EDU	PATH TO CATIONAL EXCELLENCE	Science Competency Analytical Test	SCIENCE SAMPLE QUESTION PAPER - 1						
		<u>.</u>	ب ت	QUESTIONS 50	GRADE				
				TOTAL MARKS 100	R				
			Ð	duration 60 mins					
	Instruction for S	tudents:							
	•	estion carefully befo		enng.					
		n 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 part of a plan	t that plays an import	ant role i	n reproduction is					
	(A) root	., .		(B) flower					
	(C) leaf			(D) stem					
2.	(A) A desert with(B) A jungle with(C) A pond with f	wild animals	d a habita	t?					
3.	Which of the follo	wing part of the cell t	that conta	ains pigment?					
	(A) Cell membran			(B) Plasmid					
	(C) Plastid			(D) Chromosome					
4.	The main function	n of the lacteals of the	intestine	e is the absorption of					
	(A) amino acids								
	(B) glucose and v	itamins							

- (C) lactic acid
- (D) fatty acids and glycerol

5. Taking in of the air through nostrils into the body is known as ______.

- (A) exhalation
- (B) cellular respiration
- (C) tissue respiration
- (D) inhalation

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6.	Anantlakshmi injured her knee while playing. Blood oozed out from the wound. After a few minutes, she observed a brown coloured clot on the same spot on her knee. Which component of the blood might have formed this clot?							
		Red blood cells		White blood cells				
	• •	Platelets	• •	Plasma				
7.	Ma	laria is caused by						
	(A)	bacteria	(B)	protozoan				
	(C)	virus	(D)	None of the above				
8.	Wh	ich of these includes culturing of earthworms?						
	(A)	Sericulture	(B)	Pisciculture				
	(C)	Vermicomposting	(D)	None of the above				
9.	Div	ers carry oxygen cylinders with them because		·				
	(A)	oxygen keeps them warm						
	(B)	oxygen is required for breathing						
	(C)	Both A and B						
	(D)	Neither A nor B						
10.	Clo	uds are formed due to						
	(A)	evaporation	(B)	condensation				
	(C)	Both A and B	(D)	Neither A nor B				
11.	Wh	ich one of the following is a synthetic fibre?						
	(A)	Polyester	(B)	Nylon				
	(C)	Rayon	(D)	All of the above				
12.	Wh	ich of the following statements is true about a n	nixtu	ıre?				
	(A)	It is made up of pure substances.						
	(B)	It can be solid, liquid or gas.						
	(C)	Components do not retain their original propert	ies.					
	(D)	Both A and B.						
13.	The	letter used to identify an element in the period	ic ta	ble is known a				
	(A)	formula	(B)	hint				
	(C)	sign	(D)	symbol				
14.	7 ki	lometres are equal to						
	(A)	7,00,000 metre	(B)	7,000 metre				
	(C)	700 metre	(D)	70,000 metre				
15.	A fo	orce does not change						
	(A)	size	(B)	shape				
	(C)	mass	(D)	state of motion				
16.	Ma	ss is the measure of in an object.						
	(A)	weight	(B)	matter				
	(C)	density	(D)	None of the above				

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17.	Mechanical advantage of a machine is defined as							
		effort	load					
			pivot					
	(A) Load (C) Load		(B) Load / Effort(D) Load - Effort					
18.	An organ	of a plant that absorbs water an	d mineral salts from the soil is known as					
	(A) root	·	(B) flower					
	(C) leaf		(D) stem					
19.	Which is I	not an abiotic component of the	environment?					
	(A) Soil	·	(B) Bacteria					
	(C) Wate	r	(D) Air					
20.	Ribosome	e helps in the production of						
	(A) vitam		(B) glucose					
	(C) fat		(D) protein					
21.	Read the following statements with reference to the villi of the small intestine.							
	(i)	They have very thin walls.						
	(ii)	(ii) They have a network of thin and small blood vessels close to the surface.						
	(iii)	(iii) They have small pores through which food can easily pass.						
	(iv)	They are finger-like project	ions.					
	Identify t	hose statements which enable th	ne villi to absorb digested food.					
	(A) (i), (ii) and (iv)	(B) (ii), (iii) and (iv)					
	(C) (iii) ai	nd (iv)	(D) (i) and (iv)					
22.	The break	down of food particles takes plac	ce inside the cell. During this process, lots of energy release out.					
	Which life	process helps the cell to perform	this function?					
	(A) Excre		(B) Digestion					
	(C) Repro	oduction	(D) Cellular respiration					
23.	People use water pumps in their houses to circulate water in the house pipes. If our blood vessels are compared to water pipes and blood to water, then what organ of the human body acts as a water pump that helps to circulate blood throughout the body?							
	(A) Kidne	-	(B) Liver					
	(C) Heart		(D) Lungs					
24.	Which of	the following pathogens cause t	uberculosis?					
	(A) Bacte	ria	(B) Virus					

(C) Protozoa

- (D) None of the above

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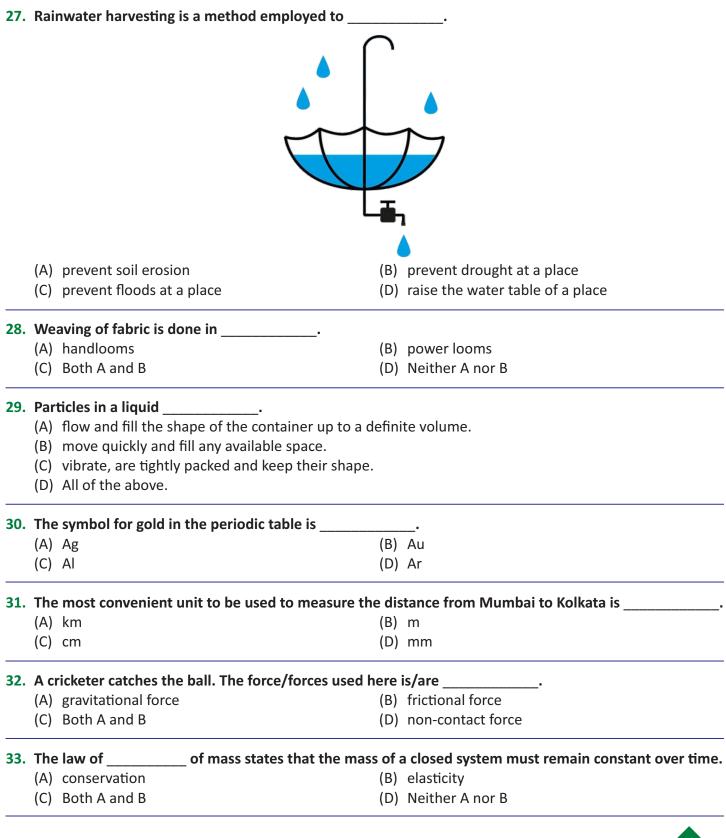
25. Which kind of materials is to be collected in blue coloured bins?

- (A) Materials that can be recycled
- (B) Plastics
- (C) Metals
- (D) Wood

26. The content of water vapour present in the air is called _

- (A) density
- (C) reactivity

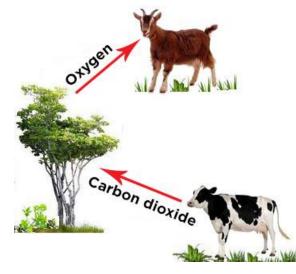
(B) solubility(D) humidity



34. Wheel is used with an axle because

- (A) Sliding friction is less than the rolling friction
- (B) Rolling friction is less than the sliding friction
- (C) Both A and B
- (D) Neither A nor B

35. What does the given figure represent?



- (A) Interdependence between plants and animals
- (B) Interdependence between plants
- (C) Interdependence between animals
- (D) Interdependence between abiotic factors

36. Who discovered the cell in 1665?

- (A) Robert Brown
- (C) Robert Hook

- (B) Robert Crook
- (D) None of the above
- 37. The food that humans eat contains lots of nutrition. These nutrients cannot be directly absorbed by the body. It must have to be breakdown into smaller particles, and after that, these molecules get absorbed by the blood. Which life process helps humans to breakdown the food?
 - (A) Excretory system
 - (B) Respiratory system
 - (C) Digestive system
 - (D) Nervous system

38. Which picture shows the least amount of protection for our respiratory system?



(C) C

(B) B (D) D



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39. The doctor placed the chest piece of a stethoscope on the patient's chest and earpieces of the stethoscope into his ears. He could hear some thumping sound. What sound is the doctor listening?

- (A) Heartbeat
- (C) Pulse

42.

43.

- (B) Blood pressure (D) Breaths
- 40. How is malaria usually transmitted to humans?
 - (A) By insect bite
 - (C) By contaminated water

- (B) By contaminated food
- (D) All of the above

41. Arshiya buried the following in her garden to dispose them off:

	An egg shell	Pencil shavings	Dry leaves	Plastic carry bags
	If this area is dug up after	a few years, which of thes	e is most likely to have rei (B) Pencil shavings	nain unchanged?
	(A) An eggshell(C) Plastic carry bags		(D) Dry leaves	
•	Plants require nitrogen for	r		
	(A) growth		(B) reproduction	
	(C) photosynthesis		(D) All of the above	
•	Observe the diagram show	wn below:		
	evaporation	precipitation	condensation condensation	tion Contraction
			runoff	

Which of the following processes is shown above?

- (A) Water cycle
- (C) Rainwater harvesting

- (B) Soil erosion
- (D) None of the above

44. Ashrita went to a cloth shop. She found a fabric that was smooth to touch, had vibrant colour and shine. This fabric could be

11. Y . H

- (A) wool (C) silk
 - (B) cotton
 - (D) jute

45. Distillation = _____ + Condensation

- (A) Sublimation
- (C) Evaporation

- (B) Precipitation
- (D) None of the above

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	(A) elastic and non-elastic	(B) solid and liquid
	(C) solid and gas	(D) metal and non-metal
17 .	The distance between Sandra and Parul's h	nome is 1563 m. This distance is equal to
	(A) 15.63 km	(B) 1.563 km
	(C) 156.3 km	(D) None of the above
48.	A body falls downwards because of	•
	(A) electrical force	(B) gravitational force
	(C) mechanical force	(D) magnetic force
49.	The difference between mass and weight is	s
	(A) mass is a force and weight is a quantity	
	(B) mass is a quantity and weight is a force	
	(C) Both A and B	
	(D) Neither A nor B	

GRADE 6

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- (A) Lever
- (C) Wedge

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(D) Screw

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