

United International University

School of Science and Engineering Quiz#01; Year 2020; Semester: Fall Course: PHY 105; Title: Physics Full Marks: 20; Section: A; Time: 30 minutes

Name:	ID:	Date:
Each question has equal number:		20x1=20
(i) Write down in one statement answer.		
1. Suppose $x = A\cos \omega t$. What is the maximum displacement of the SHM in that equation?		
2. Give an example which exhibits "Restoring force".		
3. Which types of motion it is- "Roller coaster motion"?		
4. Motions are mainly how many types?		
5. "The blade of a rotating electric fan"-which types of motion it is?		
Ans: \odot Rotational motion \odot Rotational vibrational motion \odot Non-linear motion \odot Periodic motion \odot Aperiodic Motion.		
6. 'A free falling body"- exhibits which types of motion?		
Ans: \odot Linear motion \odot Uniform motion \odot Non-uniform motion \odot Vibrational motion \odot Aperiodic motion.		
7. "Birds gliding on the sky"-which types of motion it is for most of the case? Ans: ⊙ Linear Motion ⊙ Linear and vibrational motion ⊙ Linear, vibrational, and aperiodic motion ⊙ Aperiodic motion ⊙ Linear, vibrational, rotational, and aperiodic motion.		
8. "Children playing in the park"-Which types of motion it is? Ans: ⊙ Rotational Motion ⊙ Uniform circular motion ⊙ Vibrational motion ⊙ Aperiodic motion ⊙ None of them.		



9. Which types of motion it is?

Ans: \odot Linear Motion \odot Vibrational motion \odot Rotational motion \odot Aperiodic motion \odot Rotational vibrational motion.

10. Which of the following waves are used in AC to DC converter? Ans: \odot Saw tooth wave \odot Half wave rectifier wave \odot Square wave \odot Sound wave \odot DC wave.

11. Which of the followings is EM wave?

Ans: ⊙ Square wave ⊙ De-Broglie wave ⊙ X-ray ⊙ Supersonic wave ⊙ Seismic wave.

12. "PQRST" wave is used for which purposes?



13. Which types 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. Motion of a simple pendulum is an example of Periodic motion.

16. The instant velocity of SHM of a spring block system is
$$V_{ins} = V = \sqrt{\frac{2E}{m}}$$
.

17. "Water wave" is an example of 'Transverse wave'.

18. "Kelvin waves" has mainly 3 types.

19. 'Motion of a wheel' is a perfect example for uniform circular motion.

20. The maximum velocity of that equation $x = A\cos \omega t$ is $-\omega A$.