



# United International University

## School of Science and Engineering

Quiz#01; Year 2020; Semester: Fall

Course: PHY 105; Title: Physics

Full Marks: 20; Section: C; Time: 30 minutes

<b>Name:</b>	<b>ID:</b>	<b>Date:</b>
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Each questions has equal number:

20x1=20

(i) Write down in one statement answer.

1. Write down the Hook's law.
2. Write down the differential equation of SHM.
3. Which types of motion it is- "Surfing in the sea"?
4. Waves are mainly how many types?
5. Which one of the following is EM wave?

Ans: ☐ De-Broglie wave ☐ Pressure wave ☐ Seiche wave ☐ Radio Wave ☐ Solitary wave.

6. "Pressure wave"- is which types of wave?

Ans: ☐ Transverse wave ☐ Mechanical wave ☐ Shock wave ☐ Gravitational wave ☐ None of them.

7. "Bees fly"-which types of motion it is?

8. "A stone thrown up in the air at an angle"-Which types of motion it is?

Ans: ☐ Linear Motion ☐ Non-uniform motion ☐ Semi-circular motion ☐ Aperiodic motion ☐ Rotational vibrational motion.

9. "Outer portion of the blade of a windmill"--Which types of motion it is?

Ans: ☐ Linear Motion ☐ Vibrational motion ☐ Rotational motion ☐ Aperiodic motion ☐ Rotational vibrational motion.

10. "Merry-go-round"-Which types of motion it is?

Ans: ☐ Linear Motion ☐ Non-uniform motion ☐ Rotational motion ☐ Rotational vibrational motion ☐ Aperiodic motion.

11. Which of the followings is bounded by partially standing wave?

Ans: ☐ Soliton ☐ Stationary wave ☐ Cross waves ☐ Seiche waves ☐ Rayleigh waves.



12. Which types of wave it is?



13. Which type of wave it is?



14. Which type of wave it is?

**(ii) Write down the following statements are True or False. If true write **True** and if false write **False**.**

15. Seismic waves are mainly two types:

16. The 'P-Wave' seismic wave is a longitudinal wave.

17. Wave can transfer information.

18. "Motion of a fan" is an example of Vibrational motion.

19. 'A simple harmonic motion' always tends to move at an average point.

20. Acceleration amplitude of a SHM is  $-\omega^2 A$ .