## Goa Board Model Question Bank. (Easy to Moderate) Cognitive domain: Knowledge/Understanding

1. Few drops of phenolphthalein were added to test tube A containing acid and test tube B containing a base. What will be the colour change observed in test tube B?  2. Hari mixes Plaster of Paris with water to make a statue. Give the chemical name of the new substance formed  3. "R" is a white solid often used in baking cake, is heated to give carbon dioxide gas, water vapours and a white solid "S" which is basic in nature. Identify "R" and S"  4. What is the function of left ventricle in the human heart? Name the artery to which blood is pumped?  5. Kazi and priyam want to prepare dil H2SO4 .Kazi added conc.H2SO4 to water slowly with constant stirring & cooling whereas Priyam added water to conc. H2SO4.Name the student who was correct and why?  6. Explain how the specialist could carry out a simple test to see if the river water contains some acid or not.  7. A student dropped few pieces of sea shells in dilute HCl contained in a test tube. The gas evolved was passed through lime water. What change would be observed in lime water? Write a balanced chemical equation for the initial reaction.  8. Which of the four chambers of the human heart has the thickest muscular walls? Justify .  9. How does respiration in plants differ from that in animals?  10. **India Marchaet Chamical Equation for the initial reaction.**  **India Marchaet Chamical Equation for the initial reaction.**  **Observe the given diagram of human excretory system and answer the questions below:    Identify and name the parts labelled as X and Y    Write the function of "X" and mention the wastes carried by it.		Cognitive domain: Knowledge/Understanding.
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Given figure shows the pathway taken by a nerve impulse in a reflex action. Which part 11. serves as a link between neurons? Hot pan .Z . W . X Y. 12. b. Observe the correlation in the first pair and answer the second pair. Central nervous system: Brain & Spinal cord:: Peripheral nervous system: The tallest man in the world and the shortest man in the world met each other on a 13. television show. Distinguish between the two men with respect to, i. Their condition related to the hormone ii. Cause of the condition. 14. Give one word/term for the following:a) a plant hormone that causes fruits growing in size b) a type of communication that reach cells having nervous connections only. Doctor advised Mr. X to take less sugar in his diet. 15. a) What disease is Mr. X is suffering from? b) Name the hormone that maintains the sugar level in the body. 16. Cow's milk was found to contain small traces of pesticides. Justify your answer giving reasons. 17. Which of the following constitutes a food chain? a) Grass, wheat and mango b) Grass, goat and human c) Goat, cow and elephant d) Grass, fish and goat 18. Which of the following belong to the same trophic level? Tree, Frog, Snake, Grass, Lizard 19. The use of pesticide DDT is discouraged since this chemical is found in human body. How does this chemical enter our body?

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Ī	20.	What does the high level of total coliform count in river Ganga indicates?	
Ī	21.	How did ChipkoAndolan ultimately benefit the local population? Give any two benefits?	

22.	Nikita took Zn, Al, Cu, Fe, Mg, Na metals & put each metal in cold water and then hot	
	water. She reacted the metal with steam.	
	(a) Name the metal which reacts with cold water.	
	(b) Which of the above metals react with steam?	
	(c) Name the metal which reacts with hot water.	
	(iv) Arrange these metals in order of increasing reactivity	
23.	Why are stainless steel utensils are provided with a copper bottom?	
24.	"Copper articles get a green layer if kept out in the open for a long time"	
	. Name the compound formed?	
	. Name the gas it combines with to form the above compound.	
25.	Sometimes the bottom of the vessel is getting blackened on the outside during cooking,	
	it means that	
	. the fuel is wet	
	. the fuel is not burning completely	
	. the fuel is burning completely	
	. the fuel is not cooked completely	
26.	Garima wrote IUPAC names of few compounds asked by her science teacher.	
	One of the compounds were not correctly named. Identify the one with the wrong	
	name.	
	. CH3COCH3 : Butanone	
	. CH3CH2CHO : Propanal	
	. CH3CH2COOH : Ethanoic acid	
	. CH3CH2CH2CH2OH : Butanol	
27.	Hari is a farmer who prefers to plant grafted mango trees in his backyard rather than by	
	seed germination.	
	Justify giving two reasons.	
28.	An element has atomic number 7. What will be the nature of its oxide? Justify giving	
	reason.	
29.	Why metallic character of elements increases as we move down along the group?	
30.	Two elements X and Y have atomic numbers 12 and 16 respectively.	
	a) Write the electronic configuration for these elements.	
	b) To which period of the modern periodic table do these two elements belong?	
	c) What type of bond will be formed between them and why?	
	· · · · · ·	
31.	Which of the following has the weakest covalent bond strength and why?	
	Ethyne, Ethylene, Ethane, Benzene	
32.	The molecular formula of a hydrocarbon is C10 H18. To which homologous series does it	
	belong ?	
33.	Draw an unsaturated structure of a hydrocarbon with molecular formula C6H12.	
34.	What type of reactions are expected from the unsaturated compounds?	
	W	

35.	What type of reproduction is observed in Malarial parasite?	
36.	After fertilization, name the part of the plant in which in each case develops into (a) Fruit	
	(b)Seed	

37.	Which of the following is not a part of female reproductive system?  Ovary, Vas deferens, Fallopian tubes, Vagina.
38.	Select the correct alternative given below each statement and write the complete statement  A ray AB is incident on a concave mirror parallel to its principal axis. Which of the following diagrams represents the reflected ray correctly?  1. A 2. B 3. C 4. D
39.	The negative sign in the magnification produced by a convex lens indicates that the image is . inverted and virtual . inverted and real . erect and real . erect and virtual
40.	8. Refer to the given figure. It shows wings of two animals X and Y. These wings are Z structures.  Select the option that correctly identifies X, Y and Z.  X Y  (A) Bat (B) Bat (B) Bat (C) Bird (C) Bird (D) Bird (D) Bird  Refer to the given figure. It shows wings of two animals X and Y. These wings are Z havings are Z hav
41.	If TT and Tt are two tall plants and T and t are traits of tallness and shortness respectively then which will be dominant and recessive traits?
42.	Mention two ways in which individuals with a particular characteristic may increase in a population?
43.	During the early stages of development, the embryos of reptiles, birds and mammals look very similar.  Give reason.

44. Farmers produced entirely differently looking vegetables from wild cabbage. Their characteristics are a) Arrested flower development. b) Swollen parts.

Name the two vegetables.

45.	Name any two elements which can be used in a nuclear reactor as the fission material.	
46.	Which part of the box type solar cooker causes greenhouse effect?	
-	We can cook our food easily by using biogas in our gas stoves replacing LPG. Give two	
47.	, , , , , , , , , , , , , , , , , , , ,	
40	reasons.	
48.	Why is there so much emphasis on changing over from petrol/diesel driven automobiles	
	to CNG-driven vehicles? Explain.	
49.	Which of the following lenses would you prefer to use while reading small letters found	
	in a dictionary? And why?	
	-A convex lens of focal length 50cm,	
	-A concave lens of focal length 50cm	
	-A convex lens of focal length 5 cm	
	-A concave lens of 5cm	
50.	An object of height 3cm is placed beyond C in front of a concave mirror.	
	a) What will be the magnification of the image if the height of the image is 2cm?	
	b) Draw a neat ray diagram to support your answer. ( Use convenient measurement)	
51.	An object when placed at a distance of 15cm in front of a concave mirror produces a real	
	image at a distance 30 cm in front of the mirror. Calculate the focal length of the mirror.	
52.	Sitas power of her lens is -4D. The focal length and the type of lens will be	
	. Convex lens of focal length 25cm	
	. concave lens of focal length 25cm	
	. comvex lens of focal length 40cm	
	. concave lens of focal length 40cm	
53.	When we enter the cinema hall we cannot see properly for a short time, this is because	
	. Pupil does not open	
	pupil does not close	
	. Adjustment of size of pupil takes some time	
	. Adjustment of the focal length of the eye lens does not take place	
54.	Two wires are of the same length, same radius, but one of them is of copper and the	
	other is of iron. Which will have more resistance and why?	
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55.	What is the essential difference between an AC generator and a DC generator?	
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