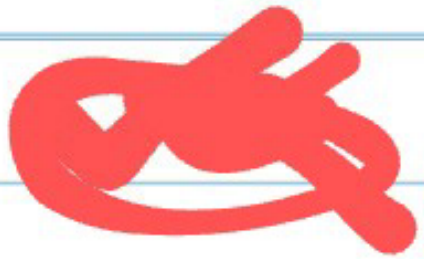
Question # 6 of 10 (Start time: 02:37:42 PM, 01 July 2022) Total Marks: 1

If a body is moving at 2m/s, then 2m/s is the ..... of the body.

Select the correct option

- acceleration
- velocity
- force
- speed





Click to Save Answer & Move to Next Question

A particle is moving in two-dimensional plane with speed 5m/s. Which of the following is NOT the possible velocity of the particle?

Select the correct option

- $3i+4j$
- $5i$
- $5j$
- $2i+3j$

If a body of weight 5N is hanging in equilibrium by a light inextensible string then the tension in the string is------

Select the correct option

- ○ 50N
- ○ 5N
- ○ 0.5N
- ○ 0N

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X=0N and Y=-5N then the angle made by the horizontal with +ve x-axis is -----

- 0 degrees
- 90 degrees
- 180 degrees
- 270 degrees



A body is held in equilibrium by two parallel strings. Tension in each string is 50N. What is the mass of the body?

Select the correct option

- ○ 5kg
- ○ 10kg
- ○ 50kg
- ○ 100kg

If a force of 10 N acts at an angle of 30 degrees with the horizontal, then the Vertical component of the force is___ N.

Select the correct option

- 5
- 8.66
- 10
- 0

Horizontal and vertical components of the force acting on a particle are 5N and 12N respectively. Magnitude of force acting on the particle is——.

Select the correct option

- 7N
- 12N
- 13N
- 17N

Greatest Resultant of two forces p and q is possible when angle between the two forces is----- degrees.

Select the correct option

- 0
- 90
- 180
- 270

If the resultant force acts along the line y=x, then the resultant makes an angle of ---- degrees with +ve x-axis.

Select the correct option

- 0
- 45
- 90
- 135

Question # 16 of 30 (Start time: 12:20:22 AM, 12 July 2020)

A body of mass 20kg is placed on an inclined plane which is lying at an angle 60 degrees to the horizontal.Then the Normal component of force acting on the body is ——N.

Select the correct option

- ○ 10
- ○ 17.3
- ○ 100
- ○ 173

Question # 18 of 30 (Start time: 12:22:47 AM, 12 July 2020)

For(Lambda,mu) theorem to be satisfied, forces should be----.

Select the correct option

- ○ equal in magnitude
- ○ parallel
- ○ co-planar
- ○ none of the given

MTH304:Grand Quiz MTH304

Question # 21 of 30 (Start time: 12:26:13 AM, 12 July 2020)

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X=0N and Y=3N then the angle made by the Resultant with with +ve x-axis is ——

Select the correct option

- 0 degrees
- 90 degrees
- 180 degrees
- 270 degrees

------ is used in Lamy's Theorem.

Select the correct option

- Trigonometry
- Differentiation
- Integration
- None of the given

Question # 14 of 30 (Start time: 12:18:32 AM, 12 July 2020)

If a body of weight 5N is hanging in equilibrium by a light inextensible string then the tension in the string is-----

Select the correct option

○	50N
○	5N
○	0.5N
○	0N

Question # 13 of 30 (Start time: 12:17:35 AM, 12 July 2020)

A body is hanging in equilibrium by a light in-extensible string.If the mass of the body is doubled, then tension in the string must be-----.

Select the correct option

- halved
- doubled
- trebled
- none of these

Greatest resultant of forces 3N and 5N is —.

Select the correct option

- 2N
- 3N
- 5N
- 8N

Question # 10 of 30 (Start time: 12:14:10 AM, 12 July 2020)

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X=3N and Y=-4N , then the Resultant of the forces act in the------

Select the correct option

- ○ first quadrant
- ○ second quadrant
- ○ third quadrant
- ○ fourth quadrant

If a body is hanging in equilibrium by a light inextensible string with tension 20N, then the mass of the body is-----

Select the correct option

- 2kg
- 5kg
- 10kg
- 20kg

Question # 8 of 30 (Start time: 12:11:56 AM, 12 July 2020)

If a body is moving at (2i+3j)m/s, then (2i+3j)m/s is the ..... of the body.

Select the correct option

- velocity
- speed
- acceleration
- force

Question # 7 of 30 (Start time: 12:11:04 AM, 12 July 2020)

Lamy's Theorem cannot be applied if angle between any two forces is.....

Select the correct option

○	180 degrees
○	100 degrees
○	70 degrees
○	40 degrees

Question # 3 of 10 (Start time: 02:34:09 PM, 01 July 2022)
Total Mar

Trigonometric ratios are applicable on------.

Select the correct option

- obtuse-angled triangle only
- any triangle
- acute-angled triangle only
- right-angled triangle only



Click to Save Answer & Move to Next Question

MTH304:QUIZ NO.1

Question # 1 of 10 (Start time: 02:32:36 PM, 01 July 2022)

Greatest resultant of forces 3N and 5N is —.

Select the correct option

- 5N
- 2N
- 3N
- 8N

Question # 5 of 10 (Start time: 02:14:53 PM, 01 July 2022)

In Lamy's theorem forces are____ to the sine of the angle between the other two.

Select the correct option

- proportional
- not proportional

Done

Question # 8 of 10 (Start time: 02:38:16 PM, 01 July 2022) Total Marks: 1

If a body doesn't change its position with respect to its surrounding then it is said to be in state of.....

Select the correct option

- motion
- rest

Three forces (2i-j)N, (4i+3j)N and (-3i+2j)N are acting on a body. What is the magnitude of single force that must be applied on the body to make it in complete equilibrium?

Select the correct option

- 5N
- 3N
- 2N
- 4N

MTH304:QUIZ NO.1

Question # 2 of 10 (Start time: 02:33:20 PM, 01 July 2022)

Acceleration is a ..... quantity.

Select the correct option

- none of the given
- both vector and scalar
- vector
- scalar

Question # 7 of 10 (Start time: 02:39:05 PM, 01 July 2022) Total Marks: 1

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle then the angle that Resultant force makes with +ve horizontal is given by

Select the correct option

Reload Math Equations

- $\theta = \tan^{-1}(\frac{Y}{X})$
- $\theta = \tan^{-1}(\frac{X}{Y})$
- $\theta = \tan^{-1}(Y + X)$
- $\theta = \tan^{-1}(YX)$

Click to Save Answer & Move to Next Question

Question # 10 of 10 (Start time: 02:41:46 PM, 01 July 2022) Total Marks: 1

According to Lamy's theorem

Select the correct option

- The three forces must be equal
- none of these
- If the three forces acting at a point are in equilibrium, then each force is proportional to the sine of the angle between the other
- The three forces must be at 120° to each other

Click to Save Answer & Move to Next Question

MTH304:QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 9 of 10 (Start time: 02:40:44 PM, 01 July 2022)

Total Marks: 1

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X is -ve and Y is +ve , then the Resultant of the forces act in the------

Select the correct option

- first quadrant
- third quadrant
- second quadrant
- fourth quadrant

Click to Save Answer & Move to Next Question

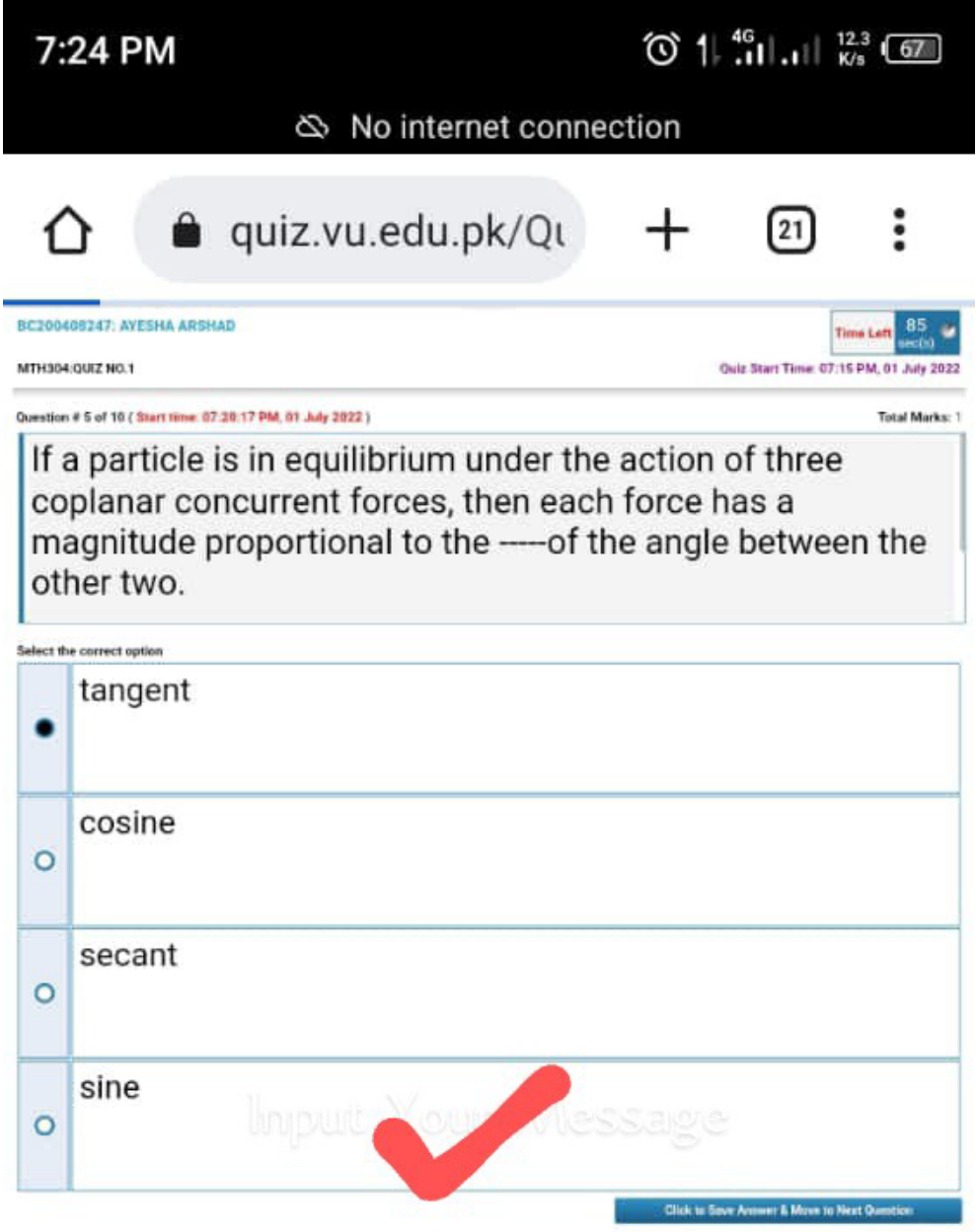
Question # 8 of 10 (Start time: 02:39:59 PM, 01 July 2022)

If the resultant force acting on the particle is (3i+4j)N, then what additional single must be applied to make the particle in Equilibrium

Select the correct option

- (3i-4j)N
- (-3i-4j)N
- (-7i-7j)N
- (-3i+4j)N

Click to Save Answer &


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MTH304:QUIZ NO.1
Quiz Start Time: 07:15 PM, 01 July 2022
Question # 5 of 10 (Start time: 07:28:17 PM, 01 July 2022)
Total Marks: 1
If a particle is in equilibrium under the action of three coplanar concurrent forces, then each force has a magnitude proportional to the -----of the angle between the other two.
Select the correct option
tangent
cosine
secant
sine
Input Your Message
Click to Save Answer & Move to Next Question

MTH304:QUIZ NO:1

Quiz Start Time: 02:32 PM, 01 Ju

Questi of 10 (Start time: 02:34:37 PM, 01 July 2022)

Total M

If a particle is in equilibrium under the action of coplanar Forces the removing a horizontal force makes the particle in----

Select the correct option

- vertical equilibrium only
- Both horizontal and vertical equilibrium
- neither horizontal equilibrium nor vertical equilibrium
- horizontal equilibrium only

Click to Save Answer & Move to Next Question

MTH304 QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 2 of 10 (Start time: 02:33:35 PM, 01 July 2022)

Total Marks: 1

Lamys theorem applies to ------coplanar concurrent forces.

Select the correct option

- four
- five
- three
- two

Question # 5 of 10 (Start time: 02:35:35 PM, 01 July 2022) Total Marks: 1

If the resultant force acts along the line y=x, then the resultant makes an angle of ----- degrees with +ve x-axis.

Select the correct option

- 45
- 90
- 135
- 0

Question # 1 of 10 (Start time: 02:11:27 PM, 01 July 2022)

Lamys theorem applies if a particle is in ——.

Select the correct option

○	equilibrium state
○	non-equilibrium state

Question # 5 of 10 (Start time: 02:14:53 PM, 01 July 2022)

In Lamy's theorem forces are___ to the sine of the angle between the other two.

Select the correct option

- proportional
- not proportional

Question # 9 of 10 (Start time: 02:17:20 PM, 01 July 2022)

Law of cosines is applicable on———.

Select the correct option

○	right-angled triangle only
○	obtuse-angled triangle only
○	any triangle
○	acute-angled triangle only

Question # 8 of 10 (Start time: 02:17:00 PM, 01 July 2022)

Acceleration is a ..... quantity.

Select the correct option

- ○ both vector and scalar
- ○ scalar
- ○ vector
- ○ none of the given

Question # 6 of 10 (Start time: 02:15:32 PM, 01 July 2022)

If a body is placed on a horizontal table and the Normal component of the contact force is 100N, then the mass of the body will be ....kg.

Select the correct option

- 100
- 0.1
- 1
- 10

Question # 10 of 10 (Start time: 02:18:56 PM, 01 July 2022)

If a particle is in equilibrium under the action of coplanar Forces then removing a horizontal force makes the particle in

Select the correct option

○	neither horizontal equilibrium nor vertical equilibrium
○	vertical equilibrium only
○	horizontal equilibrium only
○	Both horizontal and vertical equilibrium

BC200408851: SIDRA TUL MUNTAHA

MTH304 QUIZ NO.1

Question # 1 of 10 (Start time: 02:20:54 PM, 01 July 2022)

If the resultant force acting on the particle is (3i+4j)N, then what additional single must be applied to make the particle in Equilibrium

Select the correct option

- (-3i-4j)N
- (-3i+4j)N
- (3i-4j)N
- (-7i-7j)N

if the resultant force acting on the particle is (3i+4j)N, then what additional single

Select the correct option

- ○ (-3i-4j)N
- ○ (-3i+4j)N
- ○ (3i-4j)N
- ○ (-7i-7j)N

Question # 4 of 10 (Start time: 02:22:56 PM, 01 July 2022)

If a particle is in equilibrium under the action of three coplanar concurrent forces, then each force has a magnitude proportional to the ----of t

Select the correct option

- cosine
- secant
- sine
- tangent

Question # 3 of 10 (Start time: 02:22:31 PM, 01 July 2022)

Lamys theorem applies if a particle is in ——.

Select the correct option

- non-equilibrium state
- equilibrium state



The branch of science which deals with the behavior of physical bodies when subjected to forces or displacements is called....

Select the correct option

- chemistry
- physics
- mathematics
- mechanics

Question # 7 of 10 (Start time: 02:25:47 PM. 01 July 2022)

Greatest Resultant of two forces p and q is possible when angle between the two forces is---- degree

Select the correct option

- 270
- 90
- 180
- 0

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle then magnitude of Resultant force acting on the particle if Y=0 is given by—

Select the correct option

- R=2X
- R=2Y
- R=X
- R=Y

Question # 9 of 10 (Start time: 02:27:14 PM, 01 July 2022)

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X=4N and Y=0N then the angle n

Select the correct option

- 180 degrees
- 0 degrees
- 90 degrees
- 270 degrees

Three forces (2i-j)N, (4i+3j)N and (-3i+2j)N are acting on a body. What is the magnitude of single force that must be applied on the body to make it in complete equilibrium?

Select the correct option

- 5N
- 3N
- 2N
- 4N

Question # 10 of 10 (Start time: 02:28:41 PM, 01 July 2022)

The property of matter that resists changes in its motion is called.....

Select the correct option

○	weight
○	force
○	inertia
○	mass

MTH304:QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 1 of 10 (Start time: 02:32:36 PM, 01 July 2022)

Total Marks: 1

Greatest resultant of forces 3N and 5N is —.

Select the correct option

- 5N
- 2N
- 3N
- 8N

Click to Save Answer & Move to Next Question

MTH304:QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 2 of 10 (Start time: 02:33:20 PM, 01 July 2022)

Total Marks: 1

Acceleration is a ..... quantity.

Select the correct option

- none of the given
- both vector and scalar
- vector
- scalar



Click to Save Answer & Move to Next Question

Question # 4 of 10 (Start time: 02:35:18 PM, 01 July 2022) Total Marks: 1

Three forces (2i+3j)N, (4i-2j)N and (-5i+4j)N are acting on a body. What single force must be applied on the body to make it in complete equilibrium?

Select the correct option

- i-5j
- -i+5j
- i+5j
- -i-5j



Click to Save Answer & Move to Next Question

Question # 5 of 10 (Start time: 02:36:45 PM, 01 July 2022) Total Marks: 1

Lamys theorem applies to ------coplanar concurrent forces.

Select the correct option

- two
- four
- three
- five



Click to Save Answer & Move to Next Question

MTH304:QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 9 of 10 (Start time: 02:40:44 PM, 01 July 2022)

Total Marks: 1

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle. If X is -ve and Y is +ve , then the Resultant of the forces act in the------

Select the correct option

- first quadrant
- third quadrant
- second quadrant
- fourth quadrant

Click to Save Answer & Move to Next Question

Question # 8 of 10 (Start time: 02:39:59 PM, 01 July 2022) Total Marks: 1

If the resultant force acting on the particle is (3i+4j)N, then what additional single must be applied to make the particle in Equilibrium

Select the correct option

- (3i-4j)N
- (-3i-4j)N
- (-7i-7j)N
- (-3i+4j)N

Click to Save Answer & Move to Next Question

Question # 7 of 10 (Start time: 02:39:05 PM, 01 July 2022) Total Marks: 1

Let X be the Sum of Horizontal forces and Y be the sum of Vertical Forces acting on a particle then the angle that Resultant force makes with +ve horizontal is given by

Select the correct option

Reload Math Equations

- $\theta = \tan^{-1}(\frac{Y}{X})$
- $\theta = \tan^{-1}(\frac{X}{Y})$
- $\theta = \tan^{-1}(Y + X)$
- $\theta = \tan^{-1}(YX)$

Click to Save Answer & Move to Next Question

Question # 10 of 10 (Start time: 02:41:46 PM, 01 July 2022) Total Marks: 1

According to Lamy's theorem

Select the correct option

- The three forces must be equal
- none of these
- If the three forces acting at a point are in equilibrium, then each force is proportional to the sine of the angle between the other two ✓
- The three forces must be at 120° to each other

Click to Save Answer & Move to Next Question

Question # 6 of 10 (Start time: 02:15:32 PM, 01 July 2022)

If a body is placed on a horizontal table and the Normal component of the contact force is 100N, then the mass of the body will be ___kg.

Select the correct option

- 100
- 0.1
- 1
- 10

Question # 3 of 10 (Start time: 02:13:45 PM, 01 July 2022)

The property of matter that resists changes in its motion is called....

Select the correct option

- inertia
- weight
- force
- mass

Question # 6 of 10 (Start time: 02:37:42 PM, 01 July 2022) **Total Marks:** 1

If a body is moving at 2m/s, then 2m/s is the ..... of the body.

Select the correct option

- acceleration
- velocity
- force
- speed



Click to Save Answer & Move to Next Question

MTH304:QUIZ NO.1

Quiz Start Time: 02:32 PM, 01 July 2022

Question # 2 of 10 (Start time: 02:33:20 PM, 01 July 2022)

Total Marks: 1

Acceleration is a ..... quantity.

Select the correct option

- none of the given
- both vector and scalar
- vector
- scalar



Click to Save Answer & Move to Next Question

Question # 1 of 10 (Start time: 02:11:27 PM, 01 July 2022)

Lamys theorem applies if a particle is in ——.

Select the correct option

○	equilibrium state
○	non-equilibrium state

Question # 10 of 10 (Start time: 02:18:56 PM, 01 July 2022)

If a particle is in equilibrium under the action of coplanar Forces then removing a horizontal force makes the particle in

Select the correct option

○	neither horizontal equilibrium nor vertical equilibrium
○	vertical equilibrium only
○	horizontal equilibrium only
○	Both horizontal and vertical equilibrium

MTH304:QUIZ NO.1

Question # 9 of 10 (Start time: 02:17:20 PM, 01 July 2022)

Law of cosines is applicable on———.

Select the correct option

- right-angled triangle only
- obtuse-angled triangle only
- any triangle
- acute-angled triangle only

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