



RAMAGYA SCHOOL, NOIDA

X/SCIENCE/2017-18

OLYMPIAD PRACTICE WORKSHEET - 2

- Q 1. In the reaction, $2\text{FeCl}_2 + \text{Cl}_2 \rightarrow 2\text{FeCl}_3$, chlorine may be regarded as
- (a) an oxidizing agent (b) a reducing agent
(c) a catalyst (d) providing an inert medium
- Q 2. Which of the following solutions is the most basic?
- (a) pH = 8.2 (b) pH = 9.3
(c) pH = 11.2 (d) pH = 10.5
- Q 3. What are the constituents of alloy solder?
- (a) Copper, zinc (b) Copper, tin
(c) Lead, Zinc (d) Lead, tin
- Q 4. Buckminsterfullerene is an example of _____ of carbon
- (a) an isomer (b) an isotope
(c) an allotrope (d) a functional group
- Q 5. The law of triads is not applicable on
- (a) Cl, Br, I (b) S, Se, Te
(c) Na, K, Rb (d) Ca, Sr, Ba
- Q 6. The Oxygenated blood is carried from lungs to left auricle by
- (a) vena cava (b) pulmonary vein
(c) pulmonary artery (d) aorta
- Q 7. The seat of intelligence and voluntary actions in the brain is
- (a) Cerebellum (b) Cerebrum
(c) Medulla Oblongata (d) Diencephalon
- Q 8. A feature of reproduction that is common to Amoeba, Spirogyra and Yeast is that
- (a) they reproduce asexually (b) they are all unicellular
(c) they reproduce only sexually (d) they are all multicellular
- Q 9. Who proposed the hypothesis that life must have developed from the simple inorganic molecules which were present on earth soon after it was formed?
- (a) Miller (b) Urey
(c) Darwin (d) Haldane

Q 10. The image from a convex mirror will _____.

- (a) always be real (b) always be projected
(c) always be virtual (d) never be virtual

Q 11. When light passes through a prism, the colour which deviates the least is:

- (a) red (b) blue
(c) violet (d) green

Q 12. A voltmeter is used to measure

- (a) potential difference (b) electric current
(c) electric power (d) resistance

Q 13. What is the field line of a magnetic field passing through the centre of current carrying circular ring ?

- (a) Circular (b) Straight line
(c) Ellipse (d) Magnetic field is zero at center

Q 14. Which of the following is the ultimate source of energy?

- (a) water (b) uranium
(c) sun (d) fossil fuel

Q 15. Chlorophyll contains

- (a) potassium (b) iron
(c) magenese (d) magnesium

Q 16. Three persons A, B and C wore shirts of black, blue and orange colours (not necessarily in that order) and pants of green, yellow and orange colours (not necessarily in that order). No persons were shirt and pants of the same colour. Further it is given that

1. A did not wear shirt of black colour.
2. B did not wear shirt of blue colour.
3. C did not wear shirt of orange colour.
4. A did not wear pants of green colour.
5. B were pants of orange colour

What were the colours of the pants and shirt were by C respectively

- (a) Orange and Black (b) Yellow and Blue
(c) Green and Blue (d) Yellow and Black

Q 17. Six books are labelled A, B, C, D, E and F and are placed side by side. Books B, C, E and F have green covers while others have yellow covers. Books A, B and D are new while the rest are old volumes. Books A, B and C are law reports while the rest are medical extracts. Which two books are old medical extracts and have green covers?

- (a) B and C (b) C and F
(c) C and E (d) E and F

Q 18. A train traveling at 60 mph enters a tunnel that is 5 miles long. The train is one mile long. How many minutes does it take for the whole train to pass through the tunnel?

(a) 5

(b) 4

(c) 6

(d) 3

Q 19. In the Shelbyville election, the Republican candidate received one and a half times as many votes as the Democrat candidate. The Democrat candidate received one third more votes than the Independent candidate. 900 votes were cast for the Independent candidate. How many votes were cast for the Republican candidate?

(a) 1800

(b) 1700

(c) 1600

(d) 1400

Q 20. Anna and John both drive to their new home 400 miles away. Anna drives the family car at an average speed of 60 mph. John drives the removal truck at an average speed of 50 mph. During the journey, Anna stops for a total of 1 hour and 20 minutes, John stops for half as long. What is the difference in minutes between their arrival times?

(a) 55

(b) 44

(c) 80

(d) 40