for a normally distributed population is 12.42 for a sample size of 15. The population SD is known to be 18. Which one of the following options gives the correct chi-square statistics value? a) 7.22 b) 5.07 c) 6.67 d) 8.07

11. which of the following methods is use to measure causality using statistics? a) Using the R value b) Using a combination of correlation computations and statistical sampling c) Using spearman's Rho d) Using statistical sampling

12. What will be the effect of increasing sample size on standard error.   a) The standard error will decrease b) There will be an error in computation of the standard error c) The standard error will also increase d) It has no effect on the standard error

Section C: R Programming

1. You want to display the current date on the console. Which of the following functions will you use? a) Sys.Date() b) as.time() c) Sys.time() d) as.date()

2. Identify the output of the following expression.
   paste("Hello", "World") a) Hello b) Hello-World c) HelloWorld d) Hello World

3. Which of the following paces in R Studio shows the previous expressions evaluated in the console? a) Plots b) Viewer c) Environment   d) History

4. Identify the output of the following command:
   Cat("The current word is \nSchool")
   a) The current word is School
   b) The current word is
      School
   c) The current word is \nSchool
   d) The current word is
      \nSchool

5. Which of the following operations is used to modify an object defined outside a function?
   a) = b) <- c) <<- d) ->

6. What will be the out if You are execute the following command in the R command prompt seq (3, Length out = 5, by = 2)   a) 3 8 13 b) 3 4 5 6 7 8 c) 3 5 7 d) 3 5 7 9 11

7. Identify the output of the following code:
   Pmax (c(7,7,8),c(6, 5, 7),c(3,3,4))

Pmin (c(7,7,8),c(6,5,7), c(3,3,4))

a) [1] 7 8 8

[1] 3 5 4

b) [1] 8 7 4

[1]7 5 3

c) [1] 7 7 8

[1] 3 3 4

d) [1] 7 8 7

[1] 7 3 4

8. What will be the out of the following R codes

addn <- function (y){

function(x){

x+y

}

}

sapply(5:1, addn(5))

a) 6 7 8 9 10

b) 1 2 3 4 5

c) 5 4 3 2 1

d) 10 9 8 7 6

9. Which of the following logical operations is performed by the & symbol? a) Univariate OR b) Univariate AND c) Vectored AND d) Vectored OR

Section D: Machine Learning

1. The Naïve Bayes algorithm is: a) Unsupervised learning b) Supervised Learning c) Numeric Prediction d) Clustering

2. Which of the following option is an example of Nearest Neighbor algorithm. a) C5.0 decision tree algorithm b) 1R algorithm c) K-NN algorithm d) K-means algorithm

3. What does the term corpus stand for in processing text data a) Collection of text document b) A source object c) Computer's file system d) Memory stored

4. The sweetness of mango is 6 and the crunchiness is 4. Considering the following data, identify the nearest neighbor of mango by using the distance formula

Fruit	Sweetness	Crunchiness
Grape	8	5
Banana	3	7
Orange	7	3
Litchi	3	7

a) Grape b) Orange c) Banana d) Litchi