

NUMBER: 1478

PHYSICS (NEW SCHEME) GROUP-II (2015-2017) پیشہ

TIME ALLOWED: 15 Minutes

OBJECTIVE حصہ معرضی

وقت 15 من

MAXIMUM MARKS: 12

$$12 = \text{کل نمبر}$$

ہر سوال کے چار تکمیل جوابات A، B، C اور D دیئے گئے ہیں۔ جوابی کاپی پر ہر سوال کے سامنے دیئے گئے دائرہوں میں سے درست جواب کے مطابق مقفلہ دائرة کو مار لے جائیں۔

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 bubble in front of that question number. On bubble sheet, use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve questions on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) In Isolated system, the momentum after collision of two bodies is:-
 (A) Increased (B) Constant (C) Decrease (D) Zero

(2) The number of forces that can be added by head to tail rule:-
 (A) 2 (B) 3 (C) 4 (D) Any number

(3) The value of 'g' at moon is:-
 (A) 9.8 ms^{-2} (B) 10 ms^{-2} (C) 1.7 ms^{-2} (D) 1.6 ms^{-2}

(4) In Einsteins-Mass-Energy equation, "C" is the:-
 (A) Speed of sound (B) Speed of Earth (C) Speed of light (D) Speed of electron

(5) The formula of Power is:-
 (A) $P = Wt$ (B) $P = \frac{W}{t}$ (C) $P = mv$ (D) $P = ma$

(6) In S.I system, the unit of stress is:-
 (A) Nm^{-1} (B) Nm^{-2} (C) NS (D) Nm

(7) The thermometer is use to measure:-
 (A) Temperature of body (B) Force (C) Length (D) Time

(8) In solids, heat is transferred by:-
 (A) Radiation (B) Conduction (C) Convection (D) Absorption

(9) In gases, heat is mainly transferred by:-
 (A) Molecular collision (B) Conduction (C) Convection (D) Radiation

(10) In S.I system, the unit of mass is:-
 (A) Second (B) Meter (C) Kilogram (D) Newton

(11) The motion of a body in straight line is:-
 (A) Circular motion (B) Random motion (C) Linear motion (D) Translatory motion

(12) In S.I system, the unit of Momentum is:-
 (A) (B) (C) (D) S.I

SSC PART-I (9th CLASS)

PHYSICS (NEW SCHEME) GROUP-II (2015-2017)

TIME ALLOWED: 1.45 Hours

MAXIMUM MARKS: 48

SUBJECTIVE

حصہ انشائی

فرکس (نیو سیم) گروپ - دوسرا

وقت = 1.45 گھنٹے

کل نمبر = 48

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

حصہ اول

2. Attempt any five parts.

10 = 2 x 5

(i) Why "Screw Gauge" is considered more-useful than "Vernier Calliper"?

(ii) What is meant by Zero Error and Zero Correction?

(iii) Write the method to find least count of screw gauge.

(iv) Why vector quantities can not be added and subtracted like scalar quantities?

(v) Define Positive and Negative Acceleration.

(vi) State the Law of Conservation of Momentum.

(vii) Why do the passengers move out ward when a bus takes a turn?

(viii) State Newton's Second Law of Motion and write its equation.

3. Attempt any five parts.

10 = 2 x 5

(i) What is meant by Resolution of Forces?

(ii) Differentiate between Torque and Couple.

(iii) For what purpose artificial satellites have been sent into space?

(iv) If R is doubled then what will be change in "g" (where $g = \frac{GM_e}{R^2}$)

(v) What is the distance of geostationary satellite from earth and what is its speed with respect to earth?

(vi) Define "Work". What is its SI unit?

(vii) What are Solar Cells and write their use.

(viii) Define Watt and write down names of its larger units.

4. Attempt any five parts.

10 = 2 x 5

(i) The mass of 200 cm^3 volume of a stone is 500 g. Find its density.

(ii) Define Pressure and write its formula.

(iii) State Archimedes Principle.

(iv) Define latent heat of Fusion and write its formula.

(v) Convert 100°F into the temperature on celsius scale.

(vi) Why are metals good conductor of heat?

(vii) What is the difference between Conduction and Convection?

(viii) Define Thermal Conductivity.

NOTE: - Attempt any two questions.

18 = 9 x 2

5.(A) Derived the Second Equation of Motion with the help of speed-time graph? 4

(B) How much centripetal force is needed to make a body of mass 0.5 kg to move in a circle of radius 50 cm with a speed 3 ms^{-1} . 4

6.(A) Determine a force from its perpendicular components. 4

(B) a block with a force of 300 N through 50 m in 60 s. Find the power used by him to pull the block. 4

7.(A) Define volume thermal expansion and prove that $V = V_0(1 + \beta \Delta T)$ 4

(B) A barge 40 m long and 8 metre broad, whose sides are vertical, floats partially loaded in water. 4