

For Failure, Improvement of Grade & Additional Subject Candidates Only

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

The correct answers are highlighted in red colour.

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

Code No:PH-17
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 maximum number of beats/sec. that the human ear can detect is:
* 3 * 5 * **7** * 9
- ii) The power of a convex lens is 4 diopter. Its focal length is:
* 10 cm * 20 cm * **25 cm** * 50 cm
- iii) A car travelling at a constant speed of 20 m/s, rounds a curve of radius 100 m. Its acceleration is:
* **4 m / s²** * 40 m / s² * 200 m / s² * 2000 m / s²
- iv) The angle subtended at its centre by an arc whose length is equal to its radius, is:
* 37.5° * 47.3° * **57.3°** * 67.3°
- v) The velocity of sound in space is:
* **zero** * 330 m / s * 332 m / s * 344 m / s
- vi) If the mass of the bob of a simple pendulum is doubled, its time period will:
* be doubled * become fourfold * be halved * **not change**
- vii) Candela is the unit of:
* **Luminous Intensity** * Power * Current * Distance
- viii) Dimension of velocity is:
* L² * **LT⁻¹** * LT⁻² * LT²
- ix) Time rate change of linear momentum of a body is called:
* Power * Work done * **Force** * Moment arm
- x) 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
- xi) The work done along the closed path in a conservative field is:
* Positive * Negative * **Zero** * Infinite
- xii) The bending ability of light around an obstacle is known as:
* Interference * Polarization * Refraction * **Diffraction**
- xiii) 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
- xiv) In Young’s double slit experiment, if separation between slits is increased, then fringe spacing will:
* Increase * **Decrease** * Remain the same * become Infinity
- xv) This instrument is used to study the spectrum of luminous bodies:
* Telescope * Microscope * **Spectrometer** * Magnifying glass
- xvi) The dot product of force and velocity is:
* **Power** * Acceleration * Energy * Torque
- xvii) Two forces, which are equal in magnitude but opposite in direction and not acting along the same straight line, form:
* Circle * **Couple** * Power * Torque

-----XXXXXXXXXX-----