Business Mathematics Icom Part 1 Online Test

Sr	Questions	Answers Choice
1	Two homogeneous quantities which expressed in different unit of measurement is called a	A. Price B. Profit C. Rate D. Ratio
2	Number of terms in a proportion are	A. 2 B. 4 C. 3 D. 5
3	Proportion is usually denoted by	A. : B. : : C. < D. >
4	The problem which deal with more than one proportion belongs to	A. Compound proportion B. Inverse proportion C. direct proportion D. Continued proportion
5	The fractional form of 8.5% is	A.
6	Lowest term of 60:360 is	A. 6:1 B. 1:6 C. 6:36 D. 5:36
7	Decimal form of 3.75 %	A. 375 B. 37.5 C. 0.0375 D. 0.375
8	20% of 70	A. 41 B. 14 C. 140 D. 1400
9	The positive difference among the sale price and cost price is called	A. Loss B. Profit C. Percentage D. Ratio
10	In order to find profit % we use	
11	The formula for finding rate is	
12	What percent Rs. 30 is of 300	A. 30% B. 10% C. 20% D. 15%
13	The discount which is calculated on list price of goods is called	A. Trade discount B. Cash discount C. Rebate D. None of these
14	The difference of cost price and sales price is called	A. Profit% B. Loss C. Loss% D. Profit
15	The fractional form of 8.5% is	
16	The ratio between 80 and 640 is	A. 1 : 4 B. 2 : 4 C. 1 :8 D. 4 : 6
17	Annuity is used in	A. Simple arithmetic B. Function C. equation D. Mathematics of Finance
		A. Two classes

18	Interest is classified in	B. Three classes C. Four classes D. None of these
19	A number six time is 180 find the number	A. 10 B. 20 C. 30 D. 40
20	Question Image	A. 4 : 3 B. 3 : 4 C. 9 : 3 D. 3 : 1
21	A set of all values of 'x' is called	A. Function B. Domain C. Range D. Constant function
22	f(x)=ax + b is a form of	A. Quadratic function B. Linear function C. Constant function D. Explicit function
23	F(-x)=-f(x) means	A. Implicit function B. Even function C. Odd function D. Domain
24	f(x)=2x + 1 is a form of	A. Linear function B. Quadratic function C. Odd function D. Even function
25	The graph of a quadratic function is called a	A. Quadratic graph B. Parabola C. Curve D. Horizontal line
26	The coordinate axes consist of	A. Two lines B. Four lines C. One line D. Three lines
27	f(x)=5 express as $5x^0$ is called	A. Polynomial function of zero degree B. Constant C. Polynomial function D. Domain
28	Degree of the function f (x)= x^3 - $6x^2$ + 7 is	A. 3 B. 4 C. 6 D. 2
29	The point where both the axes intersect is called	A. Abscissa B. Ordinate C. Coordinate D. Origan
30	Question Image	A. {3} B. R C. R - {x = 3} D. None of these
31	The roots of quadratic equation will be imaginary if b^2 - 4ac is	A. 0 B. -ve C. +ve D. Greater than zero
32	The power of variable in a quadratic equation is	A. 3 B. 1 C. 4 D. 2
33	A linear equation consist of roots	A. One B. Two C. Zero D. Three
34	Both sides of an equation are joined by	A. > B. < C. = D. ≠
		A. Open sentence

35	5x - 2 = 10 is a	B. Right sentence C. False sentence D. Equation
36	Solution set of 4x - 7y = 12 and 3x + y = 9 is	A. (0,3) B. (1,3) C. (6,3) D. (3,0)
37	B^2 - 4ac in a quadratic formula is called	A. Nature of root B. Discriminant C. Solution set D. Extraneous root
38	$Aa^x + Ba^{-x} = C$ is a standard form of	A. Exponential equation B. Linear equation C. Quadratic equation D. Reciprocal equation
39	The solution set of equation $x^2 + 2x + 1 = 0$ is	A. {1} B. {-1} C. {1, -1} D. None of these
40	The solution set for a quadratic equation $x^2 -8x + 15$ is	A. (3, 5) B. (-3, -5) C. (3, -5) D. (-5, 3)
41	The order of matrix [a]	A. 1 x 1 B. 2 x 1 C. 0 x 1 D. 1 x 0
42	Question Image	A. Unit matrix B. Diagonal matrix C. Square matrix D. Singular matrix
43	In a square matrix number of rows and column are	A. Equal B. Now equal C. Greater D. Less then
44	Question Image	A. Equal B. Possible C. Not possible D. Zero
45	Question Image	
46	Question Image	
47	Any matrix "A" is a symmetric matrix if	A. A = A B. A = A^t C. A = -A^t D. A = A-I
48	If A is matrix of order mxn then to get AB, the matrix B must be order of	A. m x m B. P x P C. m x P D. n x P
49	A square matrix A is said to be singular if	
50	Cramer's rule is used to solve	A. System of quadratic equation B. System of linear equation C. Any system of equation D. None
51	Number of digits in decimal system	A. 5 B. 8 C. 10 D. 9
52	In decimal system $(12)_5$ is equal to	A. 17 B. 7 C. 15 D. 60
53	In base 2 system digits are used	A. 0, 2 B. 0, 1 C. 2, 3 D. 0, 1, 2
54	29 in binary number system is	A. $(110101)_2$ B. $(10101011)_2$ C. (1011101) D. $(11101)_2$

55	$(1101)_2 + (1001)_2 =$ -----------------------------	A. $(10110)_2$ B. $(11100)_2$ C. $(10001)_2$ D. $(11011)_2$
56	$(100011)_2 \times (1101)_2 =$ -------------------------	A. $(111000111)_2$ B. $(100011001)_2$ C. (100000001) D. $(110011001)_2$
57	$(1001001)_2$ in decimal system is ----------------------	A. 37 B. 67 C. 73 D. 87
58	2143 in binary system is ------------------	A. $(1111100111)_2$ B. $(100001011111)_2$ C. $(1101101101)_2$ D. $(1000010111)_2$
59	$(10101)_2$ in decimal system is	A. 32 B. 26 C. 21 D. 30
60	$(1100000)_2 - (111111)_2=$ ------------------------- :	A. $(100001)_2$ B. $(110001)_2$ C. $(1000111)_2$ D. $(111110)_2$
61	3.25 is a ratio of:	A. 3 and 25 B. 32.5 and 10 C. 325 and 100 D. 13 and 4
62	Every proportion consists of:	A. One term B. Two terms C. Three terms D. 4 terms
63	What percent Rs.300 is of 300:	A. 30% B. 10% C. 20% D. 15%
64	Quantity discount is always in:	A. Amount B. Percentage C. Quantity D. Rupees
65	Commission is:	A. Remuneration B. Salary C. Wages D. None of these
66	According to text (C-S)>0 is:	A. Loss B. Profit C. Mark-up D. Mark-down
67	Profit on an item of cost Rs.1000 C4.5% is:	A. Rs.45 B. Rs.955 C. Rs.50 D. None of these
68	Depreciation is loss in value of:	A. Fixed asset B. Current asset C. Money D. None of these
69	Discount is:	A. Difference B. Sum C. Product D. Quotient
70	45% of 900 is:	A. 450 B. 400 C. 405 D. 300
71	A square matrix A is said to be singular if.	A. $|A| = 0$ B. $|A| \neq 0$ C. $|A| = 1$ D. $|A| \neq 1$
72	The two expressions on the both sides of the equality sign is called.	A. Sides of equation B. L.H.S C. R.H.S

73	The degree of equation $5x^2 + 7x + 6$ is.	A. 2 B. 3 C. 4 D. 5
74	General form of a quadratic equation is.	A. $ax^2 + bx + c = 0$ B. $ax^2 + bx + c = 1$ C. $ax^2 - bx - c = 0$ D. $ax^2 + bx - c = 0$
75	Interest is:	A. Rent B. Wage C. Salary D. Commission
76	The methods of finding interest are:	A. One B. Two C. Three D. Four
77	Principal = Rs. 5000, Interest = 10%, Period = half year interest = ?	A. Rs. 1000 B. Rs. 500 C. Rs. 250 D. Rs. 200
78	In compound interest method, the interest earned is considered as to be:	A. Reinvested B. De-invested C. Both a and b D. None of these
79	Amount of interest varies from period to period in:	A. Simple interest B. Compound interest C. Both a and b D. None of these
80	At what rate you can double your amount in a years.	A. 5% p.a B. 6% p.a C. 8% p.a D. 9% p.a
81	Never ending annuity is:	A. Ordinary annuity B. Annuity due C. Perpetuity D. Annuity
82	Annuity classified into categories is:	A. Four B. Three C. Two D. Five
83	Amount of annuity is always:	A. Present value B. Current Value C. Both a and b D. Future value
84	S_{ni} is read us:	A. S angle i at n B. S angle n at i C. Amount S at i D. Annuity S at n
85	If $3x + 2 = 2x + 6$ then x is equal to.	A. 4 B. 5 C. 6 D. 7
86	To find the inverse of a matrix A we use the formula.	A. |A|/Adj A B. |A| Adj A C. Adj A/ |A| D. None
87	Quantity discount buy 2 get 3 is equal to:	A. 20% B. 33 1/2 % C. 67 2/3 % D. None of the above
88	$f(x) = \sqrt{x}$ is:	A. Constant function B. Compound function C. Not a polynomial function D. None of these
89	Range is asset of all:	A. Output values B. Input values C. Both input & output values D. None of these

A. Independent variable

90	In any function there will be only one:	A. Independent variable B. Dependent variable C. Random variable D. None of these
91	If h (x) = 1/x - 5;. then h (5) will be:	A. Defined B. Infinite C. Finite D. None of these
92	f (x) = √n is:	A. Constant function B. Compound function C. Not a polynomial function D. None of these
93	The function G (t) = 5t - 3/2 is:	A. Constant B. Linear C. Quadratic D. Absolute
94	Coordinate axes are:	A. X-axis only B. Y-axis only C. Origin D. Both x-axis and y-axis
95	The origin is:	A. (0,x) B. (y,0) C. (0,0) D. (x,y)
96	The y-coordinate of any point is:	A. Abscissa B. Ordinate C. x-intercept D. Origin
97	The point (4,0) lies in/an:	A. 1st quadrant B. 3rd quadrant C. x -axis D. y- axis
98	If A is matrix of order m x n then to get AB, the matrix be must be of order.	A. m x m B. p x p C. m x p D. n x p
99	How many methods are used to solve quadratic equations.	A. 3 B. 4 C. 5 D. 6
100	If matrix contains single column and 3 rows then this type of matrix is called.	A. Row matrix B. Column matrix C. Null matrix D. Identity matrix
101	If every element of matrix is zero that matrix is called:	A. Null matrix B. Square matrix C. Identity matrix D. Row matrix
102	The sign of every equation is:	A. ≠ B. = C. <u>></u> D. <u><</u>
103	A linear equation always has:	A. Three roots B. Two roots C. One root D. No root
104	Two consecutive odd integers are:	A. x and (x + 2) B. (x + 1) and (x + 3) C. 2x, (2x + 2) D. (2x + 1) and (2x + 3)
105	Factorization is one of the method use to solve:	A. ax + b = 0 B. ax2 + bx + C = 0 C. ax3 + bx + c = 0 D. None of these
106	In quadratic equation the variable has degree:	A. 1 B. 2 C. More than 2 D. Less than 2
107	Equation of the form $ax^4 + bx^3 + bx + a$ is:	A. Polynomial B. Reciprocal C. Irrational D. None of these

108	If $3^{2x} + a = 10 \cdot 3^x$ in transformed from is $y^2 + 9 = 10y$, then the transformation is:	A. $3^{2x} = y$ B. $3^x = y$ C. $1/3^x = \ y$ D. None of these
109	Solution set of equations $4x + 5y = 40$ and $3x + 2y = 23$ is:	A. { (4,5) } B. { (5, 4) } C. { (-5, 4) } D. { -4, -5) }
110	System of simultaneous equations is solved by:	A. Factorization B. Subtraction of addition C. Substitution D. Both b and c
111	A set of simultaneous equation is called set of inconsistent equation if:	A. Value of one of the unknown obtained B. Value of one of the unknown obtained C. Values of all the unknown obtained D. None of these
112	Simultaneous equations can be solved in ways.	A. 2 B. 3 C. 4 D. 5
113	1 : 3 is same as:	A. 3 to 1 B. 3 : 8 C. 1 to 3 D. None of the above
114	90.5% in common fraction:	A. 0.9 B. 10/9 C. 9/10 D. 181/200
115	Formula to calculate compounded amount is:	A. $P(1 + i)^n$ B. $P(1 + i)^{-n}$ C. $R (1 + i)$ D. $P (1 - i)^n$
116	Order of the matrix having m rows and n columns is:	A. $m + n$ B. $m - n$ C. m / n D. $m \times n$
117	Any matrix "A" is a symmetric matrix if:	A. $A = -A$ B. $A = A^t$ C. $A = -A^t$ D. $A = A^{-t}$
118	If A is a singular matrix then:	A. $A = 0$ B. $|A| = 0$ C. $A \neq 0$ D. $|A| \neq 0$
119	Do $(A + B) + C = A + (B + C)$?	A. No B. Yes C. May or may not D. Never
120	Do $AB = BA$?	A. Never B. Yes C. May or may not D. None of these
121	If $A = [aij]$, then A+ is :	A. [aij] B. [bji] C. [aji] D. [aii]
122	$I_3 \times |I_3| = ?$	A. I_3 B. 0 C. 1 D. None of these
123	If $Ax = B$ then x is	A. BA^{-1} B. AB C. B/A D. $A^{-1} B$
124	A + 0 is equal to:	A. 0 B. A C. O + A D. None of these
		A. Upper triangular matrix

125	A square matrix whose elements below the main diagonal are all zero is called.	A. Upper triangular matrix B. Lower triangular matrix C. Rectangular D. Row matrix
126	$2 \times 10 + 3 \times 10^{0} =$.	A. 23 B. 24 C. 25 D. 26
127	In decimal system base of system is:	A. 2 B. 5 C. 8 D. 10
128	In binary system the base of the system is:	A. 2 B. 5 C. 8 D. 10
129	We cannot find the inverse of a:	A. Square matrix B. Diagonal matrix C. Triangular matrix D. Singular matrix
130	Hexadecimal number system is based on:	A. Two digits B. Ten digits C. Eight digits D. Sixteen digits
131	The decimal number "2" in binary number system is equivalent to:	A. 0 B. 1 C. 10 D. 11
132	The binary number "10" is in decimal number system is equivalent to:	A. 1 B. 2 C. 3 D. 4
133	The decimal number 43 comprises:	A. 4 units and 4 tens B. 3 tens and no unit C. 0 unit and 4 tens D. 3 units and 4 tens
134	The decimal number 23 in simplest form is:	A. $3(10)^{o} + (10)^{1}$ B. $2(10)^{o} + 3(10)^{1}$ C. $2(10)^{o} + 3(10)^{2}$ D. $3(10) + 2(10)^{2}$
135	$(10110)_2$ in decimal number is:	A. 20 B. 22 C. 24 D. 26
136	In decimal $(101)_2 + (11)_2$ is equal to:	A. 2 B. 4 C. 8 D. None of these
137	5 in binary system is:	A. $(10)_2$ B. $(101)_2$ C. $(11)_2$ D. None of these
138	A matrix with same number of rows and columns is known as:	A. Diagonal matrix B. Scalar matrix C. Square matrix D. None
139	$(145)_{10} = (\ )_2$	A. 10010001 B. 10010111 C. 11100001 D. 10001001
140	Basically proportion is of:	A. 4 types B. 3 types C. 2 types D. None of these
141	$a : b :: c : d$ is:	A. a/b = d/c B. b/a = c/d C. a/b = c/d D. None of these
		A. Two classes B. Three classes

142   Annuity is classified into:

C. Four classes
D. Five classes