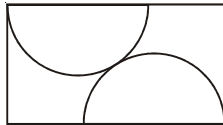
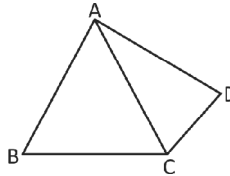

Class 10

SAMPLE QUESTIONS MATHEMATICS

- Q1.** Rajesh wants to cut two semi circle as shown in the following figure, with same diametre from a cloth measuring 80 cm by 160 cm. The diametre in centimetre of the largest semi circle is?



- (A) 100 (B) 90
(C) 110 (D) 120
-
- Q2.** If ABCD is a tetrahedron whose side are of measure 7 ,13, 18, 27, 36, and 41 units. If the length of the edge BC is 41 units , then find the length of the edge CD.

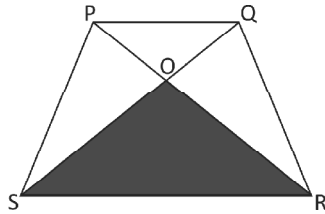


- (A) 12 units (B) 13 units
(C) 14 units (D) None of the above
-
- Q3.** A group of girls planned a picnic. The budget for food was Rs. 2400. Due to illness, 10 girls could not go to the picnic and cost of food for each girl is increased by Rs 8. How many girls planned for the picnic?
- (A) 50 (B) 55
(C) 60 (D) 65

Q4. There are two examination rooms P and Q. If 10 candidates are sent from P to Q, the number of students in each room is the same. If 20 candidates are sent from Q to P, the number of students in P is double the number of students in Q. Find the number of students in each room.

- (A) 60 & 40 (B) 70 & 50
 (C) 100 & 80 (D) 60 & 80

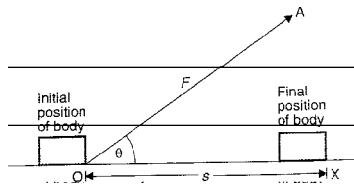
Q5. If the length of perpendicular drawn from O on SR is 4 cm, length of SR is 15 cm, then find the area of the shaded region.



- (A) 15 cm^2 (B) 20 cm^2
 (C) 25 cm^2 (D) 30 cm^2

SAMPLE QUESTIONS PHYSICS

Q1. Which one of the following options correctly represents the work done by the force F as shown in the following figure?

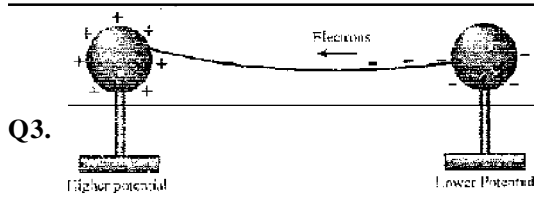


- (A) $W = FS$ (B) $W = FS \cos\theta$
 (B) $W = F \cos\theta$ (D) $W = S \cos\theta$

Q2. A horse exerts a pull on a cart of 300 N so that the horse-cart system moves with a uniform speed 18 km/h on a level road.

Calculate the power developed by the horse in watt and also find its equivalent in horsepower.

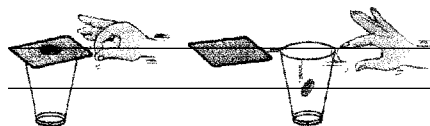
- (A) 1 HP (B) 2 HP
(C) 3 HP (D) 4 HP



In the above given figure when both the sphere is connected by the conducting wire the charge will flow in which direction?

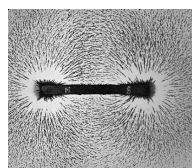
- (A) Positive to negative (B) Negative to positive
(C) In both the direction (D) Charge will not flow

Q4. Which property of motion is depicted in the following figure?



- (A) First laws of motion (B) 2nd laws of motion
(C) 3rd laws of motion (D) Inertia

Q5. Which property of magnetism shown below is not correct?

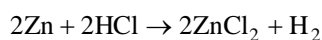


- (A) The magnetic lines of force originate from the north pole of a magnet and end at its south pole
(B) The magnetic lines of force do not intersect (or cross) one another.
(C) When a magnetic compass is placed at different points on a magnetic line of force, it aligns itself along the tangent to the line of force at that point.

- (D) When magnetic lines of force are closer together, it indicates a weak magnetic field.

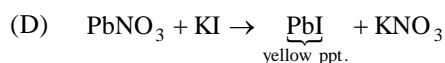
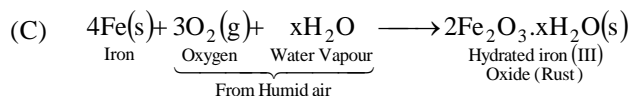
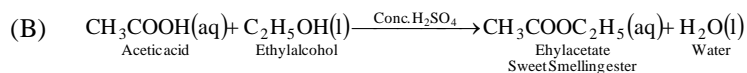
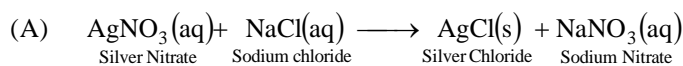
SAMPLE QUESTIONS CHEMISTRY

Q1. Which test is used to test the evolution of gas shown in the reaction below?

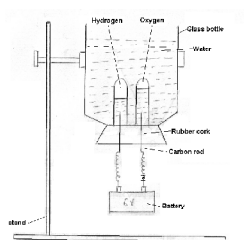


- (A) It turns lime water milky
 (B) It turns bromine water colourless
 (C) It burns with pop sound
 (D) It burns with yellow flame

Q2. Which one of the following is a fast reaction?



Q3. Which one of the following processes is shown in the following figure?



- (A) Industrial production of Hydrogen gas

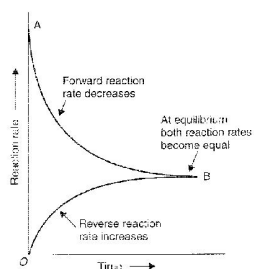
- (B) Industrial production of oxygen gas
- (C) Combination reaction
- (D) Electrolysis of water

Q4. Which molecule structure is shown in the following figure?



- (A) S
- (B) S₂
- (C) S₄
- (D) S₈

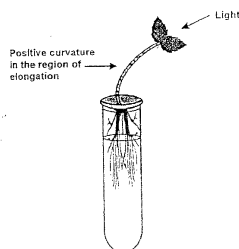
Q5. The equilibrium state of a reaction is affected by several factors. Which one of the following factors does not affect the equilibrium state of a reaction?



- (A) Temperature
- (B) Pressure
- (C) Concentration of reactant and product
- (D) Initial and final concentration

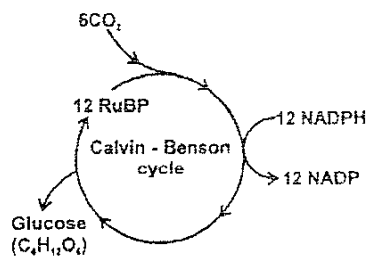
SAMPLE QUESTIONS BIOLOGY

Q1. Plant shows movement due to different stimulus. Identify the tropic movement shown by the plant as shown in the following figure:



- (A) Phototropism (B) Chemotropism
 (C) Geotropism (D) Hydrotropism

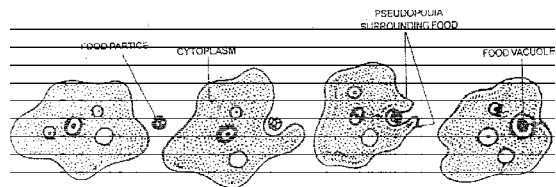
Q2. Which type of reaction is shown by the Calvin Benson cycle shown in the following figure?



Calvin - Benson cycle

- (A) Light reaction (B) Dark reaction
 (C) Hill reaction (D) Photochemical reaction

Q3. The process of obtaining food by the organism shown in the following figure is known as:



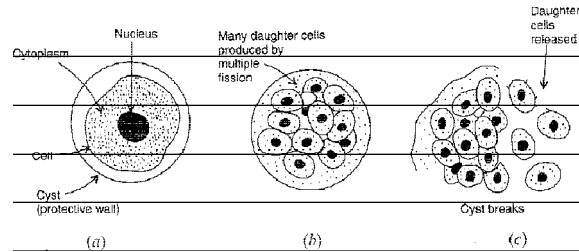
- (A) Ingestion (B) Absorption
 (C) Phagocytes (D) Digestion

Q4. Which one of the following is not the part of large intestine of human digestive system?

- (A) Caecum (B) Colon
 (C) Rectum (D) Ileum

Q5. There are different mode of a sexual reproduction in lower plants and animals. One such mode of a sexual reproduction is shown

in the following figure. Identify the mode of reproduction shown in the following figure:



- (A) Fragmentation (B) Budding
 (C) Re generation (D) Multiple fission

SAMPLE QUESTIONS MENTAL ABILITY

Q1. Find the number of triangles in the following figure:



- (A) 27 (VB) 25
 (C) 23 (D) 21

Q2. If $x(y+z) = w$ and $x, y, z,$ and w are all integers, which one of the following must be true?

- (A) $x(y + z) > 0$ (B) $xy + z = w$
 (C) $xy + xz = w$ (D) None of the above

Q3. A polynomial gives a remainder 2 when it is divided by $x-1$. When it is divided by $x-2$, it gives the remainder 1. Rajesh divides this polynomial with $x-1$ and $x-2$. What will be its remainder?

- (A) $-x + 3$ (B) 2
 (C) $x + 3$ (D) None of the above

Q4. Rakesh has as many sisters as he has brothers. Each of his sisters has twice as many brothers as she has sisters. How many children are there in the family?

- (A) 4 (B) 5
(C) 6 (D) 7

Q5. Each of the following figures shows a square of side 1 cm with inscribed circles. In which one of the following figures do the circles have the greatest total area?

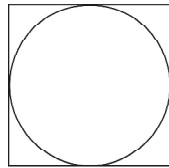


Fig. 1

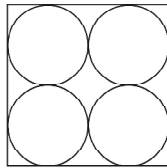


Fig. 2

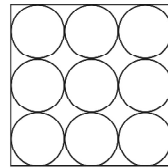


Fig. 3

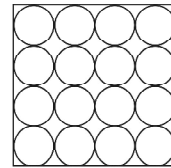


Fig. 4

- (A) Figure 1 (B) Figure 2
(C) Figure 3
(D) They all have the same area

SAMPLE QUESTIONS ENGLISH

Q1. Find the synonyms of the following:

1. BRAZEN
2. ABHOR
3. CANDOR
4. CHIDE

- (A) 1. excessively bold, 2. detest, 3. honesty, 4. compassion
(B) 1. excessively bold, 2. love, 3. honesty, 4. scold
(C) 1. excessively bold, 2. detest, 3. honesty, 4. scold
(D) 1. solid, 2. detest, 3. honesty, 4. scold

Q2. Fill in the blanks with non finite verb.

I can't believe you wanted ___1___, and you forgot ___2___ a fishing pole. How did you expect ___3___ any fish? Were you just going to sit in the river trying ___4___ fish with your bare hands? You would have had a hard time ___5___ that!

- (A) 1. to go fishing, 2. bringing ,3. to catch 4. trying to catch, 5. doing
- (B) 1. go fishing, 2.to bring, 3. to catch 4. trying to catch, 5. done
- (C) 1. to go fishing, 2. to bring, 3. to catch 4. trying to catch, 5. doing
- (D) 1. to go fishing, 2. to bring, 3. catching, 4. trying to catch, 5. doing

Q3. In the following question four parts of a sentence are given. One part has a mistake. Identify that part.

- (A) I woke up in a good mood
 - (B) this morning and turned on
 - (C) the radio to listen to music
 - (D) and know something about the weather.
- (A) A (B) B
(C) C (D) D

Q4. In the following question four sentences are given. Choose the grammatically correct sentence.

1. You cannot pass till you work hard.
 2. Either he or she is at your fault.
 3. I doubt whether the result will be out today.
 4. I doubt that the result will be out today.
- (A) 1 and 2 (B) 2 and 3
(C) 3 and 4 (D) 1 and 4

Q5. Fill in the blanks with suitable preposition.

I took the tattered object _____1_____ my hands and turned it _____2_____ rather ruefully. It was a very ordinary black hat of the usual round shape, hard and much the worse to wear. The lining had been of red silk, but was a good deal discoloured. There was no maker's name; but, the initials A.W. were scrawled _____3_____ one side. It was pierced in the brim for a hat securer, but the elastic was missing. For the rest, it was cracked, exceedingly dusty, and spotted in several places, although there seemed to have been some attempt to hide the discoloured patches _____4_____ smearing them with ink.

“I can see nothing,” said I, handing it back to my friend.

- (A) 1. in, 2. on, 3. on, 4. by (B) 1. at, 2. over, 3. on, 4. by
(C) 1. in, 2. over, 3. on, 4. by
(D) 1. in, 2. over, 3. on, 4. while

SAMPLE QUESTIONS GENERAL KNOWLEDGE

Q1. Which one of the following films of Kamal Hasan was in controversy about hurting the sentiments of the minority?

- (A) Dashawtar (B) Vishwaroopam
(C) Giraftar (D) None of the above

Q2. The Chief Minister of which one of the following states has warned the IPL governing body not to allow Sri Lankan players in their state to play match in IPL?

- (A) Kerala (B) Karnataka
(C) Andhra Pradesh (D) Tamilnadu

Q3. India was in diplomatic tussle with which one of the following countries on the issue of surrendering of marines who killed an Indian Fisherman?

- (A) Germany (B) Italy
(C) France (D) Pakistan

Q4. Which one of the following ministers of Uttar Pradesh Govt. resigned from the State Cabinet in the wake of DSP Killing?

- (A) Raghuraj Pratap Singh (B) Ajam Khan
(C) Shivpal Yadav (D) None of the above

Q5. In which one of the following countries “ Wimbledon” championship is played?

- (A) France (B) USA
(C) UK (D) Russia

Class 10 Math Answers

1. Ans A 2. Ans B 3. Ans D 4. Ans C 5. Ans D

Class 10 Physics Answers

1. Ans A 2. Ans B 3. Ans B 4. Ans D 5. Ans D

Class 10 Chemistry Answers

1. Ans C 2. Ans A 3. Ans D 4. Ans D 5. Ans D

Class 10 Biology Answers

1. Ans A 2. Ans B 3. Ans C 4. Ans D 5. Ans D

Class 10 Mental Ability Answers

1. Ans A 2. Ans C 3. Ans A 4. Ans D 5. Ans D

Class 10 English Answer

1. Ans C 2. Ans C 3. Ans D 4. Ans B 5. Ans C

Class 10 General Knowledge Answer

1. Ans B 2. Ans D 3. Ans B 4. Ans A 5. Ans C
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