

PHYSICS**CHOOSE THE CORRECT OPTION:**

01. A passing motorcycle causes distortion or disturbance with reception of signal in radio and T.V. The cause of this is
(a) The spark plug fitted in the engine produces electro-magnetic signals due to sparking
(b) The vehicle's metal parts block/distort the radio waves
(c) The intense sound waves effect the small electronic devices of the receptor
(d) Modern motor-cycles are fitted with electric ignition system which produces radio waves
02. Which of the following are produced by a moving electric charge?
(1) Electric field (2) Magnetic field (3) Gravitational field
(a) 1 and 3 (b) 2 and 3 (c) 1 and 2 (d) 2 only
03. When a glass rod is rubbed against silk
(a) Glass rod loses electrons and becomes positively charged
(b) Silk loses electrons and becomes positively charged
(c) Glass rod loses electrons and becomes negatively charged
(d) Silk loses electrons and becomes negatively charged
04. If a bimetallic strip is heated, it will
(a) Bend towards the metal with higher thermal coefficient of expansion
(b) Not bend at all
(c) Twist itself into a helix
(d) Bend towards the metal with lower thermal expansion coefficient
05. Mercury is used in the liquid thermometer because
(a) It is shiny and expands quickly (b) It expands slowly
(c) It does not expand (d) None of these
06. 273.0 K is equal to
(a) 0°C (b) 100°C (c) 0° F (d) 100°F
07. The SI unit of temperature is
(a) Kelvin (b) Celcius (c) Fahrenheit (d) None of these
08. The motion in which all points of the body move through the same distance in the same time is
(a) Curvilinear motion (b) Rectilinear motion
(c) Translatory motion (d) None of these

□□□

CHEMISTRY

CHOOSE THE CORRECT OPTION:

09. Liquids flow from a higher to a lower level. Which liquid can climb up the walls of the glass vessel in which it is kept?
(a) Liquid helium (b) Alcohol (c) Water (d) Liquid nitrogen
10. Rubber is very soft. Therefore, it is vulcanised and used in tyres. Vulcanised rubber resists:
(a) Drops of acid rain (b) Cold temperatures
(c) Jerking movement (d) Wear and tear due to friction
11. Which of the following is not a natural dye of either vegetable or animal origin?
(a) Tyrian purple (b) Indigo (c) Saffron (d) Azo dye
12. Which of the following is a super-cooled liquid?
(a) Glass (b) Ammonia (c) Ice cream (d) Wood
13. Methane gas is an organic fuel obtained from the sources mentioned here. Pick the false one?
(a) Coal gas (b) Molasses (c) Natural gas (d) Sewage
14. The odourless, poisonous gas mixed with smoke that arises from burning coal is:
(a) Carbon monoxide (b) Nitrogen (c) Carbon dioxide (d) Methane
15. Chromium is used in making:
(a) Stainless steel (b) Mosaic-floor grinders
(c) Electrodes (d) Bronze
16. Various methods are adopted for protecting iron from rust. Which of the following statements is false?
(a) Chrome plating looks good
(b) Ordinary tin plating is cheap but not reliable
(c) Zinc plating is more permanent than chrome plating
(d) Zinc protects iron but does not protect itself

□□□

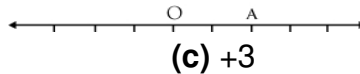
MATHEMATICS

CHOOSE THE CORRECT OPTION:

17. If the number 56_795 is divisible by 3, then the digit in the blank among the following is ____.

- (a) 5 (b) 0 (c) 1 (d) 6

18. In the figure below, if point O represents zero on the number line, then point A represents ____.



- (a) -2 (b) +2 (c) +3 (d) -3

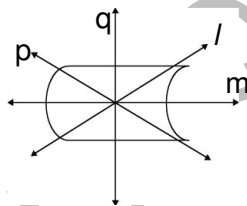
19. $9\frac{1}{8}$ can be expressed as an improper fraction as ____.

- (a) $\frac{17}{9}$ (b) $\frac{72}{8}$ (c) $\frac{10}{8}$ (d) $\frac{73}{8}$

20. The perimeter of an isosceles triangle is 25 cm and the length of one of the sides is 5 cm. The lengths of the other two equal sides are ____.

- (a) 5 cm and 5 cm (b) 10 cm and 10 cm
(c) 7.5 cm and 7.5 cm (d) 15 cm and 15 cm

21. In the figure below, the mirror line or the axis of symmetry is ____.



- (a) line q (b) line p (c) line l (d) line m

22. The supplementary angle of $\frac{1}{2}$ of 120° is ____.

- (a) 130° (b) 120° (c) 60° (d) 100°

23. Which of the following pair of fractions are equivalent fractions?

- (a) $\frac{1}{4}, \frac{4}{6}$ (b) $\frac{15}{45}, \frac{30}{60}$ (c) $\frac{5}{12}, \frac{10}{12}$ (d) $\frac{6}{24}, \frac{3}{12}$

24. Kirti and Tina go for a morning walk. Kirti goes around a rectangular field of length 275 m and breadth 125 m. Tina goes around a square field of side 225 m. The correct statement among the following is ____.

- (a) Both Kirti and Tina covers equal distance in each round.
(b) Kirti covers 100 m more distance than Tina in each round.
(c) Tina covers 100 m more distance than Kirti in each round.
(d) Tina covers 50 m more distance than Kirti in each round.

□□□

Answer Key

	Physics		Chemistry		Mathematics
1	a	9	a	17	c
2	c	10	d	18	b
3	a	11	d	19	d
4	d	12	a	20	b
5	a	13	b	21	d
6	a	14	a	22	b
7	a	15	a	23	d
8	c	16	d	24	c

□□□