GUJARAT UNIVERSITY

B.ED. Examination - SEMESTER - III

December-January - 2020- 21

B-107- Pedagogy of School Subject Science And Technology

Time : 2 Hour

Total Marks : 50

1.	Who coined the word cell	?	
	(A) Robert Hook	(B) Robert Brown	
	(C) Watson and Crick	(D) Fleming	
2.	Which is the dead element	of the phloem ?	
	(A) Sieve tube	(B) Sieve Cell	
	(C) Phloem Parenchyma	(D) Phloem Fibre	
3. To which division does marchantia belong :			
	(A) Thallophyta	(B) Bryophyta	
	(C) Pteridophyta	(D) Gymnosperms	
4.	Which protozoan is respon	sible for sleeping sickness ?	
	(A) Amoeba	(B) Leishmania	
	(C) Trypanosoma (A	D) Ascaris	
5.	Which of the following is l	nelpful in formation of humans?	
	(A) Lichen	(B) Moss	
	(C) Earthworms	(D) All the given	
6.	5. Whose species is Bos Indicus ?		
	(A) Cow	(B) Buffalo	
	(C) Fowl	(D) Honeybee	
7.	7. Water kept in an earthen pot becomes cool during summer. Which		
phenomenon is related with this process ?			
	(A) Diffusion	(B) Transportation	
	(C) Evaporation	(D) Osmosis	
8.	In which of the following i	s Tyndall effect seen ?	
	(A) Solution of common sa	lt (B) Milk	
	(C) Lemon Juice (A	D) Solution of copper sulphate (Blue vitriol)	

9. Which of the elements has equal atomic mass and molecular mass?

- (A) Nitrogen (B) Neon
- (C) Oxygen (D) Chlorine
- 10.----- is used in the treatment of cancer.

(A) 235 U	(B) 24 Na	(C) 127 I	(D) 60 Co
	· · ·		

11. What is constant for an object performing uniform circular motion?

- (A) Acceleration (B) Velocity
- (C) Displacement (D) Speed

12.Newton's second and third law lead to which important law of physics ?

- (A) Law of pressure
- (B) Archimedes' Principle
- (C) Low of conservation of momentum
- (D) Law of conservation of energy

13.At which of the following place/locations the magnitude of g is the most?

- (A) At the top of the Mount Everest (B) At the equator
- (C) At the Antarctica (D) In deep well

14. The force existing between two particles having mass 1 unit and at a distance of 1 unit from each other is called ------.

- (A) Gravitational Potential
- (B) Gravitational Acceleration
- (C) Intensity of gravitational field
- (D) Universal constant of gravitation

15. Which one among kinetic energy, potential energy and mechanical energy cannot be negative ?

- (A) Kinetic energy (B) Potential energy
- (C) Mechanical energy (D) Both 'B' and 'C'

16.The work done on the object is negative, then the measure of angle between force and displacement would be -----.

(A) 0° (B) 45° (C) 90° (D) 180°

17. Work done on an object is not dependent on -----.

- (A) Displacement
- (B) Force applied
- (C) The angle between force and displacement
- (D) Initial velocity of the object

18.Of which type are earthquake waves before the main shock begins ?

(C) Supersonic (D) Intrasonic

19. The SI unit of intensity of sound is -----.

(A) Wm^{-2}	(B) $W^2 m^{-1}$
(C) $m^2 W^{-1}$	$(D)W^2 m^{-2}$

20.Isolate the irrelevant pair :

(A) Unicellular organisms - Protista

(B) Prokaryotic organisms - Monera

(C) Eukaryotic multicellular organisms without cell wall - Fungi

(D) Unlimited growth - Plants

21.Fullerene or bucky-ball is made-up of ------ carbon atoms.

- (A) 100 (B) 20
- (C) 75 (D) 60

22. Which type of the reflection will be represented by a light reflected from a book ?

(A) Regular	(B) Irregular
(C) Both types	(D) None

23.---- lens is used to correct the defect of vision termed as presbyopia.

- (A) Convex (B) Concave
- (C) Bifocal (D) Contact

24. Which physical quantity has a unit of kWh?

- (A) work (B) Electric power
- (C) Electric current (D) Electric potential

25. How many times does an AC Electric current with the frequency 52Hz			
change its direction ?			
(A) 25 (B) 50 (C) 100 (D) 200			
26. Which coloured wire is used for earthing?			
(A) Red (B) Black (C) Green (D) White			
27.Distance of geostationary statelite from the earth's surface is km.			
(A) 4300 (B) 37956 (C) 35786 (D) 23123			
28. Which of the following solutions is the most basic ?			
(A) $pH = 8.2$ (B) $pH = 9.3$ (C) $pH = 11.5$ (D) $pH = 10.6$			
29. Which alloy is used to solder the electric wires ?			
(A) $Sn+Cu$ (B) Al (C) $Pb+Sn$ (D) $Cu+Zn$			
30. Which of the following substances is hygroscopic?			
(A) cryolite (B) feldspar			
(C) anhydrous calcium chloride (D) slag			
31. Which of the following gases is used as preservative in juice of fruits and			
jams ?			
(A) NH_3 (B) SO_2 (C) H_2 (D) CO_2			
32. Which component obtained from refining of petroleum is used as solvent			
in petrochemicals ?			
(A) Naphtha (B) Kerosene			
(C) Tar (D) petroleum coke			
33. Which of the following is used in conveyor belts ?			
(A) polythene (B) PVC			
(C) Teflon (D) Neoprene			
34. The autotrophic mode of nutrition requires			
(A) Carbon dioxide and water (B) Chlorophyll			
(C) Sunlight (D) All of above			
35.During which process blood is filtered out in Bowman's capsule ?			
(A) Reabsorption (B) Secretion			
(C) Ultrafiltration (D) Non of them			

36. Which of the fol	llowing cell can cha	36. Which of the following cell can change its shape?			
(A) Amoeba	(B) Bacter	(B) Bacteria			
(C) Paramoecium	m (D) Chlam	nydomonas			
37.Which substance	e does the cell wall	in the husk of a co	oconut possess?		
(A) Lignin	(B) Cutin	(C) Suberin	(D) Pectin		
38. Who gave 'Five	e Kingdom' classific	cation?			
(A) Carolus Lini	naeus	(B) Ernst Haec	(B) Ernst Haeckel		
(C) Robert Whit	taker	(D) Carl Woese	(D) Carl Woese		
39. Which of the fo	llowing pairs is a pa	airs of acute diseas	se?		
(A) elephantiasis	s, typhoid	(B) cholera, jau	undice		
(C) diabetes, car	ncer	(D) common co	old, cough		
40. Above which reg	gions of the earth ar	e the holes n ozor	e layer discovered?		
(A) equator		(B) tropic of ca	ncer		
(C) tropic of Cap	pricorn	(D) Antarctica			
41.Which of the fol	llowing is a source of	of a protine?			
(A) maize	(B) wheat	(C) rice (D) green gran		
42. Water stored in the dam					
42. Water stored in	the dam				
42. Water stored in (A) does not pos		(B) possesses e	electrical energy		
(A) does not pos		-	electrical energy potential energy		
(A) does not pos (C) possesses ki	ssess energy	(D) possesses p			
(A) does not pos (C) possesses ki	ssess energy netic energy waves are use	(D) possesses p			
(A) does not pos(C) possesses ki43. In SONAR	ssess energy netic energy waves are use ound (B)	(D) possesses p ed.			
 (A) does not pos (C) possesses kit 43. In SONAR (A) ultrasonic so (C) radio 	ssess energy netic energy waves are use ound (B)	(D) possesses p ed. infrasonic sound audible sound	potential energy		
 (A) does not pos (C) possesses kit 43. In SONAR (A) ultrasonic so (C) radio 	ssess energy netic energy waves are use bund (B) (D) is stored in dark colo	(D) possesses p ed. infrasonic sound audible sound	ootential energy		
 (A) does not pos (C) possesses kind 43. In SONAR (A) ultrasonic so (C) radio 44. Sliver chloride in (A) it is a white 	ssess energy netic energy waves are use bund (B) (D) is stored in dark colo	(D) possesses p ed. infrasonic sound audible sound oured bottle becau (B) it gives red	ootential energy useox reaction		
 (A) does not pos (C) possesses kit 43. In SONAR (A) ultrasonic so (C) radio 44. Sliver chloride i (A) it is a white (C) to avoid the 	ssess energy netic energy waves are use bund (B) (D) is stored in dark colo solid	 (D) possesses p ed. infrasonic sound audible sound oured bottle becau (B) it gives red (D) none of the 	ootential energy useox reaction		
 (A) does not pos (C) possesses kit 43. In SONAR (A) ultrasonic so (C) radio 44. Sliver chloride i (A) it is a white (C) to avoid the 	ssess energy netic energy waves are use bund (B) (D) is stored in dark colo solid effect of sunlight of the teeth is made	 (D) possesses p ed. infrasonic sound audible sound oured bottle becau (B) it gives red (D) none of the 	ootential energy useox reaction ese		
 (A) does not pos (C) possesses kind 43. In SONAR (A) ultrasonic so (C) radio 44. Sliver chloride in the the the the the the the the the the	ssess energy netic energy waves are use bund (B) (D) is stored in dark cold solid effect of sunlight of the teeth is made sphate	 (D) possesses p (D) possesses p (D) infrasonic sound (D) audible sound (D) none of the (D) none of the 	ootential energy useox reaction ese rate		
 (A) does not pos (C) possesses kind 43. In SONAR (A) ultrasonic so (C) radio 44. Sliver chloride in the the the the the the the the the the	ssess energy netic energy waves are use bund (B) (D) is stored in dark colo solid effect of sunlight of the teeth is made osphate hosphate	 (D) possesses p (D) possesses p (D) infrasonic sound (D) audible sound (D) none of the (D) none of the (D) calcium nit (D) sodium ph 	ootential energy use ox reaction ese rate osphate		

47. Which type of image can nt be obtained by a concave mirror?

	(A) real and enlarg	ged		
	(B) real and dimin	ished		
	(C) virtual and end	larged		
	(D) virtual and dir	ninished		
48	3. The lens in huma	n eyes is a		
	(A) convex lens		(B) convex mirror	
	(C) concave mirror		(D) concave lens	
49 Light from the following is least scattered by fog, dust and smoke.				
	(A) violet	(B) blew	(C) red	(D) yellow
50. Who discovered the magnetic effect of an electric current?				
	(A) Faraday	(B) Oersted	(C) Volta	(D) Ampera