

PAPER CODE

NUMBER: 1478

2019 (A)

SSC PART-I (9th CLASS)

MTN = 7/11 = 9 - 14/ رول نمبر

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

فزکس (نیو سکیم) گروپ - دوسرا

TIME ALLOWED: 15 Minutes

OBJECTIVE حصہ معروضی

وقت = 15 منٹ

MAXIMUM MARKS: 12

کل نمبر = 12

نوٹ - ہر سوال کے چار ممکنہ جوابات A، B، C اور D دیئے گئے ہیں۔ جو اپنی کاپی پر ہر سوال کے سامنے دیئے گئے دائروں میں سے درست جواب کے مطابق متعلقہ دائرہ کو مارکر یا پین سے بھر دیجئے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔ دائروں کو پُر نہ کرنے کی صورت میں کوئی نمبر نہیں دیا جائے گا۔ اس سوالیہ پرچہ پر سوالات ہرگز حل نہ کریں۔

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

سوال نمبر 1-

- (1) In Isolated system, the momentum after collision of two bodies is:-  
(A) Increased بڑھ جاتا ہے (B) Constant مستقل رہتا ہے (C) Decrease کم ہو جاتا ہے (D) Zero صفر رہتا ہے
- (2) The number of forces that can be added by head to tail rule:-  
(A) 2 (B) 3 (C) 4 (D) Any number کوئی بھی تعداد
- (3) The value of 'g' at moon is:-  
(A)  $9.8 \text{ ms}^{-2}$  (B)  $10 \text{ ms}^{-2}$  (C)  $1.7 \text{ ms}^{-2}$  (D)  $1.6 \text{ ms}^{-2}$
- (4) In Einsteins-Mass-Energy equation, "C" is the:-  
(A) Speed of sound آواز کی سپیڈ (B) Speed of Earth زمین کی سپیڈ (C) Speed of light روشنی کی سپیڈ (D) Speed of electron الیکٹرون کی سپیڈ
- (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)  $\text{Nm}^{-1}$  (B)  $\text{Nm}^{-2}$  (C)  $\text{NS}$  (D)  $\text{Nm}$
- (7) The thermometer is use to measure:-  
(A) Temperature of body جسم کا درجہ حرارت (B) Force فورس (C) Length لمبائی (D) Time وقت
- (8) In solids, heat is transferred by:-  
(A) Radiation ریڈی ایشن (B) Conduction کنڈکشن (C) Convection کنوئیکشن (D) Absorption ابزورپشن
- (9) In gases, heat is mainly transferred by:-  
(A) Molecular collision مالیکیولز کا ٹکرائو (B) Conduction کنڈکشن (C) Convection کنوئیکشن (D) Radiation ریڈی ایشن
- (10) In S.I system, the unit of mass is:-  
(A) Second سیکنڈ (B) Meter میٹر (C) Kilogram کلوگرام (D) Newton نیوٹن
- (11) The motion of a body in straight line is:-  
(A) Circular motion سرکولر موشن (B) Random motion رینڈم موشن (C) Linear motion لیئر موشن (D) Translatory motion ٹرانسلیٹری موشن
- (12) In S.I system, the unit of Momentum is:-  
(A)  $\text{kg ms}^{-1}$  (B)  $\text{kg m}^{-1}$  (C)  $\text{kg ms}^{-2}$  (D)  $\text{kg m}^{-2}$



## SSC PART-I (9th CLASS)

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

فزکس (نیو سکیم) گروپ - دوسرا

TIME ALLOWED: 1.45 Hours

SUBJECTIVE حصہ انشائیہ

وقت = 1.45 گھنٹے

MAXIMUM MARKS: 48

کل نمبر = 48

نوٹ - جوابی کاپی پر وہی سوال نمبر اور جزو نمبر درج کیجیے جو کہ سوالیہ پرچے میں درج ہے۔  
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

سوال نمبر 2- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (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

سوال نمبر 3- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (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

سوال نمبر 4- کوئی سے پانچ اجزاء کے جوابات تحریر کیجیے۔

- (i) The mass of  $200 \text{ cm}^3$  volume of a stone is  $500 \text{ g}$ . 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  $100^\circ \text{ F}$  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.

## SECTION-II حصہ دوم

NOTE: - Attempt any two questions.

18 = 9 x 2

نوٹ - کوئی سے دو سوالات کے جوابات تحریر کیجیے۔

5. (A) Derived the Second Equation of Motion with the help of speed-time graph?  
(B) How much centripetal force is needed to make a body of mass  $0.5 \text{ kg}$  to move in a circle of radius  $50 \text{ cm}$  with a speed  $3 \text{ ms}^{-1}$ ?  
6. (A) Determine a force from its perpendicular components.  
(B) a block with a force of  $300 \text{ N}$  through  $50 \text{ m}$  in  $60 \text{ s}$ . Find the power used by him to pull the block.  
7. (A) Define volume thermal expansion and prove that  $V = V_0 (1 + \beta \Delta T)$   
(B) A barge  $40 \text{ metre}$  long and  $8 \text{ metre}$  broad, whose sides are vertical, floats partially loaded in water.