

PHYSICS

- The hand span is an unreliable measure of length because
 - People do not measure properly with it
 - It varies from person to person
 - It is not a standard unit of measurement
 - Both (b) and (c)
- Which of these will always be translatory motion?
 - Periodic motion
 - Rectilinear motion
 - Rotational motion
 - All of these
- What kind of motion does a pendulum have?
 - Rectilinear motion
 - Rotational motion
 - Periodic motion
 - Non-periodic motion
- Which of these will not form a Shadow?
 - A child
 - A tree
 - Clear glass
 - A cloud
- A shadow is formed when
 - Light from a luminous object reaches our eyes
 - Light from a luminous object reaches our eyes after reflection
 - Light from a luminous object is prevented from reaching our eyes by another object
 - Light from a luminous object reaches our eyes after passing through a transparent object
- Which one of the following is a luminous source?
 - Moon
 - Glow signboard
 - Star
 - A firefly
- Electric current flows in
 - Particular direction
 - Opposite direction
 - Different direction
 - None of these
- Sources of electric current are
 - Switch and wires
 - Solar panel and storage cell
 - Glass beaker & switch
 - Wires & clips
- Electric wires are covered with a plastic layer to
 - Make them safe
 - Help flow of electric current
 - Insulate them
 - Make them appear nice

- (i) & (iv)
 - (ii) & (iv)
 - (ii) & (iii)
 - (i) & (iii)
- Find the odd one out
 - Dry cell
 - Connecting wires
 - Plastic rope
 - Switch

CHEMISTRY

- Wind is used for the process of
 - Fog formation
 - Winnowing
 - Ozone formation
 - Nitrogen fixation
- Separating funnel is used
 - In simple filtration
 - For separating 2 miscible liquids
 - For separating 2 immiscible liquids
 - For separating an insoluble solid from its solution
- Which of the following is not soluble in water
 - Salt
 - Sand
 - Sugar
 - Milk
- Which of these changes are physical and reversible
 - Burning of coal
 - Freezing of water
 - Rusting of iron
 - Melting of wax
 - (i) & (ii)
 - (ii) & (iv)
 - (ii) & (iii)
 - (iii) & (iv)
- A change that is accompanied by absorption of heat energy is called
 - Exothermic change
 - Fast change
 - Slow change
 - Endothermic change
- If two substances are mixed together, it will result in
 - A physical change only
 - A chemical change only
 - Either a physical change or a chemical change
 - None of the above
- Water in oceans cannot be used for drinking and agriculture because:
 - It has high levels of pollutants
 - It is poisonous
 - It has high salt content
 - It has high fluoride content

8. How much of the earth's surface is covered with water?
 (a) About one fourth
 (b) About two third
 (c) About half
 (d) About three fourth
9. Water table refers to
 (a) Level of sea water
 (b) Level of surface water
 (c) Level of ground water
 (d) None of these
10. Water that can be used for drinking is known as
 (a) Rain water (b) Potable water
 (c) Surface water (d) All of these
7. The tendril in a pea plant is a modified
 (a) Stem (b) Leaf
 (c) Flower (d) Root
8. The response of roots towards the earth is known as
 (a) Geotropism (b) Phototropism
 (c) Stimulus (d) Auto tropism
9. The root system of monocot plants is
 (a) Taproot system
 (b) Fibrous root system
 (c) Either (a) or (b)
 (d) Both (a) and (b)
10. The part of a plant that attaches a leaf to the stem is
 (a) Node (b) Internode
 (c) Petiole (d) Lamina

BIOLOGY

1. Cereals are
 (a) Vegetables
 (b) Fruits
 (c) Animal products
 (d) Seeds mostly obtained from plants
2. Food is needed for
 (a) Fighting deceases
 (b) Providing energy
 (c) Growth
 (d) All of these
3. Stems of which of the following plants are eaten?
 (a) Turnip and beetroot
 (b) Carrot and cabbage
 (c) Radish and sweat potato
 (d) Onion and garlic
4. Proteins can supply energy when there is short supply of
 (a) Vitamins
 (b) Water and roughage
 (c) Mineral salts
 (d) Carbohydrates and fats
5. For strong bones and teeth we need
 (a) Vitamin D (b) Vitamin A
 (c) Vitamin E (d) Vitamin K
6. Milk is a complete food for
 (a) Adults (b) babies
 (c) Boys only (d) Girls only

MATHEMATICS

1. $42(4 + 2) = (42 \times 4) + (42 \times 2)$ is an example of:
 (a) Closure property
 (b) Commutative property
 (c) Associative property
 (d) Distributive property
2. Which of the following would give the value zero?
 (a) $30 \div 0$ (b) 30×1
 (c) 30×0 (d) $30 \div 30$
3. A ray XY is symbolically written as
 (a) \overrightarrow{XY}
 (b) \overline{XY}
 (c) \overleftarrow{XY}
 (d) XY
4. If $\ell \parallel m$ and $m \parallel n$, then
 (a) $\ell \parallel p$ (b) $\ell \parallel q$
 (c) $m \parallel n$ (d) $\ell \parallel n$
5. Opposite of rise in temperature by 5°C .
 (a) $+5^\circ \text{C}$
 (b) -15°C
 (c) -5°C
 (d) $+15^\circ \text{C}$
6. $100 - 4[25 - \{5 + 12 - 9\}]$
 (a) (-32) (b) $+132$
 (c) $+132$ (d) (-132)

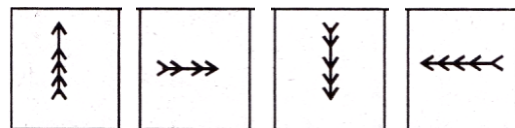
7. Equivalent fraction of $\frac{9}{11}$ is
- (a) $\frac{99}{88}$ (b) $\frac{234}{286}$
 (c) $\frac{72}{77}$ (d) $\frac{90}{100}$
8. Which number should come in place of _____?
 $\frac{1}{7} + \frac{2}{7} + \frac{?}{7} = 1\frac{3}{7}$
- (a) 1 (b) 2
 (c) 3 (d) 7
9. 8 sq. cm = _____ sq. mm.
- (a) 800
 (b) 80
 (c) 8000
 (d) 80,000
10. Which number is equal to $\left(\frac{0.1}{0.01} + \frac{0.01}{0.1}\right)$?
- (a) 10.1 (b) 1.10
 (c) 1.01 (d) 10.01

MENTAL ABILITY

1. Out of the four choices given for each question, you have to select one that will maintain the relationship on the two sides of the sign :: the same if it is substituted for the question mark?
- 13 : 19 :: ? : 31
- (a) 21 (b) 23
 (c) 25 (d) 26
2. Letters of the English alphabet have been formed into groups in certain order. Find the set of letters that is most appropriate to fill the gap from the sets given in the choice.
- CEG : EGC :: LNP :
- (a) LPN
 (b) UWY
 (c) NPL
 (d) MOP
3. Choose the correct alternative.
- 583 : 293 :: 488 : ?
- (a) 291 (b) 378
 (c) 487 (d) 581

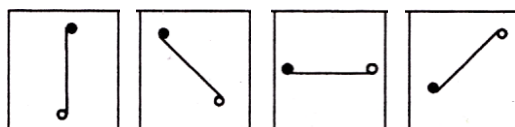
4. In each of the following questions, there are two words / set of letters / numbers to the left of the sign :: which are connected in some way. The same relationship obtains between the third word / set of letters / numbers and one of the four alternatives under it. Find the correct alternative in each question.
- Man : Walk :: Fish : ?
- (a) Swim
 (b) Breath
 (c) Live
 (d) Sleep
5. In each example on some letters are missing shown by (...). The missing letters are given in their proper sequence as one of the five alternatives given under each question. Find out the correct alternative.
- 5, 9, 16, 29, 54,
- (a) 103
 (b) 105
 (c) 109
 (d) None of these

6. Which of the following would come in place of the question mark in the following letter number series.
- 2, 3, 10, 15, 26, 35, 50, 63, ?
- (a) 80 (b) 82
 (c) 83 (d) 84
7. b - a - bab - ab - a
- (a) a b a b (b) b a b a
 (c) b a bb (d) a bb a
8. a - baa - baa - ba
- (a) aab (b) bab
 (c) bba (d) bbb
9. Choose the figure which is different from the others.



- (a) (b) (c) (d)

10. Choose the figure which is different from the others.



- (a) (b) (c) (d)

SPACE FOR ROUGH WORK

RJ Vision Pvt. Ltd.