-		SAMPLE PAPER
Edı	iventure	Class : IX
	PHYSIC	<u>6</u>
1.	A scooter going due east at 10 m s ⁻¹ turns right three remains unchanged in taking this turn, the change in (a) 20.0 m s^{-1} in south–western direction (b) zero (c) 10.0 m s^{-1} in south–east direction	bugh an angle of 90°. If the speed of the scooter the velocity of the scooter is :
	(d) 14.14 m s^{-1} in south–western direction	
2.	A car moving with a velocity of 10 m/s can be stop distance of 20 m. If the velocity of the car is 30 m/s.	pped by the application of a constant force F in a It can be stopped by this force in
	(a) $\frac{20}{3}$ m	(b) 20 m
	(c) 60 m	(d) 180 m
3.	If a body starts from rest and travels 120 m in the 6 th	second then what is the acceleration ?
	(a) 20 m/s^2	(b) 27 m/s^2
	(c) 21.8 m/s^2	(d) 3 m/s^2
4.	A body is thrown vertically upwards from the top A If it thrown vertically downwards from A with the If it is allowed to fall freely from A, then the time it (a) $t = \frac{t_1 + t_2}{2}$ <i>Eduventure</i> (c) $t = \sqrt{t_1 t_2}$	A of a tower. It reaches the ground in t_1 seconds. same speed it reaches the ground in t_2 , seconds. takes to reach the ground is given by (b) $t = \frac{t_1 + t_2}{2}$ (d) $t = \sqrt{\frac{t_1}{t_2}}$
5.	A body falls freely from rest. It covers as much dista	ance in the last second of its motion as covered in
	the first three second. The body has fallen for a time	of. Take $g = 10 \text{ m/sec}^2$.
	(a) 3 s	(b) 5 s
	(c) 7 s	(d) 9 s
6.	Initially a body is at rest. If its acceleration is 5 ms^{-2}	then the distance travelled in the 18 th second is
	(a) 86.6 m	(b) 87.5 m
	(c) 88 m	(d) 89 m
7.	A particle is thrown vertically upward. Its velocity height attained is $(g = 10 \text{ ms}^{-2})$	at half of the height is 10 m/s. The maximum
	(a) 8 m	(b) 20 m
	(c) 10 m	(d) 16 m

t	า กับรูปส์	SAMPLE PAPER	CLASS : IX
8.	A cricket ball of mas	s 0.2 kg moving with a velocity	of 20 m/s is brought to rest in 0.4 s.
	The average force is		
	(a) 20 N		(b) 30 N
	(c) 40 N		(d) 10 N
9.	A body released from height exactly one set of the second body is	m a height falls freely towards econd later. The separation betw s. Take $g = 9.8 \text{ m/sec}^2$.	earth. Another body is released from the same een the two bodies two second after the release
	(a) 9.8 m		(b) 49 m
	(c) 24.5 m		(d) 19.6 m
10.	A cricket ball of mas The impulse of the fo	ss 0.2 kg moving with a velocity orce acting on the ball is	of 20 m/s is brought to rest by a player in 0.1 s.
	(a) 3 N-s		(b) 4 N–s
	(c) 5 N-s		(d) 6 N–s
11.	A body of mass 8 kg up by a string with a m/sec^2 .	g is hanging from another body of an acceleration of 2.2 m/s ² . The	of mass 12 kg. The combination is being pulled tension T in upper string, will be. Take $g = 9.8$
	(a) 200 N		(b) 220 N
	(c) 240 N	V	(d) 260 N
12.	A body of mass 5 kg acceleration of the bo (a) 4 m/s ² (c) 6 m/s ² A rocket has an initia the initial thrust need	g is acted upon by two perpendic ody is al mass of 20×10^3 Kg. If it is t ded is (g = 10 m/s ²)	 cular forces 8 N and 6 N. The magnitude of the (b) 2 m/s² (d) 3 m/s² o blast off with an initial acceleration of 4 m/s²,
	(a) 6×10^4		(b) 28×10^4
	(c) 20×10^4		(d) 12×10^4
14.	A boy having a mass boy will be greatest v	equal to 40 kilograms is standin when the elevator	in an elevator. The force felt by the feet of the
	(a) Stands still		
	(b) Moves downwar	rd at a constant velocity of 4 m/s	1
	(c) Accelerates dow	'nward with an acceleration equa	1 to 4 m/s
15	(d) Accelerates upw	and with an acceleration equal to	0.4 m/s
15.	acceleration 'a' is 3 :	ght of a man in a stationary lift $a = accele$	eration due to gravity of the earth)
	(a) 3g/2		(b) g/3
	(c) 2g/3		(d) g

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	SAMPLE PAPER	CLASS : IX	trigga Eduventure
	<u>CH</u>	<u>IEMISTRY</u>	
16.	Which of the following is not a compound -		
	(a) Sodium chloride	(b) Water	
	(c) Iron	(d) Copper sulphate	
17.	Which of the following is not a mixture.		
	(a) Sand in water	(b) Sugar solution	
	(c) $CuSO_{4.}5H_2O$	(d) Milk	
18.	Brass contains -		
	(a) Gold and copper	(b) Copper and zinc	
	(c) Copper and silver	(d) Copper and tin	
19.	Which of the following is not a chemical cha	ange-	
	(a) Electrolysis of water		
	(b) Boiling of water		
	(c) Digestion of food		
	(d) Burning of magnesium ribbon in oxygen	n to form magnesium oxide	
20.	Which of the following is liquid metal -		
	(a) Copper	(b) Mercury	
	(c) Bromine	(d) Silver	
21.	Which of the following can not be pure subs	tance-	
	(a) Mercury	(b) Sugar	
	(c) Blood	(d) Glucose	
22.	Which of the following can be classified as a	a compound-	
	(a) Milk	(b) Sea-Water	
	(c) Ice	(d) Cast iron	
23.	Which of the following forms a true solution	n in water -	
	(a) Starch	(b) Sugar	
	(c) Chalk powder	(d) Egg albumin	
24.	Which of the following statements is not cor	rect-	
	(a) A compound is a pure substance		
	(b) Compound is homogenous is nature		
	(c) Compound usually contains two or more	e elements	
	(d) Compound can be separated into constit	uent elements by some physical proc	cess.
25.	Which of the following statement is not true	-	
	(a) True solution are homogeneous in natur	e	
	(b) Suspension are heterogeneous in nature		
	(c) Solute particle in a colloidal solution ca	n be separation by filtration	
	(d) True solution are transparent to light		

Eduven		a	SAMPLE PAPER	CLASS : IX	
26.	6. Which of the following is the second most abundant metal in the earth's crust ?				
	(a) Cop	oper	(b)	Aluminium	
	(c) Iron	1	(d)	Zinc	
27.	Which o	of the following will show	Tyndall effect-		
	(a) Star	rch solution	(b)	Sodium chloride solution	
	(c) Cop	oper sulphate solution	(d)	Sugar solution	
28.	When a	beam of light is passed th	rough a colloidal solution	on, it gets -	
	(a) Ref	lected	(b)	Absorbed	
	(c) Sca	ttered	(d)	Path of light does not visible	
29.	Campho	or can be purified by -			
	(a) Dist	tillation	(b)	Filtration	
	(c) Sub	limation	(d)	Crystallization	
30.	Carbon	burn in oxygen to form ca	arbon dioxide. The prope	erties of carbon dioxide are -	
	(a) Sim	ilar to oxygen			
	(b) Sim	ilar to carbon			
	(c) Tota	ally different from both c	arbon and oxygen		
	(d) Mue	ch similar to both carbon	and oxygen		
			MATHEMATICS		
31.	If the H	CF of 65 and 117 is expre	essible in the form 65m -	- 117, then the value of m is	
	(a) 4	Eduvent	(b)	2	
	(c) 1	синтенц	(d)	3	
32.	A forest of numb row). Th	er wants to plant 44 apple per of trees). Also, he wa ne number of rows (minin	es tree, 66 banana trees a ints to make distinct row num) that required is :	and 110 mango trees in equal rows (in terms ws of tree (i.e. only one type of tree in one	
	(a) 2		(b)	3	
	(c) 10		(d)	11	
33.	Find the	coordinates of the point	equidistant from the poin	nts A $(1, 2)$, B $(3, -4)$ and C $(5, -6)$.	
	(a) (12,	, 3)	(b)	(11, 2)	
	(c) (10,	, 2)	(d)	(11, 3)	
34.	The poir	nts (a, a) (– a, a) and (–($$	$\sqrt{3}$)a, $(\sqrt{3})$ a) form the ve	ertices of an :	
	(a) Sca	lene triangle	(b)	Right angled triangle	
	(c) Isos	sceles Right angled triang	le (d)	Equilateral triangle	
35.	Rozly ca speed of	an row downstream 20 k Frowing in still water ?	m in 2 hours, and the u	pstream 4 km in 2 hours. What will be the	
	(a) 6 km	n/hr	(b)	4 km/hr	
	(c) 3 kr	m/hr	(d)	7 km/hr	
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	SAMPLE PAPER	CLASS : IX	trigya
36.	If the coordinates of three consecutive vertices of coordinates of the fourth vertex are	f a parallelogram are (1, 3)), (-1, 2) and (2, 5) then
	(a) (6, 4)	(b) (4, 6)	
	(c) $(-2, 0)$	(d) None of these	
37.	If the sides of a triangle are 5 cm, 12 cm and 13 cm	n respectively then length	of the shortest altitude is
	(a) 5 cm	(b) $\frac{60}{13}$ cm	
	(c) 12 cm	(d) 8.5 cm	
38.	ABC is an isosceles triangle in which $\angle B = 90^{\circ}$ a $\triangle ABC$ is :	nd D is midpoint of AC. If	f BD = 8 cm then area of
	(a) 64 cm^2	(b) $64\sqrt{2} \text{ cm}^2$	
	(c) 32 cm^2	(d) $32\sqrt{3} \text{ cm}^2$	
39.	X lies in the interior of $\angle BAC$. If $\angle BAC = 70^{\circ}$ at	nd $\angle BAX = 42^{\circ}$ then $\angle X$	AC = ?
	(a) 28°	(b) 29°	
	(c) 27°	(d) 30°	
40.	The bisectors of the base angles of an isoscele $\angle B = \angle C = 50^{\circ}$. What is the measure of angle O ?	es triangle ABC, with Al	B = AC, meet at O. If
	(a) 120°	(b) 130°	
	(c) 80°	(d) 150°	
41.	If A (0, 3) ; B(-2, 0) ; C(0, -3) and D(2, 0) form a ABCD ?	rhombus ABCD, then wh	at is the area of rhombus
	(a) $\sqrt{29}$ units ² Eduventure	(b) 24 units^2	
	(c) 12 units ²	(d) None of these	
42.	If $x = \frac{1}{2 - \sqrt{3}}$, the value of $x^3 - 2x^2 - 7x + 5$ equal	S	
	(a) 0 (b) -5	(c) 5	(d) 3
43.	Which of the following is not a criterion for congr	uence of triangles ?	
	(a) SSS	(b) SSA	
	(c) ASA	(d) SAS	
44.	O is any point in the interior of $\triangle ABC$. Then which	ch of the following is true ')
	(a) $(OA + OB + OC) < \frac{1}{2} (AB + BC + CA)$	(b) $(OA + OB + OC)$	>(AB + BC + CA)
	(c) $(OA + OB + OC) > \frac{1}{2} (AB + BC + CA)$	(d) None of the above	
45.	If x and y are both positive solutions of equation a	x + by + c = 0, always lie i	n :
	(a) First quadrant	(b) Second quadrant	
	(c) Third quadrant	(d) Fourth quadrant	
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			BIOLOGY	
46.	In p cov	plant cells, in addition to the plas vering called	ma membrane, cytoj	blasm and nucleus there is also a rigid outer
	(a)	Cell wall	(b)	Cell membrane
	(c)	Plasma membrane	(d)	Cytoplasm
47.	Wh	at are the two major constituents	of the plasma memb	rane ?
	(a)	Lipids	(b)	Proteins
	(c)	Carbohydrates	(d)	Both (a) and (b)
48.	Wh	ich statement best describes a sel	ectively permeable n	nembrane ?
	(a)	It lets all substances through		
	(b)	It does not let substances throug	h	
	(c)	It filters a solid from a liquid		
	(d)	It lets some substances through	but not others	
49.	Wh	en raisins are kept in freshwater,	, the water moves	the raisins. This makes the raisins to
		<u> </u>		
	(a)	Outside, swell	(b)	Outside, shrink
	(c)	Inside, swell	(d)	Inside, shrink
50.	Wh	at will happen to a plant cell plac	ed in a hypertonic so	lution ?
	(a)	The cell will show plasmolysis	(b)	The cell will swell and remain intact
	(c)	The cell will burst	(d)	The cell will remain unchanged
51.	Wh	tich of the following statements is	s true about the cell w	vall ?
	(a)	The cell wall is mainly compose	ed of lipid	
	(b)	The cell wall is mainly compose	ed of starch	
	(c)	The cell wall is mainly compose	ed of protein	
	(d)	The cell wall is mainly compose	ed of cellulose	
52.	Thr	ree living organisms are given in f	the image below.	
	Wh	nat do the rabbit , fungus , plants	have in common?	
	(a)	They are all unicellular		
	(b)	They all have same type of cells	in the body	

(c) They all have cells without cell walls

(d) They all are multicellular organisms

	SAMPLE PAPER	CLASS : IX	trigga Eduventure		
53.	Differentiation leads to the development of meris	tematic tissue into			
	(a) collenchyma	(b) sclerenchyma			
	(c) parenchyma	(d) All of these			
54.	Nerve cell does not contain				
	(a) Axon	(b) Dendrites			
	(c) Tendon	(d) Myelin sheath			
55.	Which of the following parts of the nerve cell con	tains the nucleus ?			
	(a) Cell body	(b) Myelin sheath			
	(c) Axon	(d) Dendrite			
56.	Assertion : Chlorenchyma, is a type of parenchym	na that helps aquatic plants t	o float.		
	Reason : The cells of chlorenchyma have large at	ir cavities.			
	(a) Both A and R are true and R is the correct ex	planation of A			
	(b) Both A and R are true but R is not the correct	t explanation of A			
	(c) A is true but R is false				
	(d) Both A and R are false				
57.	Which of the following is voluntary in nature ?				
	(a) Muscles which are attached to the skeleton				
	(b) Muscles present in heart				
	(c) Muscles which form the contractile compone	nt of the digestive system			
	(d) Muscles which form the contractile component of the urinary system				
58.	The muscular tissue which function throughout th	e life continuously without f	atigue is		
	(a) Skeletal muscle UVENTURE	(b) Cardiac muscle			
	(c) Voluntary muscle	(d) Smooth muscle			
59.	Contractile proteins are found in				
	(a) Bones	(b) Blood			
	(c) Muscle	(d) Cartilage			
60.	Which of the following tissues have cells that an corners ?	re living, elongated and irreg	gularly thickened at the		
	(a) chlorenchyma	(b) aerenchyma			
	(c) parenchyma	(d) collenchyma			
61.	Pointing to a man in the photograph a lady said, "The father of his brother is the only son of my mother." How is that man related to that lady?				
	(a) Brother	(b) Son			
	(c) Cousin	(d) Nephew			
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62. In the following question, Select from the answer choices an appropriate number to replace the question mark.



(a) 41

(c) 25

Direction : (Q.63 & Q.64) Read the given information carefully and answer the questions.

Six square states having equal area in a country are located in North-South direction in two columns next to each other. States are located in the given order. State 1, State 3 and State 5 are on the Western side and States 2, State 4 and State 6 are on the Eastern side. Within the six states, there are exactly four medical institutes, two management institutes and two technical institutes. These eight institutions are located as follows.

- (i) No institution is in more than one of the states.
- (ii) None of the states contains more than one management institute and none contains more than one technical institute.
- (iii) None of the states contains both a management institute and a technical institute.
- (iv) Each management institute is located in a state that contains atleast one medical institute.
- (v) The technical institutes are located in two states that do not share a common boundary.

State 3 contains a technical institute and State 6 contains a management institute.

- **63.** If one of the states contains exactly two medical institutes and exactly one technical institute, then which combination of three states might contain no medical institute ?
 - (a) 1,3,5 (b) 1,4,5
 - (c) 2,3,5 (d) 2,4,6
- **64.** Which one of the following could be true ?
 - (a) State 1 contains exactly one medical institute
 - (b) State 1 contains exactly one technical institute
 - (c) State 2 contains exactly one management institute
 - (d) State 6 contains exactly one technical institute





	SAMPLE PAPER	CLASS : IX	trigya
Dire	ctions (Q.74 & Q.75) :		
In a	school, there were five teachers. A and B were teach	ning Hindi and English.	
C an	d B were teaching English and Geography. D and A	were teaching Mathematics and	l Hindi.
E an	d B were teaching History and French.		
74.	Who among the teachers was teaching maximum nu	umber of subjects ?	
	(a) A	(b) B	
	(c) C	(d) D	
75.	D, B and A were teaching which of the following su	ibjects?	
	(a) English only	(b) Hindi and English	
	(c) English and Geography	(d) Hindi only	
76.	Find the next term in the series : 10, 19, 40, 77, 158	,?	
	(a) 311	(b) 307	
	(c) 301	(d) 299	
77.	When the time by the watch is 20 minutes past 7, th	e angle between the hands of the	watch is
	(a) 100°	(b) 90°	
	(c) 80°	(d) 95°	
78.	If 12th March 1986 was Wednesday, then 31st Marc	ch 1994 would be	
	(a) Wednesday	(b) Thursday	
	(c) Friday	(d) Saturday	
79.	Find the missing term in the following Figure		
	5 3 (28) 2 4	8 8 12 2 4	
	(a) 3	(b) 9	
	(c) 1	(d) 2	
80.	343 cubes of similar size are arranged in the form o 7) and kept at the corner of a room, all the exposed have at least 2 faces painted ?	f a bigger cube (7 cubes on each surfaces are painted then How n	side, i.e. $7 \times 7 \times$ nany of the cubes
	(a) 19	(b) 144	
	(c) 120	(d) None of these	
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1. (d) 2. (d)		ANSWER KE	Y	
1. (d) 2. (d)			<u> </u>	
1. (d) 2. (d)		PHYSICS		
2 . (d)	4. (c)	7. (c)	10. (b)	13. (b)
(u)	5. (b)	8. (d)	11. (c)	14. (d)
3. (c)	6. (b)	9. (c)	12. (b)	15. (b)
		<u>CHEMISTRY</u>		
16. (c)	19. (b)	22. (c)	25. (c)	28. (c)
17. (c)	20. (b)	23. (b)	26. (c)	29. (c)
18. (b)	21. (c)	24. (d)	27. (a)	30. (c)
		MATHEMATIC	<u>6</u>	
31. (b)	34. (a)	37. (b)	40. (b)	43. (b)
32. (c)	35. (b)	38. (a)	41. (c)	44. (c)
33. (b)	36. (b)	39. (a)	42. (d)	45. (a)
I	Eduvent	ure		I
		BIOLOGY		
46. (a)	49. (c)	52. (d)	55. (a)	58. (b)
47. (d)	50. (a)	53. (d)	56. (d)	59. (c)
48. (d)	51. (d)	54. (c)	57. (a)	60. (d)
b1. (d)	65. (d)	69. (a)	73. (d)	77. (a)
62. (d)	66. (d)	70. (b)	74. (b)	78. (b)
b3. (a)	67. (b)	71. (b)	75. (d)	79. (d)
b4. (a)	68. (a)	72. (a)	7 6. (a)	80. (a)