BOARD OF INTERMEDIATE EDUCATION, KARACHI
INTERMEDIATE EXAMINATION, 2016 (ANNUAL)

Date: 13.05.2016
9:30 a.m. to 9:50 a.m.

PHYSICS PAPER – I
(Science Groups)

Max. Marks: 17
Time: 20 minutes

SECTION 'A'
(MULTIPLE CHOICE QUESTIONS) – (M.C.Qs.)

The correct answers are highlighted in red colour.

Code No:PH-01

Write this Code No. in the Answerscript.

NOTE:

i) This section consists of 17 part questions and all are to be answered. Each question carries one mark.

ii) Do not copy the part questions in your answerbook. Write only the answer in full against the proper number of the question and its part.

iii) The code of your question paper is to be written in bold letters in the beginning of the answerscript.

iv) The use of scientific calculator is allowed. All notations are used in their usual meanings.

1. Select the most appropriate answer for each from the given options:

i) The power of a convex lens is 4 diopter. Its focal length is:
   * 10 cm   * 20 cm   * **25 cm**   * 50 cm

ii) A car travelling at a constant speed of 20 m/s, rounds a curve of radius 100 m. Its acceleration is:
   * $4\,m/s^2$ * $40\,m/s^2$ * $200\,m/s^2$ * $2000\,m/s^2$

iii) The angle subtended at its centre by an arc whose length is equal to its radius, is:
   * 37.5^o * 47.3^o * 57.3^o * 67.3^o

iv) The velocity of sound in space is:
   * **zero**   * $330\,m/s$ * $332\,m/s$ * $344\,m/s$

v) If the mass of the bob of a simple pendulum is doubled, its time period will:
   * be doubled   * become fourfold   * be halved   * **not change**

vi) Candela is the unit of:
   * **Luminous Intensity**   * Power   * Current   * Distance

vii) Dimension of velocity is:
   * L^2 * LT^{-1} * LT^{-2} * LT^2

viii) Time rate change of linear momentum of a body is called:
   * Power   * Work done   * **Force**   * Moment arm

ix) At a distance, equal to the radius of the earth, above the surface of the earth, the value of gravitational acceleration will be:
   * **one fourth**   * one eight   * one ninth   * zero

x) The work done along the closed path in a conservative field is:
   * Positive   * Negative   * **Zero**   * Infinite

xi) The bending ability of light around an obstacle is known as:
   * Interference   * Polarization   * Refraction   * **Diffraction**

xii) Two perpendicular vectors having magnitude 3 and 4 units are added. The magnitude of resultant vector is:
   * **5 units**   * 6 units   * 7 units   * 8 units

xiii) In Young's double slit experiment, if separation between slits is increased, then fringe spacing will:
   * Increase   * **Decrease**   * Remain the same   * become Infinity

xiv) This instrument is used to study the spectrum of luminous bodies:
   * Telescope   * Microscope   * **Spectrometer**   * Magnifying glass

xv) The dot product of force and velocity is:
   * **Power**   * Acceleration   * Energy   * Torque

xvi) Two forces, which are equal in magnitude but opposite in direction and not acting along the same straight line, form:
   * Circle   * **Couple**   * Power   * Torque

xvii) The maximum number of beats/sec. that the human ear can detect is:
   * 3   * 5   * **7**   * 9

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