



9FZFTEK

SET- A

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SUMMATIVE ASSESSMENT - II (2015-16) SCIENCE

Class - X

Date - 08. 03.16 Maximum Marks: 90 Time allowed: 3 hours General Instructions: The question paper comprises of two Sections, A and B. You are to attempt both the sections. All questions are compulsory. (ii) There is no choice in any of the questions. (iii) All questions of Section-A and all questions of Section-B are to be attempted separately. (iv) Question numbers 1 to 3 in Section-A are one mark questions. These are to be answered in one (v) word or in one sentence. Question numbers 4 to 6 in Section-A are two marks questions. These are to be answered in (vi) about 30 words each. Question numbers 7 to 18 in Section-A are three marks questions. These are to be answered in (vii) about 50 words each. Question numbers 19 to 24 in Section-A are five marks questions. These are to be answered in (viii) about 70 words each. Question numbers 25 to 33 in Section-B are multiple choice questions based on practical skills. (ix)Each question is a one mark question. You are to select one most appropriate response out of the four provided to you. Question numbers 34 to 36 in Section-B are questions based on practical skills. Each question (x) is a two mark question. SECTION-A State the reason why covalent compounds are generally poor conductor of electricity? 1 Why is it, that asexual reproduction produces exact copies, but sometimes 1 minor variations are also seen in next progeny? Name two chemicals which are responsible for thinning of ozone layer. A person is able to see objects clearly only when these are lying at distances between 50 cm and 2 300 cm from his eye. Identify the kind of defects of vision he is suffering from. Give reason for your answer.

How are large dams built on rivers advantageous to us? Give any two advantages? 2

Accumulation of harmful chemicals in our bodies can be avoided. Explain how this can be 2 achieved.

What are oxidizing agents? State any two oxidizing agents. Write one chemical equation using 3 oxidizing agent.

Lithium, sodium and potassium are placed in the same group on the basis of their similar 3 8) properties. List three similar properties of these elements.

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What do you understand by hydrocarbons? Stating the general formula for alkenes with write 3 the formula for an alkene with five carbon atoms. Draw the structural formula for this alkene, 10 What are metalloids? Where are they placed in the periodic table? Give two examples of 3 metalloids. An organ like a wing in birds are an advantage to the organism. Did they appear in different 3 11 stages or were formed due to a single sudden change in them? 3 12 In the diagram given below B Label parts A to D. (a) (b) Define the process depicted in it What will happen if both the characters present in F1 generation pass together in F2 generation? 3 3 Identify from the diagram -the type of reproduction used and the organism showing it. How would you relate the following methods to asexual reproduction? (a) 3 В 15 Binary fission (i) (ii) Spore formation State any one advantage of using sexual reproduction over asexual reproduction. (b) Name the part of eye that: (a) 16 3 Controls the amount of light entering into eye Regulates the size of the passage through which light enters Why are we not able to see immediately after we enter a dark hall from a lighted place? (b) Mention the nature of image produced by a plane mirror. 17 (a) 3



		1	$l_{max} = 1$. What does this mean?									
		(e) The magnification produced by a pro-										
B ¹⁸		As the number of vehichles on the road is increasing, so is the combustion of fossils fuels, which is leading to air pollution. Emission of CO ₂ is causing greenhouse effect which has resulted in										
		global warming. (i) Suggest four ways to minimise the consumption of fossil fuels at individual level. (ii) What values we must have to be environmental friendly?										
С	19	Male	rite the common name of ethanoic acid and the functional group present in it. Explain any of 5 three Chemical properties with chemical equation for each.									
В	20	(a)	a) Explain whether traits like eye colour or height is genetically inherited. Do power to lift 5									
		0	How do variations affect the evolution of those organisms that represents the response of the second									
В	21	(a) The two cells formed after DNA copying are similar but not identical. What reason can be associated for this?										
		(b)	Variation though leads to	WILLIA STA	hanges in an individual but is useful for the survival							
		(c)	Is the consistency of DNA co	pying imp	ortant during reproduction :							
	1000	Draw a ray diagram showing refraction of light through a glass prism and mark the following										
P	22		Incident ray (b)	Eme	rgent ray							
		(a)	Refracted ray (d)	Ang	e of incidence							
		(c) (e)	Angle of deviation (f)	Ang	le of emergence							
		(0)			that a long with the help of ray diagrams for both	5						
P	23	(a)	ngth of a lens with the help of ray diagrams for both									
		(1.)	type of lenses. An object is placed between	en F and	12 F of a concave lens. Draw a ray diagram to show							
	Q	(b)	, and the second									
		(c)	how image is formed? Explain why while using	convex l	ens and sun as the object a paper can be burnt?							
_		* ****	at the of a rou diagram &	explain the laws of reflection of light at a plane mirror	. 5							
P	24	on clearly on the diagram. If the angle of incidence i	s									
		32.5	what will be the angle of re	flection ?	Control and Contro							
		The state of the s										
				5	ECTION - B the hot mixture of vegetable oil and NaOH, which	of 1						
	25	me not maxime of vegetable on that theory, states										
			ollowing salt is added ? Calcium chloride	(b)	Sodium chloride							
		(a)	Magnesium chloride	(d)	Aluminium chloride							
		(c)) S	375 - 80								
	26	Nam	kaline hydrolysis of coconut oil is done.	1								
	20	(a)	oxidation	(b)	hydrolysis							
		(c)	saponification	(d)	reduction							
1	27	The cleansing action of soap is more in soft water as it:										
	21	(a)	is free from microbes	(b)	does not have salts in it							
		(c)	has impurities	(d)	has dissolved salts							

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28)	In an experiment of finding the focal length of a convex lens by obtaining the image of distant object, a laboratory assistant keeps the following apparatus on the table A: A stand with a metal needle fixed in it.										
	B :	A stand with a metal needle fixed in it.									
	C:	The state of the s									
	D:	A metre scale.	een.								
	A student can do the experiment by using the apparatus listed as:										
	(a)	A, B, C	y using i i(b)	.не арр. В, С, I							
	(c)	C, D, A	(d)								
29	(c) C, D, A (d) D, A, B A student measured the focal length of a concave mirror by focusing a distant object on the										
	screen as 20 cm. It means that the distance between:										
	(a)	Object and screen is 40 cm.									
	(b)	Mitror and screen is 40 cm.									
	(c)	Mirror and screen is 20 cm.			*						
	(4)	Mirror and object is 20 cm.			1						
30	Which of the following is not an essential precaution for glass slab experiment?										
	(11)	(a) All the pins should be fixed vertically									
	(b)	(b) The line of viewing should be along the plane of the paper									
	(c)	(c) The head of all pins should be strictly always along a straight line									
	(d) The tips of pins should be strictly always along a straight line										
31											
	(a)	between two refracting face	s of pris	in.		1					
	(b)										
	(c) between refracted ray (inside prism) and incident ray.										
	(d) between emergent ray and refracted ray (inside prism)										
32	The tendrils present in a pea plant are modified:										
	, (a)	leaf		(b)	stem	1					
	(c)	flower		(d)	root						
33	The embryonic leaf is represented by :										
	(a)	Plumule	(b)	Embr	ro	1					
	(c)	Cotyledon	(d)	Radic							
34	A student added dilute Acetic acid to an unknown white solid 'A' taken in a test tube. It was										
	observed that a colourless gas 'B' was evolved. The ges 'B' was passed through lime water										
	which turned milky. Name the solid 'A' and gas 'B' along with their chemical formulae.										
35	Write two main precautions to be taken while observing the permanent prepared slide of binary										
	fissic	fission in Amoeba.									
36	A student obtained an image of an object between F2and 2F2 by a convex lens. The image										
	formed was real, inverted and smaller than the object.										
	(a) What would have been the position of the object in this case?										
	(b)	Draw a complete ray diagra	am for tl	ne imag	formation.						
				-0000000	•						