BHAVANS SCHOLARSHIP-2020-21   CLASS XI (SCIENCE)

	QUESTION	OPTION_1	OPTION_2	OPTION_3	OPTION_4	ANSWER
1	Find the error in the sentence below If I were him / I would have taught / those cheats a lesson.	If I were him	I would have taught	those cheats a lesson	No error	OPTION_1
2	The antonym of 'Evasive' is_	free	honest	liberal	frank	OPTION_4
3	Discipline is on the wane in schools and colleges these days.	Declining	Increasing	Spreading	Spiralling	OPTION_1
4	India's/ kabaddi/ one/ is/ games/ indigenous/ of	One of India's games indigenous is kabaddi.	Indigenous games India's one is of kabaddi.	Kabaddi is one of India's indigenous games.	Kabaddi indigenous games is one of	OPTION_3
5	'What have you decided to do?' she asked him.	She asked him what he had decided to do.	She asked him what had he decided to do.	She asked him if he has decided to do.	She asked him what he decided to do.	OPTION_1
6	"It's silence silences…" The literary device in this line is :	Oxymoron	Repetition	Personification	synecdoche	OPTION_3
7	The word that means 'something that cannot be seen' is :	Tangible	Impalpable	Perceptive	Bedlam	OPTION_2

#	Question					Answer
8	The equation of state for a real gas at pressure P and volume V is given by $(P + a/V^2)(V-b) = RT$ The unit of 'a' in the above equation is	dyne cm²	dyne cm⁴	dyne cm⁻⁵	dyne cm⁻³	OPTION_2
9	The radius of gyration of a ring of mass 100g and radius 5cm about an axis passing through its center and perpendicular to its plane is	1.52cm	3.54cm	2.51cm	5cm	OPTION_4
10	A body is initially at rest. It undergoes one dimensional motion with constant acceleration. The power delivered to it at time t is proportional to	$t^{3/2}$	$t^{1/2}$	t^2	t	OPTION_4
11	A rubber ball is dropped from a height of 5m on a plane. On bouncing, it rises to 1.8m. The ball loses its velocity on bouncing by a factor of	3/5	16/25	2/5	9/25	OPTION_3
12	Two identical particles move towards each other with velocities 2v and v respectively. The velocity of centre of mass is	v	v/3	v/2	0	OPTION_3
13	The distance x of a particle moving in one dimension under the action of a constant force is related to time 't' by the equation $t = \sqrt{x} + 3$, where x is in metres and t in seconds. What is the displacement of the particle when its velocity is zero?	0	1	2	3	OPTION_1
14	A certain force applied to a mass m1 gives it an acceleration of 15 m/s². The same force applied to a mass m2 gives it an acceleration of 10 m/s². If the two masses are fixed together and the same force is applied to the combination, find the acceleration.	3 m/s²	4 m/s²	5 m/s²	6 m/s²	OPTION_4
15	Arrange S, P, As in order of increasing ionisation energy	S < P < As	P < S < As	As < S < P	As < P < S	OPTION_3
16	The property of hydrogen which distinguishes it from alkali metals is	its electropositive character	its affinity for non-metal	its reducing character	its non-metallic character	OPTION_4

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#	Question					
17	Given that bond energies of H – H and Cl – Cl are 430 kJ mol–1 and 240 kJ mol–1 respectively and ΔH_f for HCl is – 90 kJ mol– 1, bond enthalpy of HCl is	380 kJ mol–1	425 kJ mol–1	245 kJ mol–1	290 kJ mol–1	OPTION_2
18	Which has the maximum number of atoms?	27g Al (Z=27)	56 g Fe (Z=56)	24 g C (Z=12)	108 g Ag (Z=108)	OPTION_3
19	Which among the following has maximum dipole moment	CO_2	NF_3	CH_4	NH_3	OPTION_4
20	Orbital which is not possible	2p	3d	3s	3f	OPTION_4
21	Element which has more negative electron gain enthalpy is	F	O	Cl	S	OPTION_3
50	Where did Prime Minister Narendra Modi virtually laid the foundation stone for First-of -its-kind world's largest hybrid renewable energy (RE) park on December,2020?	Pavagada, Karnataka	Tunda, Gujarat	Bhadla, Rajasthan	Dhordo, Gujarat	OPTION_4
51	Who won the Ramanujan Prize for Mathematicians for the year 2020?	Dr. Carolina Araujo	Cedric Villani	Andrew Wiles	Grigori Pereliman	OPTION_1
52	Which of the following is the first Indian State in the world where successful breeding of Western Tragopan has taken place?	Assam	Arunachal Pradesh	Jammu and Kashmir	Himachal Pradesh	OPTION_4
53	Which international clinical trial is launched by the World Health Organisation (WHO) and partners to help find an effective treatment for COVID-19?	Solidarity	Dissidence	Severence	Dissension	OPTION_1

#	Question	A	B	C	D	Answer
54	Gabriel Daniel Fahrenheit was	A German Physicist	Devised temperature scale	Developed the mercury thermometer in 1714	All of the above	OPTION_4
55	A cube is coloured red on one face, green on the opposite face, yellow on another face and blue on the face adjacent to the yellow face. The other two faces are left uncoloured. It is then cut into 125 smaller cubes of equal size. How many cubes have at least one green face?	5	16	25	32	OPTION_3
56	In a certain coding system, 816321 means 'the brown dog frightened the car', 64851 means 'the frightened cat ran away', 7621 means 'the cat was brown ', 341 means 'the dog ran'. What is the code for 'the dog was frightened'?	5438	8263	8731	7521	OPTION_3
57	Complete the following sequence 6, 8, 9, 12, 14, 18, ?	19	21	23	25	OPTION_2
58	A girl introduced a boy as the son of the daughter of the father of her maternal uncle .The boy is	Son	Uncle	Son in law	Cannot be determined	OPTION_4
59	Door of Vivek's house faces the east .From the backside of his house , he walks 50 metres straight, then turns to the right and walks 50 metres again .Finally, he turns towards left and stops after walking 25 metres. Now , Vivek is in which direction from the starting point ?	South east	North east	Southwest	North west	OPTION_4
60	Refer the following and answer the question that follows: "If highways were restricted to cars and only those trucks with capacity of less than 8 tons, most of the truck traffic would be forced to run outside highways. Such a reduction in the amount of	The roads outside highway would be as convenient as highway	Most of the roads outside highways are not ready to handle truck traffic.	Most trucks that are currently running in highway have a capacity of more than	Cars are at greater risk of being involved in collisions than are trucks	OPTION_3
61	Evidence shows that people who live in the Antarctic score higher on happiness surveys than those who live in Florida. Which is the best conclusion that can be drawn from this data?	Floridians would be happier if they move to the Antarctic.	People in colder climates are happier than those in warmer climates.	There are only happy people in the Antarctic	Those in the Antarctic who scored high on a happiness survey probably like snow.	OPTION_4
62	Mr. Baker, Mr. Butcher and Mr. Builder are a baker. a butcher, and a builder, but not in that order. No man has the same profession as his name. Mr. Builder is not a butcher. Which of the following is/ are true?.	III ONLY	II ONLY	I ONLY	I AND II ONLY	OPTION_1

		Only B is sufficient	Both A and B together are needed	Only A is sufficient	Both A and B together are not needed	
63	What is the birth date of Nutan's mother?To answer this question, which of the following information given in the statements A and B is/ are sufficient? A. Nutan's father remembers that his wife's birthday is after 20th and before 23rd February.	. Only B is sufficient	Both A and B together are needed	Only A is sufficient	. Both A and B together are not needed	OPTION_2
64	While facing East,you turn to your left and walk 10 yards.Then,turns to your left and walk 10 yards and now turn 45° to your right and go straight to cover 50 yards.Now,in what direction are you with respect to the starting point	North east	North	South east	North west	OPTION_4
65	A ball whose kinetic energy is E is projected at an angle of 45° to the horizontal. What will be the kinetic energy of the ball at the highest point of its flight	0 E/2	E	2E		OPTION_2
66	A road construction crew is resurfacing the highway between point D and point E. The distance between point D and point E is 93 miles of road. The crew has completed 35 miles. If they work at a pace of 2.9 miles per day, how many more days will it take to finish?	21	54	35	20	OPTION_4
67	What makes the captain say Isle Amsterdam was the most beautiful land on earth?	It was a volcanic piece of rock	There were plenty of diverse types of vegetation on the Island	The island saved them, finally they could feel land under their feet and escaped	As it was inhabited by scientists who gave them a warm reception	OPTION_3
68	When the local doctor could not treat him,,he was ----------------------- to the City Hospital	refer	referred	referring	refers	OPTION_2
69	Three of the following four are alike in a certain way and so form a group. Which one of the following does not belong to that group?	PR	FG	DF	MQ	OPTION_2