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The default category for questions shared in context 'MTH105'.
Multiple Choice Questions (MCQs)
MCQ1
Given these propositions
I. Garri is from yam and 8+1= 6
II. Garri is from maize and 2+4= 8
III. Garri from cassava and 3+4= 9
IV. Garri is from cassava and 4+5=9
The only proposition is
i
0.0000000
0.0000000
iii
0.0000000
1.0000000
MCQ2
Given that p? q this means the symbols speak about
Conjunction p?q
1.0000000
Disjunction p?q
0.0000000
Conjunction p v q
0.0000000
Disjunction p/q
0.0000000
MCQ3
If P is a given negation, its negation is _____
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```
? p
0.0000000
Vρ
0.0000000
~ p
1.0000000
/ p
0.0000000
MCQ4
Conditional statement is of the form "if P then Q." then the symbolical representation is
p?q
0.0000000
pàq
1.0000000
p v q
0.0000000
p \sim q
0.0000000
MCQ5
Bi-conditional statement can be symbolically represented as ____
p ? q
0.0000000
pàq
0.0000000
póq
1.0000000
pvq
0.0000000
MCQ6
Given that (p \vee q) \vee r = p \vee (q \vee r)
Commutative
```

```
0.0000000
Idempotent
0.0000000
Associative
1.0000000
Distributive
0.0000000
MCQ7
If p v (q ? r) = (p v q) ? (p v r) then it is a(an)
Identity
0.0000000
Commutative
0.0000000
Distributive
1.0000000
Associative
0.0000000
MCQ8
If A= 200050001 then A is matrix
Square
0.0000000
Diagonal
1.0000000
Transpose
0.0000000
Symmetric
0.0000000
MCQ9
Given A= 123242 and B= 104213find A+B
104212
0.0000000
126453
0.0000000
```

```
227455
1.0000000
217545
0.0000000
MCQ10
If A= 213312 and B= 212122 then 2A+B=
428433
0.0000000
638746
1.0000000
637556
0.0000000
638756
0.0000000
MCQ11
Given that A= 123457 and B= 124365 find AB
 27236658
1.0000000
23662758
0.0000000
66582327
0.0000000
23276658
0.0000000
MCQ12
Find the determinant of A= 4365
20
0.0000000
18
0.0000000
5
```

```
0.0000000
1.0000000
MCQ13
Find the determinant of 12-47
15
1.0000000
12
0.0000000
0.0000000
0.0000000
MCQ14
Find det X, given that X= 123321411
15
0.0000000
12
0.0000000
-12
1.0000000
-15
0.0000000
MCQ15
Given that 32X1 is a singular matrix, find X.
21/2
0.0000000
11/2
1.0000000
0.0000000
```

```
0.0000000
MCQ16
Given that M= 221+62-X213 find X, for M to be singular
21/2
0.0000000
31/2
0.0000000
41/2
0.0000000
51/2
1.0000000
MCQ17
Solve for x and y in x+3y=4 and 3x+4y=6
2/5,6/5
1.0000000
6/5,2/5
0.0000000
-6/5,2/5
0.0000000
6/5,-2/5
0.0000000
MCQ18
Given that co-factor matrix M= 16-12-4-5-33-12-3find the Adj M
16-5-5-12-312-43-3
1.0000000
16-12-5-12-312-412-3
0.0000000
16-5-5-1212-3-43-3
```

```
0.0000000
16-3-5-121212-4-12-3
0.0000000
MCQ19
Find the magnitude of 3i - 4j
3
0.0000000
0.0000000
1.0000000
0.0000000
MCQ20
Let x, y, z be the heights assigned to A, B, C such that x+2y+3z= 11, 2x+4y+5z= 21
and x+2y+3z=11
x= 2, y=3, z=2
0.0000000
x=2, y=-3, z=1
0.0000000
x=2, y=3, z=1
1.0000000
x=2, y=3, z=-2
0.0000000
MCQ21
Find the unit vector in the direction of the vector 4i - 3j
1/5(4i - 3j)
1.0000000
1/5(4i + 3j)
0.0000000
1/5(3i - 4j)
```

```
0.0000000
1/5(3i + 4j)
0.0000000
MCQ22
If Z1= 3+i and Z2= 4+3i, find Z1+Z2
12+3i
0.0000000
7+4i
1.0000000
12-3i
0.0000000
7-4i
0.0000000
MCQ23
Given that Z1 = 3-2i and Z2 = 5+3i, find Z1 - Z2
2+4i
0.0000000
2-4i
0.0000000
2+4i
0.0000000
-2-4i
1.0000000
MCQ24
If Z1 = 2-2i and Z2 = 5-3i, find Z1/z2
.(2-2i)(5+3i)34
1.0000000
(2-2i)(5-3i)34
0.0000000
(2+2i)(5+3i)34
0.0000000
(2+2i)(5-3i)34
```

```
0.0000000
MCQ25
Find the distance between A (5, -3) and B (-1, 3)
-63
0.0000000
-62
0.0000000
63
0.0000000
62
1.0000000
MCQ26
Find the angle of inclination if A (2, -3) and B (4, 5)
90o
0.0000000
60o
0.0000000
45o
1.0000000
30o
0.0000000
MCQ27
Find the distance between A (0, 1) and B (9, 6)
104
0.0000000
105
0.0000000
106
1.0000000
107
0.0000000
MCQ28
Find the distance between A (6, 3) and (6, 9)
8
```

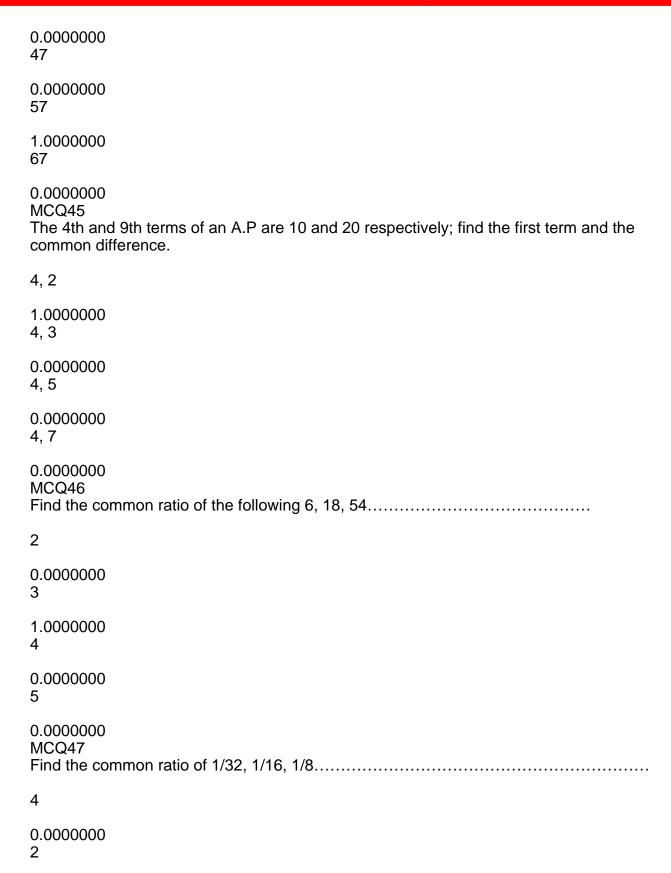
```
0.0000000
1.0000000
0.0000000
0.0000000
MCQ29
Find the gradient of the straight line A (-2, 0) and B (6, -4)
2/3
0.0000000
3/2
0.0000000
1/2
1.0000000
2/2
0.0000000
MCQ30
Find the distance between A (6, 9) and B (11, 15)
36
0.0000000
25
0.0000000
61
1.0000000
51
0.0000000
MCQ31
Find the equation of a line with A (2, 3) and B (6, 8)
5x+4y=-2
0.0000000
5x-4y = -2
```

```
1.0000000
5x+4y=2
0.0000000
5x-4y=2
0.0000000
MCQ32
Find the equation of a line, which passes through the points A (0, 3) and (6, 0)
x+2y=6
0.0000000
x-2y = 6
0.0000000
y-2x = 6
0.0000000
y + 2x = 6
1.0000000
MCQ33
Find the coordinate of the point of intercept of the equations 2x+3y=5 and x+2y=3.
1, 1
1.0000000
1, -1
0.0000000
-1, 1
0.0000000
-1, -1
0.0000000
MCQ34
Find the gradients of these equations x+y=5 and x+2y=6 respectively
-1 and -1/2
1.0000000
1 and 1/2
0.0000000
-1 and 1/2
0.0000000
```

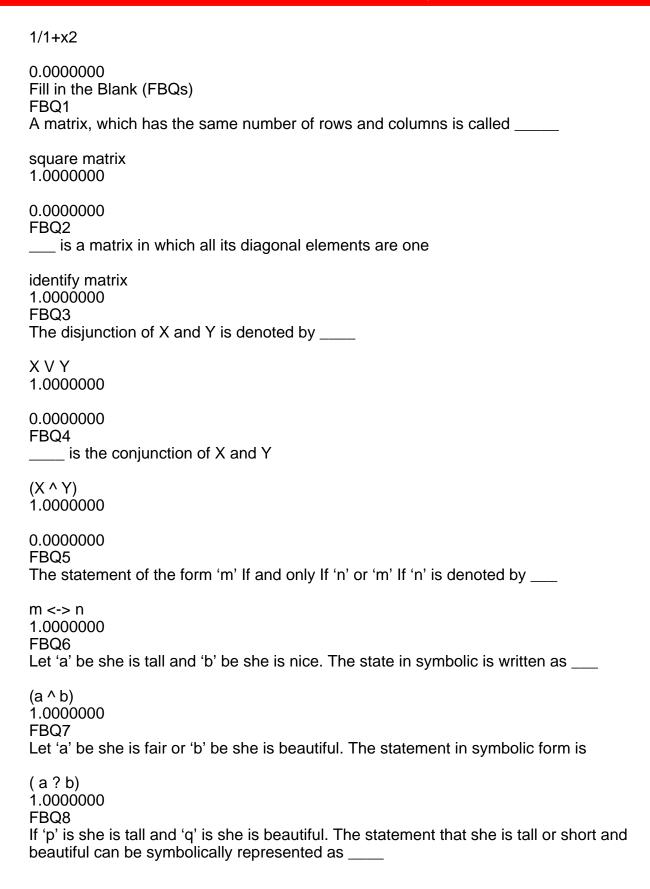
```
1 and -1/2
0.0000000
MCQ35
Find the coordinate of the meeting points of equations x+y=3 and x+2y=5
-1, -2
0.0000000
1, -1
0.0000000
-1, 2
0.0000000
1, 2
1.0000000
MCQ36
Find the equation of a line that is perpendicular to 2x+5y=10
5x-2y=4
0.0000000
5x-2y = -4
1.0000000
2x-5y = -10
0.0000000
2x+5y = 10
0.0000000
MCQ37
Given that two (2) lines with gradients M1 and M2 are parallel, then_____
M1? M2
0.0000000
M1 < M2
0.0000000
M2 < M1
0.0000000
M1 = M2
1.0000000
MCQ38
```

Find the equation of the line which is parallel to 3x+2y=5 and passes through the point (3, -6).3x+2y=30.0000000 3y + 2x = 30.0000000 3x+2y = -31.0000000 3y + 2x = -30.0000000 MCQ39 Find the equation of the line which is perpendicular to 2x+3y=6 and passes through the point (2, -4) 2x-3y=80.0000000 2x+3y=-81.0000000 2x-3y = -80.0000000 2x+3y=80.0000000 MCQ40 Given x2+y2-24x-10+60=0, find the coordinate of the centre. 12, 5 1.0000000 5, 12 0.0000000 -12, -5 0.0000000 -5, -12 0.0000000 MCQ41 Find the coordinate of the centre and radius of circle of the equation x2+y2-24x-6y+86=0

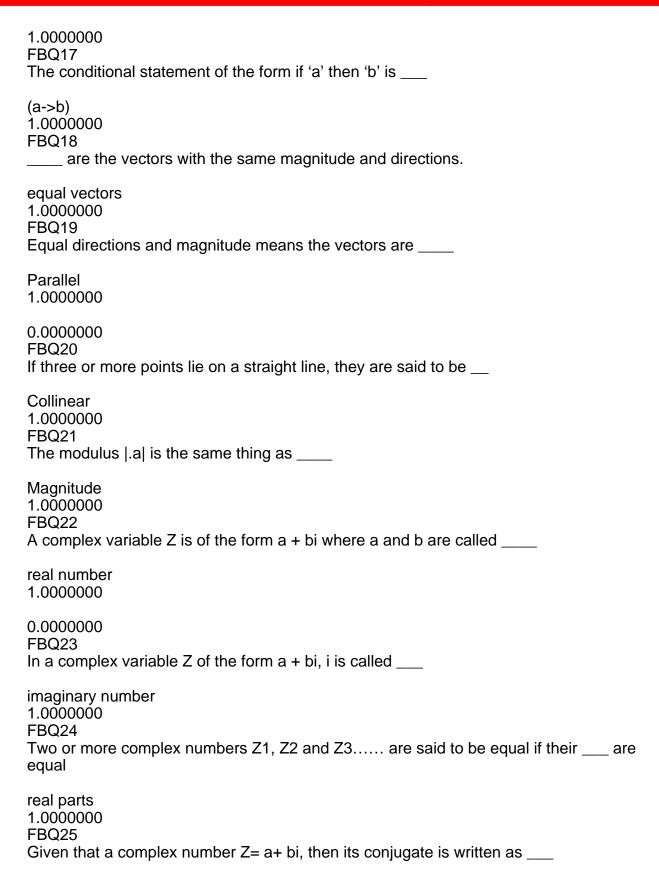
```
(-12, -3), r = 7
0.0000000
(12, -3), r = 7
0.0000000
(12, 3), r = 7
1.0000000
(-12, 3), r=7
0.0000000
MCQ42
Given that nth term of a Sequence 4, 6, 8...... is a-n = a + (n-1) d, find the 7th term
10
0.0000000
12
0.0000000
14
0.0000000
16
1.0000000
MCQ43
Given the two (2) sequences 1, 3, 5 .....and 2, 4, 6......the 8th terms of the two (2)
sequences are ......
11 and 12
0.0000000
13 and 14
0.0000000
15 and 16
1.0000000
17 and 18
0.0000000
MCQ44
Find the 16th term of an A.P whose first term is 102 and common difference -3.
37
```



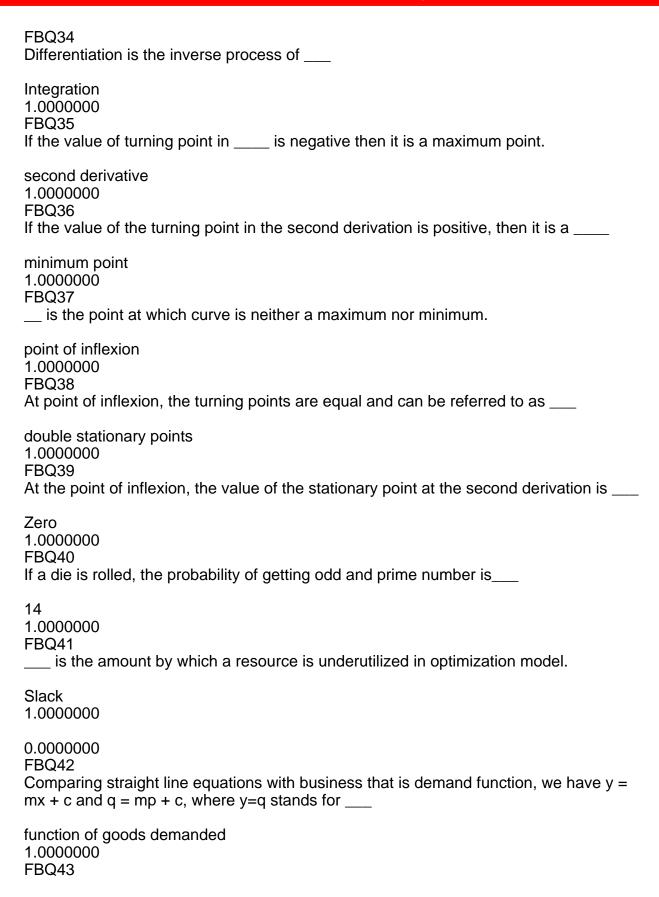
```
1.0000000
1/2
0.0000000
1/4
0.0000000
MCQ48
Find the limit of 5xx+1as X à 8
0
0.0000000
0.0000000
5
1.0000000
0.0000000
MCQ49
The derivative of 5x3+3x+2/x
15x2+3+2/x2
0.0000000
15x2-3+2/x2
0.0000000
15x2+3-2/x2
1.0000000
15x2-3-2/x2
0.0000000
MCQ50
If y=sin-1x, find dy/dx
1/1-x2
0.0000000
1/1+x2
0.0000000
1/1-x2
1.0000000
```



```
(p? (\sim p \land q))
1.0000000
0.0000000
FBQ9
If p and q stand for he is tall and handsome respectively, then (\sim p \land - q) is
He is neither tall nor handsome
1.0000000
0.0000000
FBQ10
The equilibrium prices and quantities for two commodity market models Xdj = -2 - p + q
and Xsi = -2 - q is
(2, 4)
1.0000000
FBQ11
The equation of the line passing through the points A (2,3) and B (4, 6) is ____?
2y = 3x
1.0000000
FBQ12
     is defined to be the matrix obtained by replacing every number aij of the given
matrix A by its cofactor in the determinant of A.
cofactor
1.0000000
FBQ13
Given that A = 1425, the determinant of A is ____
-3
1.0000000
0.0000000
FBQ14
The determinant of A2 - 2A is ____, Given that A = 1221
15
1.0000000
FBQ15
If A = 200010203 it is called ____?
diagonal matrix
1.0000000
FBQ16
The determent of 1-11-223-121 is
-3
```



```
Z = a - bi
1.0000000
a-bi
1.0000000
FBQ26
If Zn = rn (cos? + I sin?) = r (cos? + I sin?)n, it is called
De Moivre's Theorem
1.0000000
FBQ27
The slope is the same thing as ___ of the line with x-axis
tangent of an angle inclination
1.0000000
FBQ28
The gradient of a line is the same as the ____ of that line,, usually denoted by 'm'.
Slope
1.0000000
0.0000000
FBQ29
The gradient or slope of any line can be determined by the ____ in y and/over that of x.
rate of change
1.0000000
0.0000000
FBQ30
The equation of a straight line y - mx - c = 0 has ____ and ___ as slope and the
intercept on the y-axis.
m and c
1.0000000
FBQ31
The equation of a line that passes through the origin is _____
y = mx
1.0000000
FBQ32
The equation of a line given one point and the slope is generally written as ____
y-y1 = m (x-x1)
1.0000000
FBQ33
___ is the locus of curve equidistant from a point.
Circle
1.0000000
```



Comparing straight line equations with business that is demand function, we have y = mx + c and q = mp + c, where mx = mp then m stands for

```
gradient of x and p respectively
1.0000000
* coefficient of x and p respectively*
1.0000000
FBQ44
Comparing straight line equations with business that is demand function, we have y =
mx + c and q = mp + c, where mx = mp then x and p stand for ____
variable price of the goods demanded
1.0000000
FBQ45
The equation of a line with two points and the slope is ____
m = y2-y1/x2-x1 = y-y1/x-x1
1.0000000
m = y1-y2/x2-x1 = y-y2/x-x2
1.0000000
FBQ46
Give that AB-=-BA- are vectors of the same magnitude but in direction.
Opposite
1.0000000
FBQ47
If AB-=1, then AB- and it is called a ____ vector
Unit
1.0000000
FBQ48
Given AB-=-BA- are vectors of the magnitude but in opposite direction.
same
1.0000000
FBQ49
a-is equal to –a If "a" is less than ____
 Zero
1.0000000
0
1.0000000
FBQ50
a- is equal to "a" If 'a' is greater than ____
Zero
1.0000000
1.000000Zero*
```

1.0000000 0 1.0000000