**TEST NO. 3**
**CH – 3**

**PHYSICS** **CLASS 9TH – 2020** **Paper: (Objective Type)**
**Time Allowed: 15 Minutes** **Maximum Marks: 12**

Note : You have four choices for each objective type question as A , B, C and D. The choice which you think is Correct, fill that circles in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

| Q. 1 | QUESTIONS | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| 1. | Inertia depends on. | Force | Net force | Mass | Velocity |
| 2. | The multiple of Mas and Velocity of a body is called. | Torque | Force | Work | Momentum |
| 3. | When a horse pulls a cart, the action is on the | Cart | Horse | Earth | Earth and cart |
| 4. | In isolated system the momentum after collision of two bodies is. | Increases | Constant | Decreases | Zero |
| 5. | Rate of change of momentum is called. | Torque | Force | Mass | Distance |
| 6. | Which of following material lowers friction when pushed between metal plates. | Water | Marble power | Air | Oil |
| 7. | Which of the following is the unit of momentum? | $Kgms^{-1}$ | $Kgms^{-2}$ | $Kg^{-1}ms$ | $Kgms^{-2}s^{-1}$ |
| 8. | The unit of momentum is. | Nm | $Kgms^{-2}$ | $Ns^{-1}$ | Ns |
| 9. | The weight of a body is 147 N. Its mass will be when g =10 $ms^{-2}$. | 1,47 kg | 14.7 kg | 0.147 kg | 147 kg |
| 10. | A string is stretched by two equal and opposite forces 10 N each. The tension in the string is. | 10 N | 5 N | Zero | 20 N |
| 11. | 1 N is equal to. | 1 $kgms^{-2}$ | 1$kg^{-1}$ s | 1 kgms | 1$kgms^{-1}$ S |
| 12. | Formula to determine centrifugal force. | $mv/r^2$ | $mr^2/v$ | $m^2r/v$ | $mv^2/r$ |

A B C D A B C D A B C D A B C D A B C D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Ⓐ Ⓑ Ⓒ Ⓓ | 4 | Ⓐ Ⓑ Ⓒ Ⓓ | 7 | Ⓐ Ⓑ Ⓒ Ⓓ | 10 | Ⓐ Ⓑ Ⓒ Ⓓ | 13 | Ⓐ Ⓑ Ⓒ Ⓓ |
| 2 | Ⓐ Ⓑ Ⓒ Ⓓ | 5 | Ⓐ Ⓑ Ⓒ Ⓓ | 8 | Ⓐ Ⓑ Ⓒ Ⓓ | 11 | Ⓐ Ⓑ Ⓒ Ⓓ | 14 | Ⓐ Ⓑ Ⓒ Ⓓ |
| 3 | Ⓐ Ⓑ Ⓒ Ⓓ | 6 | Ⓐ Ⓑ Ⓒ Ⓓ | 9 | Ⓐ Ⓑ Ⓒ Ⓓ | 12 | Ⓐ Ⓑ Ⓒ Ⓓ | 15 | Ⓐ Ⓑ Ⓒ Ⓓ |

نوٹ: معروضی سوال نامے کو توجہ سے پڑھیں اور ہر MCQ کی درست آپشن A,B,C,D کو پین کی سیاہی یا مار کر سے اس طرح پُر کریں کہ سیاہی دائرے سے باہر نہ نکلے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

**TEST NO. 3**

**CH - 3**

**PHYSICS** **CLASS 9TH – 2020** **Paper : (Essay Type)**

**Time Allowed: 1:45 hours** **Maximum Marks: 48**

## (PART – I)

**2. Write short answers to any Five (5) questions:** **10**

(i) Define force and its unit.
(ii) Define inertia. Describe two examples of inertia.
(iii) Define inertia and momentum.
(iv) State Newton's first law of motion.
(v) Define Newton's second law of motion and give equation.
(vi) The weight of a body is 147 N. What is its mass?
(vii) Write two difference of Mass and Weight.
(viii) A force of 20 N moves a body with an acceleration of 2 $ms^{-2}$. What is its mass?

**3. Write short answers to any Five (5) questions:** **10**

(i) Define Newton's third law of motion and write two examples.
(ii) When a gun is fired, its recoils. Why?
(iii) What is the Law of conservation of Momentum?
(iv) Write two advantages and two disadvantages of friction.
(v) Why rolling friction is less than sliding friction?
(vi) What is centrifugal force? Write its SI unit.
(vii) What is Atwood Machine? Give its one uses.
(viii) Why is it dangerous to travel on the roof of a bus?

**4. Write short answers to any Five (5) questions:** **10**

(i) Find the acceleration that is produced by 20 N force in a mass of 8 kg.?
(ii) What is the relation between force and momentum?
(iii) What is meant by co-efficient of friction?
(iv) How does oiling the moving parts of a machine low as friction?
(v) Difference between Centripetal force and centrifugal force.
(vi) Write the advantage of banking of the road.
(vii) How cream separator work?
(viii) What is meant by limiting friction?

## (PART – II)

**Note:- Attempt any TWO questions.**

**5.** (a) Write a note on momentum. **4**
(b) How much time is required to change 22 Ns momentum in a body by a force of 20 N? **5**

**6.** (a) Write the advantages and disadvantages of friceion. **4**
(b) A body of mass 5 kg is moving with velocity 10 ms-1. Find the force required to stop it in 2 second. **5**

**7.** (a) Explain Centripetal force and Drive $F_c = mv^2/r$. **4**
(b) How much is the force of friction between a wooden block of mass 5 kg and the horizontal marble floor? The coefficient of friction between wood and the marble is 0.6 **5**