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## CHAMPS 2022-23 ALL INDIA SCIENCE CHALLENGE EXAM (AISCE)

Name of the Student :	Roll No.: Pate:				
Class :	Subject	: Science	Time: 60 Min		
Instructions to the Candidate  1. Each question carries 1 mark. There is no negative marking.  2. Separate Optical Mark Reader (OMR) Answer Sheet is supplied to you along with question paper booklet.  3. Read the questions carefully and fill in the circle corresponding to your answer. Fill in the circle Completely.  4. Rough work should be done only in the space provided in the Question Paper Booklet.  5. Return the OMR Answer sheet to the invigilator before leaving the examination hall.  6. You can carry the question paper with you after completing the examination.  7. Once you enter the examination hall, you are not permitted to leave till the end of the examination.					
	VII Olean	- Coioma			
	vi Clas	s Science			
In a given system	m of units, the ratio	of the unit of volu	me to that of area		
gives the unit of					
(A) Mass	(B) Length	(C) Time	(D) Temperature		
Which of the fol	Which of the following is C.G.S unit of relative density?				
$(A) \log m/s^2$	(B) $kg/m^3$	$(C) g/cm^3$	(D) None of these		
Which of the fol	lowing statements b	elow should be use	ed while using the		
symbol for a unit of a physical quantity?					
(A) The symbol 1	named after scientis	t should have the	capital		
(B) They can take plural forms					
(C) They can be	written in full	(D) none of these			
Which of the following is not a unit of time?					
(A) Hour	(B) Nano second	(C) Micro second	(D) Light year		
All magnetic ma	All magnetic materials lose their magnetic properties when:				
(A) Dipped in wa	ater	(B) Dipped in oil			
(C) Strongly hea	ted	(D) Brought near a piece of iron			
Attraction is ma	ximum at the				
(A)Centre	(B) Poles	(C) Both A and B	(D) none of these		

7.	What happens when we hit a magnet with a hammer?		
	(A) It gains more magnetic force		
	(B) It demagnetizes		
	(C) The north and south poles chan	ge position	
	(D) All of these		
8.	A bar magnet is immersed in a hear	o of iron fillings and pulled out. The amount	
	of iron filling clinging to the		
	(A) North Pole is almost equal to the	e South Pole	
	(B) North Pole is much than the Sou	ath Pole	
	(C) North Pole is much less than the	e South Pole	
	(D) Magnet will be same all along its	s lengths	
9.	Statement 1: Magnetic property possessed by a magnetic substance due to the		
	presence of a magnet is called magnetic induction.		
	Statement 2: Magnetic properties camaterials.	an also be induced in non magnetic	
	(A) Only statement 2 is correct	(B) Both statements are correct	
	(C) Only statement 1 is correct	(D) Both statements are incorrect	
10. At the time of short circuit, the current in the circuit			
	(A)Reduces substantially	(B) does not change	
	(C)Increases heavily	(D) varies continuously	
11.	An electric fuse works on the		
	(A) Chemical effect of current	(B) magnetic effect of current	
	(C) Lighting effect of current	(D) Heating effect of current	
12.	In the given circuit tester diagram v	what could it be if the bulb does not light	
	up?		
	(A) Iron Nail (B) Copper coin	(C) Aluminum Revert (D) Glass marble	
13.	Statements hold correct when two r	nagnets are brought closer together?	
	(A) They repel each other	(B) they pull each other	
	(C) They lose their magnetic power	(D) they become weak	
14.	. , , , , , , , , , , , , , , , , , , ,		
	This phenomenon is called		
	(A) Reflection	(B) Lateral inversion	
	(C) Shadow form	(D) Diffusion of light	
15.	Density of water at 4°C is		
	(A) Minimum (B) Maximum	(C) Infinity (D) All of these	

16.	Which of the following has a fixed shape?			
	(A) Iron	B) Oxygen	(C) Milk	(D) CO2
17.	Which gas is responsible for fizz in soft drinks?			
	(A) Oxygen	(B) Hydrogen	(C) Nitrogen	(D) Carbon dioxide
18.	Which of the follo	wing gets reddish	brown in colour or	n exposure to air?
	(A) Gold	(B) Silver	(C) Iron	(D) Aluminium
19.	Which one of the	following liquids is	s immiscible with v	vater?
	(A) Vinegar	(B) Glycerine	(C) Lemon juice	(D) Kerosene
20.	Transparent mate	erials allow the ligl	nt to pass through	them
	(A) partially	(B) completely	(C) sometimes on	ly (D) not at all
21.	What type of a su	ibstance is steel?		
	<ul><li>(A) A solid-liquid heterogeneous mixture</li><li>(B) A solid - solid heterogeneous mixture</li><li>(C) A solid - solid homogeneous mixture</li></ul>			
	(D) pure substan	ce		
22.	2. A compound has (A) only one kind of mixture.			
	<ul><li>(B) only one kind of element.</li><li>(C) a mixture of elements and molecules.</li><li>(D) only one kind of molecules</li></ul>			
23.	Which of the follo	wing is an exampl	e of a solid-in-gas	mixture?
	(A) Soil	(B) Smoke	(C) Moisture	(D) Dew
24.	The sky looks cle	arer and brighter a	after the rain due t	o loading by rain drops.
	Which of the following is similar to the process mentioned above?			ned above?
	(A) Separation of	butter from curd.		
	(B) Separation of	salt from sea wate	r.	
	(C) Sprinkling wa	ter on a dusty stre	eet before sweeping	
	(D) Separation of	grain seeds from t	heir stalks.	
25.	Nitrogen reacts w	rith hydrogen unde	er high temperatur	e and pressure and
	forms ammonia. Which type of change is undergone in the given example?			n the given example?
	(A) A chemical ch	ange	(B) A physical cha	ange
	(C) An exothermic	c reaction	(D) A natural cha	nge
26.	On lowering the t	emperature, a liqu	id turns into a sol	id.
	What is this proc	ess called?		
	(A) Condensation	(B) Melting	(C) Freezing	(D) Sublimation

27.	What is the process of heating a liquid to a high temperature and rapidly				
	cooling it so that the bacteria is killed called?				
	(A) Pasteurization	(B) Chlorination	n		
	(C) Bacterial disinfection	(D) Sublimatio	n		
28.	Which of the following is	a natural, periodic change	5		
	(A) The occurrence of day	s and nights.			
	(B) The explosion of a bon	nb.			
	(C) The occurrence of an o	earthquake.			
	(D) Formation of snow.				
29.	What kind of change is th	What kind of change is the making of a ring from pure gold?			
	(A) An irreversible, chemical change				
	(B) An irreversible, physic	eal change			
	(C) A reversible, chemical	change			
	(D) A reversible, physical	change			
30.	Which one of the following	Which one of the following is not essential for good health?			
	(A) Balanced diet	(B) Antibiotics			
	(C) Clean habits	(D) Healthy ha	bits		
31.	An example for endo para	asite is			
	(A) Head lice (B) Flea	a (C) Plasmodium	m (D) Mosquito23.		
The table shows the characteristics of blood in one blood vessel of the					
			31000 . 66561 61 6116 5649		
	Oxygen concentration	Carbon dioxide	Pressure		
		Carbon dioxide			
	Oxygen concentration High	Carbon dioxide concentration	Pressure  High		
	Oxygen concentration High	Carbon dioxide concentration  Low	Pressure  High res?		
	Oxygen concentration  High  Which blood vessel contact	Carbon dioxide concentration  Low ins blood with these featu	Pressure  High res?		
	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava	Pressure  High res?		
32.	Oxygen concentration  High  Which blood vessel contact (A) Aorta	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava	Pressure  High res?		
32.	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava	Pressure  High  res?  artery		
32.	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV)	Pressure  High  res?  artery		
32.	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an (I) Artificial (II) National (III) National (III)	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV	Pressure  High  res?  artery		
	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an  (I) Artificial (II) Nature (III) Which of the above option	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV as are correct?  C) I & III (D) II & IV	Pressure  High  res?  artery		
	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an  (I) Artificial (II) Nature (A) I & II (B) II & III (C)	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV as are correct?  C) I & III (D) II & IV cleaves arise is called	Pressure  High  res?  artery  /) Terrestrial		
	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an  (I) Artificial (II) Nature (A) I & II (B) II & III (C)	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV as are correct?  C) I & III (D) II & IV	Pressure  High  res?  artery  /) Terrestrial		
	Oxygen concentration  High  Which blood vessel contact (A) Aorta (C) Pulmonary vein  An aquarium is a/an  (I) Artificial (II) Nature (A) I & II (B) II & III (C)	Carbon dioxide concentration  Low ins blood with these featu (B) Pulmonary (D) Vena cava  ecosystem ural (III) aquatic (IV as are correct?  C) I & III (D) II & IV cleaves arise is called	Pressure  High  res?  artery  /) Terrestrial		

- 34. The milk you get in a pouch is not fresh. It was made free of microbes by heating it at 70°C and then cooling it instantly. Can you identify the name of the process?
  - (A) Boiling

(B) Freezing

(C) Pasteurization

- (D) Condensation
- 35. Observe the meal dairy of a 10 year old child. Can you say what is wrong in this food chart?

Day	Breakfast	Lunch	Dinner
Monday	Apple and nuts	Vegetables and	Egg, milk, fruit
		meat	custard

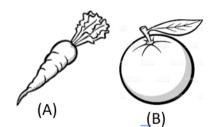
His diet is lacking in

(A) Fats

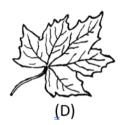
(B) Proteins

(C) Carbohydrates

- (D) Roughage
- 36. Which of the following not a component of shoot system?







- 37. Choose the correct answer for non-living factors of the ecosystem
  - (A) Biotic factors

(B) Produces

(C) Decomposers

- (D) Abiotic factors
- 38. Terrestrial animals have
  - (A) Lungs
- (B) Legs
- (C) Sense organs (D) All the above
- 39. Identify hinge joint among the following
  - (A) Joints of bones of finger
- (B) Joints at the wrist

(C) Hip joint

- (D) Joint between head & torso
- 40. Plants cannot reproduce by
  - (I) Leaves
- (II) Roots
- (III) Stem

- (IV) Seeds
- (V) Bark

Identify the correct option

(A) All except V

(B) All except III

(C) Only IV

(D) All I to V