

# **COMPUTER ALGEBRA SYSTEMS AND**

## **RELATED SOFTWARE**

### **MULTIPLE CHOICE QUESTIONS-**

Ques1 Which of these command is used for prime factorization of n?

- (A) Factorizing[n ]. (B) FactorInteger[n]. (C) Expand[n]. (D) Factor[n]

Ans (B)

Ques2 How many argument does manipulate command take?

- (A) 3. (B) 4. (C) 1. (D) 2

Ans (D)

Ques3 Which of these command is used for defining the scale of the axes?

- (A) mesh (B)AspectRatio. (C) Style. (D) Axes

Ans (B)

Ques4 To find the numeric value which of these command we use?

(A) N[ ] . (B) D[ ]. (C) n [ ] . (D) none of these

Ans (A)

Ques5 Which of these option is used if we want axes to intersect at the origin?

(A) AxesScale->{0,0}. (B) AspectRatio->{0,0}. (C) AxesOrigin->{0,0}. (D) AxesOrigin->{0,0}

Ans (C)

Ques6 Which command is used for altering the working directory?

(A) scan( ). (B) setwd( ) . (C) data( ). (D) item( )

Ans (B)

Ques7 Which of these command is used for removing variable defined in ls( ) function?

(A) remove( ). (B) rm( ). (C) re( ). (D) rv ( )

Ans (B)

Ques8 What is the use of sd( scores ) command?

(A) standard median. (B) standard deviation. (C) Variance. (D) standard mean

Ans (B)

Ques9 Which of these command is used to see individual student score from one exam to next in R?

- (A) plot( ) . (B) stem ( ). (C) scan( ). (D)boxplot( )

Ans (A)

Ques10 Which of these command is used to check relationship between two things say exam1 and exam2 in R Language?

- (A) lm(exam1,exam2). (B) abline(exam1, exam2).  
(C)cor(exam1,exam2). (D) ls(exam1,exam2)

Ans (C)

### **ONE WORD QUESTIONS-**

Ques 11 A list of currently defined variables can be generated with which function in R?

Ans ls()

Ques 12 which command is used to calculate the transpose of the matrix in MATLAB?

Ans Transpose

Ques 13 The plotting engine that lies beneath Maxima is called what?

Ansgnuplot

Ques 14 what is delayed assignment operator in Mathematica?

Ans:=

Ques 15 To Generate the sequence of values in maple, which function is used?

Ansseq()

Ques 16 The rank of a matrix A in matlab is given by which command ?

Ansrank(A)

Ques 17 In R, which function produces stem and leaf plot of an array ?

Ans>stem()

Ques 18 The command for log10 (5) in mathematica is given as?

AnsLog[10,5]

Ques 19 what is the command to write matrix in maxima?

Ans>A=[2,3;7,1]

Ques 20 The built in function e is represented by what in maple?

Ansexp()

Ques 21 which command is used to find the product of two matrices m,n ?

Ans m.n

Ques 22 which function is used to find the nth prime?

Ans Prime[n]

Ques 23 which command is used to find the value of exponential constant up to 20 digits?

Ans N[E,20]

Ques 24 Write the command to evaluate  $2x^2+x=1$ .

Ans Solve[ $2x^2+x==1,x$ ]

Ques 25 Write the command to plot sinx and cosx in the range  $-10 < x < 10$ .

Ans Plot[Sin[x], Cos[x], {x, -10, 10}]

Ques 26 Write the command to evaluate  $7^{23} \bmod 23$ .

Ans Mod[ $7^{23}, 23$ ]

Ques 27 Write the command to evaluate logarithm of 5.65 to the base 10.

Ans Log[10, 5.65]

Ques 28 Write the command to print first 10 prime numbers .

Ans Table[Prime[n], {n, 1, 10}]

Ques 29 Plot pie command is used to draw a pie-chart. Is it true or false?

Ans False

**Ques 30** The data object combining text and numbers is of type “text”. Is it true ?

**Ans** TRUE