Model Paper "Business Mathematics"
For Bridge Courses of Foundation Diploma of ACCA
Annual Examination 2017 & Onward
Objective
Part-A

Roll No: _____

Time: 30 Minutes   **Total Marks: 20**

Note: This part is compulsory. It should be attempted on the question paper and returned to the supervisory staff after the prescribed time. Cutting, overwriting and use of lead pencil are not allowed. Supervisory staff is required to attach it with the answer book.

_____

Q.1   Each statement has more than one choice. Select the correct answer from these and encircle it.   **20x1=20**

i.   Binary number system is base on
a.   0,1   b.   0,2   c.   0,3   d.   0,4

ii.   Number system use in computer
a.   Decimal   b.   Binary   c.   Octal   d.   None of above

iii.   Convert $(7)_{10}$ to its Equivalent number with binary system is
a. $(III)_2$ b. $(IOI)_2$ c. $(OII)_2$ d.   None of above

iv.   Rectangular arrangement of numbers and symbols belonging to situation is called
a.   Determinant   b.   Matrix   c.   Equation   d.   Formula

v.   A matrix comprising all zero entries is
a.   Unit   b.   Null   c.   Row   d.   Column

vi. $6x=180$ Value of x is
a.   180   b.   30   c.   174   d.   None of above

vii.   When the Principal remains same if interest is
a.   Simple   b.   Compound   c.   None of Above   d.   All of above

viii.   If number of columns and rows are equal then matrix is
a.   Singular   b.   Square   c.   Null   d.   Unit

ix.   The ratio between 3 days and 40 hours
a.   9:5   b.   5:9   c.   4:9   d.   5:4

x. X^0 is equal
a.   1   b.   0   c.   2   d.   3

xi.   Ratio between 80:640 is
a.   1:4   b.   2:4   c.   1:8   d.   4:16

xii.   If 2:7::x:49
a.   9   b.   7   c.   14   d.   52

xiii. $\begin{vmatrix} 2x & 4 \\ 6 & 2 \end{vmatrix}$ is a singular matrix then x is
a.   2   b.   4   c.   6   d.   12

xiv.   Commission is
a.   Remuneration   b.   Wages   c.   Salaries   d.   None of above

xv.   Discount means
a.   Increase sale price   b.   Decrease sale price   c.   All of above   d.   None of above

xvi.   Types of proportion are
a.   2   b.   3   c.   4   d.   6

xvii.   Cost is Rs/- 500 and loss 5% selling price is
a.   Rs/- 25   b.   Rs/- 400   c.   Rs/- 475   d.   None of these

xviii.   25% of Rs/- 500 is
a.   Rs/-125   b. Rs/- 150   c.   Rs/- 200   d.   Rs/- 250

xix.   Compound interest is
a.   Same simple interest   b.   Different simple interest
c.   May or may not simple interest   d.   All of above

xx.   5 in binary number system is
a. $(IO)_2$ b. $(IOI)_2$ c. $(II)_2$ d.   None of above

Time: 02:30 Hours   **Total Marks: 80**

Section-I

Short Questions   **08x5=40**

Q.2 Attempt any eight (08) from the following questions.

  i.   Convert 1942 in binary number

  ii.   Find the determinant of A= $\begin{vmatrix} 4 & 9 \\ 7 & 6 \end{vmatrix}$

  iii.   Find value of x if 4x-3=2x+7
  iv.   Define with example matrix
  v.   Define ratio with example
  vi.   Define compound interest with formula
  vii.   Define Profit
  viii. Give formula for annuity
  ix.   Divide Rs/- 60,000 in the ratio of 5:7
  x.   Define principal amount
  xi.   Define percentage with formula
  xii.   Explain and define commission
  xiii. Explain the types of proportion
  xiv.   Explain the formula of inverse of A
  xv.   Define and explain binary number system

Section-II

Long Questions   **10x4=40**

Q.3 Attempt any Four (04) from the given questions.

  i.   Solve the system of Equation
         4x + 5y = 40
         3x + 2y = 23
  ii.   Find two consecutive integers whose sum is 99
  iii.   A table cost Rs/- 600 and sold for Rs/- 555, Find percentage loss
  iv.   Find A^{-1} whereas,

         $A = \begin{pmatrix} -1 & -2 \\ 3 & 4 \end{pmatrix}$

  v.   Solve equations by factorization
         $X^2 + 10x = 8(2x-1)$
  vi.   An agent earned Rs/- 27,000 at the rate of 4% for sale what was the sale price
  vii.   A jewelry set was sold for Rs/- 50,400 on 16% loss, Find cost price of each set