

Sample

0	1	2	3	4
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0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

30 P-595

SSC-A-I-2026 (9th)

0+0=

(Section-A) Marks= (12) Time Allowed: 20 Minutes

All questions of this section must be answered on this page and handed over to the Superintendent within given time

991234



Student Name _____

Name of Paper PHYSICS (PH-I)

F .per Date 15-APR-26

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Paper Code 71

Signature of Student: _____

Paper Version

A ● C

Sign and Seal of Suptd: _____

SEAL

Roll No
Student Must Fill the
Roll Number Bubbles

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

سوال نمبر

سوال نمبر کے مطابق درست جواب نمبر کا دائرہ پر کریں۔

- The ratio of the gravitational forces exerted by the earth and moon on each other is: a. 1:6, b. 6:1, c. 1:1, d. 1:3
- A man pulls a heavy box with a force of 100N at 60° angle and displaces it by 2m. The work done is: a. 20J, b. 30J, c. 50J, d. 100J
- A power of 1000 watt is equal to: a. 1000 hp, b. 746 hp, c. 0.746 hp, d. 1.34 hp
- The extension per unit length in steel wire is called: a. stress, b. strain, c. Young modulus, d. elastic limit
- A temperature of 60°C is the same on fahrenheit scale as: a. 100°F, b. 140°F, c. 273°F, d. 373°F
- The measure of the ability of a substance to conduct heat from one region to another region as a result of temperature difference is called: a. conduction, b. convection, c. thermal conductivity, d. radiation
- All of the following are base quantities except: a. mass, b. length, c. time, d. force
- If the slope of speed time graph is zero, the object is: a. stationary, b. moving with uniform velocity, c. moving with uniform acceleration, d. moving with variable acceleration

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- The force that tends to prevent a stationary body to start motion is called: a. static friction, b. kinetic friction, c. normal force, d. gravitational force
- A body is moving in a straight line with uniform speed. A force that acts perpendicular to its velocity will: a. increase its speed, b. decrease its speed, c. change direction of motion, d. increase its mass
- The condition for a body to be in complete equilibrium is: a. $\Sigma \tau = 0$ only, b. $\Sigma F = 0$ only, c. $\Sigma p = 0$, d. $\Sigma F = 0$ and $\Sigma \tau = 0$
- A couple acting on a body tends to produce: a. translatory motion, b. rotatory motion, c. vibratory motion, d. no motion

- A B ● D
- A B C ●
- A B C ●
- A ● C D
- A ● C D
- A B ● D
- A B C ●
- A ● C D
- B C D
- A B ● D
- A B C ●
- A ● C D
- A B C D
- A B C D
- A B C D

If the Candidate is absent, The Superintendent Should fill this Cricle and pack the sheet with solved OMR sheets in roll number order



PHYSICS — 9th

SSC-9th-Abbottabad-2026

Time: 2 Hours 40 Minutes

SECTION-B

Marks: 32

NOTE: Attempt any eight of the following short questions. Each question carries 4 marks

- Q.1. Define base and derived quantity. Why is speed a derived quantity? 1+1+1+1
- Q.2. Identify scalars and vectors among the following: Distance, Energy, Velocity, Work, Force, Momentum, Pressure Weight 1+1+1+1
- Q.3. The momentum of a body increases from 20Ns to 100Ns in 4s. Calculate the net force acting on the body. 1+1+1+1
- Q.4. State the law of conservation of linear momentum. Express this law for the collision of two bodies of masses m_1 and m_2 2+2
- Q.5. A vector F makes an angle θ with x-axis in a coordinate system. Show that its vertical component is given by $F_x = F \sin \theta$ 1+1+1+1
- Q.6. State the principle of moments with an example. 2+2
- Q.7. If the distance between two identical spherical bodies is tripled without changing their masses, by what factor will the gravitational force F between them change? 1+1+1+1
- Q.8. A car of mass 500kg is moving with kinetic energy of 1000J. Calculate the speed of the car. 1+1+1+1
- Q.9. Define efficiency. Write its mathematical expression. What is the main cause of energy losses in practical machines? 1+1+1+1
- Q.10. Define elastic limit, stress, strain and Young modulus. 1+1+1+1
- Q.11. Describe the process of heat transfer in fluids through convection currents arising from difference in density. 2+2

SECTION-C

Marks: 21

NOTE: Attempt any three of the following questions. Each question carries 7 marks

- Q.12. i. Differentiate between: (i) Distance and displacement (ii) Speed and velocity, with clear examples in each case. 2+2
- ii. A motorcar starts from rest and moves with uniform acceleration of 4ms^{-2} for 10s. Calculate distance covered by the motorcar. 3
- Q.13. i. What is artificial satellite? Derive the formula for the orbital velocity of artificial satellite orbiting in circular orbit of radius r . 1+3
- ii. Calculate the value of acceleration due to gravity (g) at a height of 400 km above earth surface. 3
- Q.14. i. Show that the pressure exerted by a liquid of density ρ at depth h is given by $P = \rho gh$. 4
- ii. State kinetic molecular model of matter and differentiate between solids & gases on the basis of this model. 3
- Q.15. i. Prove that the relationship between centigrade and fahrenheit temperature scale is given by $T_F = 9/5(T_C + 32)$ 4
- ii. How does the nature and temperature of liquid and movement of air affect the rate of evaporation? 3