



SCIENCE SAMPLE QUESTION PAPER - 1





QUESTIONS 50



TOTAL MARKS 100



DURATION 60 mins

GRADE

Instruction for Students:

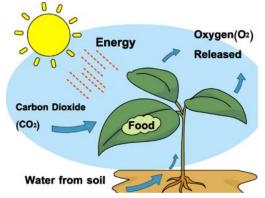
- ⇒ Read the question carefully before answering.
- ⇒ Each question has 4 options (A, B, C & D).
- Grand Finale Marking System:-

Each correct answer carries 2 marks.

For each unattempted question, 2 marks will be deducted.

For each wrong answer, 2.5 marks will be deducted.

- ⇒ Grand Finale Result will be declared Online after 45 days from the exam date. To know your Result, login to www.neltas.com and use given Seat Number.
- 1. The image shows how plants obtain carbon dioxide and water from the surroundings.



Based on the image, state the mode of nutrition in plants?

- (A) Heterotrophic, as plant obtain prepared food in the form of water and carbon dioxide.
- (B) Autotrophic, as the plant prepares its own food using water and carbon dioxide.
- (C) Heterotrophic, as plant consumes food prepared by other organisms.
- (D) Autotrophic, as plant obtains food in the form of sunlight.
- The list below shows some animals that acquire their food with different modes of feeding:

LICE	SNAKE	BUTTERFLY			
SNAIL	ANT	MOSQUITO			

Which two animals of the following animals suck their food?

(A) Lice and ants

(B) Snails and snakes

(C) Butterfly and ants

(D) Lice and mosquito

3.	 The kidney is an organ that contains blood capillaries that helps in the filtration of blood. The useful substances get absorbed by the blood. Which of the following describes the fate of harmful substances? (A) Harmful substances get accumulated in the kidney and are released out as sweat. (B) Harmful substances get absorbed by the blood and then are delivered to the lungs for filtration (C) Harmful substances dissolve in water and then are delivered back to the kidney for filtration (D) Harmful substances dissolve in water and are removed from the body as urine. 							
4.	Medulla oblongata controls (A) smelling (B) beating of heart and respiratory movement (C) intelligence and will power (D) balancing of the body	it						
5.	Carbohydrate is stored in plants in the form of							
	(A) proteins(C) vitamins	` ,	fats starch					
6.	When do seasonal allergy occur?	When do seasonal allergy occur?						
	(A) Every season	(B)	Throughout the year					
	(C) Every month	(D)	None of the above					
7.	A group of living organisms which are closely related and can breed among themselves are called							
	(A) species	(B)	phylum					
	(C) genus	(D)	kingdom					
8.	Fluid connective tissue in humans consists of							
	(A) blood and lymph	` ,	blood and matrix					
	(C) lymph and plasma	(D)	lymph and cytoplasm					
9.	A separation technique which is used to obtain liquid from a solution by heating, is called							
	(A) distillation		centrifugation					
	(C) filtration	(D)	evaporation					
10.	Valency of sodium is							
	(A) 1	(B)						
	(C) 3	(D)	4					
11.	Metallurgy is a process of							
	(A) extracting metal from its mineral							
	(B) extracting metal from its ore							
	(C) extracting metal from its pure ore							
	(D) extracting pure metal from its ore							
12.	Chalk, limestone, marble, eggshells and seashells are made of							
	(A) calcium hydroxide	` '	calcium carbonate					
	(C) calcium oxide	(D)	calcium chloride					
13.	Which of these mixtures represents a neutralization reaction?							
	(A) Acid + Water	` '	Acid + Acid					
	(C) Base + Water	(D)	Acid + Base					

VE	LTAS S-CAT	GRADE 7					
L 4.	 Which of the following are indicators that a chemical change has occurred in a substance? (A) The expansion in the size of material upon being heated (B) A substance breaking into smaller pieces of itself (C) Irreversibility of a substance after heating (D) A substance not resuming its original shape, after being pressed 						
L 5 .	In which form does oxygen exists normally in the atmosphere?	hich form does oxygen exists normally in the atmosphere?					
	(A) O (B) O ₂						
	(C) O ₃ (D) None of the above						
L 6 .	Which of the following materials is a good conductor of heat?						
	(A) Wood (B) Plastic						
	(C) Stone (D) Metal						
L 7.	 Which of these defines the speed of an object? (A) Total distance covered divided by the total time taken (B) The size of the object and the distance covered (C) Total distance covered multiplied by the total time taken (D) The length of space between two particular points 						
L8.	Janifer's dad explains to her that a fuse wire helps in protecting electrical appliances. What role does the fuse wire play in an electrical appliance? (A) It reduces the consumption of electricity. (B) It avoids overheating of an electrical appliance. (C) It helps to avoid the passing of large current. (D) It helps in storage of electricity for further use.						
L9.	If the bar magnet is carefully cut in half into two smaller magnets, they will each have	·					

- 20. Wheels on skateboard experiences
 - (A) sliding Friction

(B) rolling Friction

(C) static Friction

(D) fluid Friction

21. Cuscuta is a plant that lacks chlorophyll. It is a yellow wiry branched structure that climbs on other plants to obtain food. Kiya sets up an experiment using two potted plants, one with Cuscuta and other without it as shown below:

Which of these plants will show more growth?

- (A) Plant A, as Cuscuta shares chlorophyll of the host plants to synthesis its own food.
- (B) Plant B, as Cuscuta shares its readymade food with host plants to increase their combined growth.
- (C) Plant A, as Cuscuta uses readymade food of the plant B that weakens the host plant.
- (D) Plant B, as Cuscuta provides valuable nutrients to host plants for photosynthesis.

22	If haking soda or fruit salt is mixed with vine	gar there takes place a				
	(C) metal	(D) non-metal				
31.	Elements that are brittle and cannot be rolle (A) liquid	ed into wires are known as (B) non-elastic				
24		· '				
30.	Atoms of elements (A) can exist independently (C) may or may not exist independently	(B) cannot exist independently (D) None of the above				
29.	 When different gases are mixed to form the (A) chemical reaction (B) both chemical and physical reaction (C) no physical reaction (D) no chemical reaction 	air, there is/are				
	<u>``</u>					
28.	A group of similar types of cells that perform (A) species (C) tissue	n a specific function is called a/an (B) organ (D) organ system				
	(A) entomology (C) taxonomy	(B) anatomy (D) morphology				
27.	The branch of biology which deals with classification is called					
	(A) Skin rashes(C) Wheezing	(B) Vomiting(D) Stomach ache				
26.	Which symptom occurs commonly due to pollen allergy?					
	(C) stem	(D) flowers				
25.	Stomata are present on the surface of(A) leaves	• (B) roots				
	(C) cerebrum	(D) vertebral column				
24.	The spinal cord is an extension of (A) medulla oblongata	(B) cerebellum				
	(C) nephrons	(B) capillaries(D) glomerulus				
23.	The kidneys are made up of tubular units cal (A) neurons					
	(C) Cows chew continuously because they st(D) Cows chew continuously to remove the s					
	(B) Cows chew continuously to collect saliva mouth.	in their mouth so that more bacteria can be formed in their				
22.	even when they are not eating grass. What o	e food in their mouths, whereas cows chew continuously could be the reason behind this fact? The partially digested food, returns to their mouth in small				

(B) transference(D) both a and b

(A) chemical reaction

(C) physical reaction

- 33. Which of these activities represents a neutralization reaction in everyday life?
 - (A) Meditation before going to bed
 - (B) Consumption of milk of magnesia during indigestion
 - (C) Exercise in the morning with an empty stomach
 - (D) Drinking of water after consumption of food
- 34. Simran finds that a small iron rod left outdoors in the garden gets rusted. Which of the following could have prevented rusting?
 - (A) Placing the rod in a salt solution
 - (B) Burying the rod in the soil
 - (C) Painting the surfaces of the rod
 - (D) Placing the rod in a trough of water
- 35. Oxygen reacts with hydrogen to produce _____
 - (A) water

(B) hydrogen peroxide

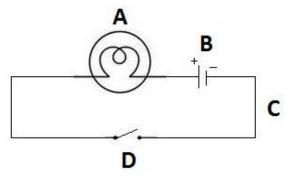
(C) Both A and B

- (D) Neither A nor B
- 36. Convection may occur through _____.
 - (A) solids and liquids

(B) solids and gases

(C) solids, liquids and gases

- (D) liquids and gases
- 37. Preetu drops a ball from the top of the hill. He notices the ball rolling down as shown in the image. Which of the following statements is true about the motion?
 - (A) Preetu is in motion as he drops the ball.
 - (B) The ball is in motion as it rolls down the slope.
 - (C) Preetu is in motion as he is standing on top of the hill.
 - (D) The ball is in motion as its shape changes over time.
- 38. The image represents an electric circuit with different components.



Which of the marked components represents a battery in the circuit?

(A) A

(B) B

(C) C

- (D) D
- 39. You hold a magnetic compass and observe the needle spin until it points north.
 - The north end of the compass needle points toward Earth's __
 - (B) magnetic north pole.
 - (A) geographic south pole.(C) magnetic south pole.

- (D) geographic north pole.
- 40. Friction between moving parts of machine causes _
 - (A) light

(B) heat

(C) energy

(D) All of the above

41. Which of the following statement defines the term 'nutrition'?

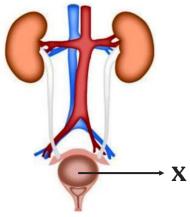
- (A) It is the mode of obtaining food by the individual.
- (B) It is the mode of eliminating food by the individual.
- (C) It is the amount of food present in the body.
- (D) It is the components of food required by the body.

42. The false feet of Amoeba are used for _____

(A) movement only

- (B) capture of food only
- (C) capture of food and movement
- (D) exchange of gases only

43. The given image shows the excretory system in humans:



What is the importance of the labelled part in the excretory system?

- (A) It filters waste from the blood.
- (B) It produces urine.
- (C) It carries urine from the kidney to outside.
- (D) It stores the urine till urination.

44. Phenolphthalein is a synthetic indicator and its colours in acidic and basic solutions, respectively are:

(A) red and blue

(B) pink and colourless

(C) colourless and pink

(D) blue and red

45. Which of the following is a physical change?

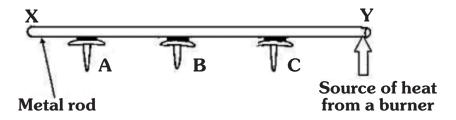
(A) Rusting of iron

(B) Combustion of magnesium ribbon

(C) Burning of candle

(D) Melting of wax

46. Several nails were attached to a metallic rod, through its length by using drops of wax as adhesive. This rod was placed horizontally with one end subjected to the flame of a burner, as depicted, below:



Nails closer to point Y begin to fall. If the burner is removed after a short while, nails closer to point X, remained affixed. Which end of the rod is hotter, and why?

- (A) X is hotter as the wax and nails both remained stuck to the rod.
- (B) Y is hotter as the wax melted faster due to the heat of the rod.
- (C) Y is hotter as the gravity acted faster near Y, dropping the nails.
- (D) X is hotter because heat moved from Y and was transferred to X.

NELTAS S-CAT GRADE 7

47.	A car covers a total of 200 kilometres in 4 hours. What is the average speed of the car?						
	(A) 40 km/hr	(B) 800 km/hr					
	(C) 100 km/hr	(D) 50 km/hr					
48.	A student performed an experiment where he placed a magnetic compass near a current-carrying wire.						
	He notices some deflection in the comp compass?	ass needle. What causes the deflection of the needle in the					
	(A) Magnetic effect of the compass on paper						
	(B) Magnetic effect of the electric curre	nt					
	(C) Electric effect of the magnetic compass						
	(D) Electric effect of the paper on the co	mpass					
49.	The rock of material which attracts is termed as						
	(A) magnet	(B) magnesia					
	(C) magnetic	(D) magnetite					
50.	The force of friction can be reduced by the help of						
	(A) ball bearing	(B) lubricants					
	(C) smooth surfaces	(D) All of the above					

NELTAS S-CAT GRADE 7

ANSWERS									
1	2	3	4	5	6	7	8	9	10
В	D	D	В	D	Α	Α	Α	Α	Α
11	12	13	14	15	16	17	18	19	20
D	В	D	С	В	D	Α	С	В	В
21	22	23	24	25	26	27	28	29	30
С	Α	С	Α	Α	С	С	С	С	С
31	32	33	34	35	36	37	38	39	40
D	Α	В	С	С	D	В	В	Α	В
41	42	43	44	45	46	47	48	49	50
Α	С	D	С	D	В	D	В	D	D