

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 responsible for sleeping sickness ?
(A) Amoeba (B) Leishmania
(C) Trypanosoma (D) Ascaris
5. Which of the following is helpful in formation of humans ?
(A) Lichen (B) Moss
(C) Earthworms (D) All the given
6. Whose species is Bos Indicus ?
(A) Cow (B) Buffalo
(C) Fowl (D) Honeybee
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 is Tyndall effect seen ?
(A) Solution of common salt (B) Milk
(C) Lemon Juice (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) Law 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 ?
- (A) Infrasonic
 - (B) Ultrasonic
 - (C) Supersonic
 - (D) Intrasonic
19. The SI unit of intensity of sound is -----.
- (A) Wm^{-2}
 - (B) W^2m^{-1}
 - (C) m^2W^{-1}
 - (D) $\text{W}^2 \text{m}^{-2}$
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

36. Which of the following cell can change its shape?
 (A) Amoeba (B) Bacteria
 (C) Paramecium (D) Chlamydomonas
37. Which substance does the cell wall in the husk of a coconut possess?
 (A) Lignin (B) Cutin (C) Suberin (D) Pectin
38. Who gave 'Five Kingdom' classification?
 (A) Carolus Linnaeus (B) Ernst Haeckel
 (C) Robert Whittaker (D) Carl Woese
39. Which of the following pairs is a pair of acute disease?
 (A) elephantiasis, typhoid (B) cholera, jaundice
 (C) diabetes, cancer (D) common cold, cough
40. Above which regions of the earth are the holes in ozone layer discovered?
 (A) equator (B) tropic of cancer
 (C) tropic of Capricorn (D) Antarctica
41. Which of the following is a source of protein?
 (A) maize (B) wheat (C) rice (D) green gram
42. Water stored in the dam
 (A) does not possess energy (B) possesses electrical energy
 (C) possesses kinetic energy (D) possesses potential energy
43. In SONAR waves are used.
 (A) ultrasonic sound (B) infrasonic sound
 (C) radio (D) audible sound
44. Silver chloride is stored in dark coloured bottle because
 (A) it is a white solid (B) it gives redox reaction
 (C) to avoid the effect of sunlight (D) none of these
45. The outer layer of the teeth is made up of
 (A) calcium phosphate (B) calcium nitrate
 (C) potassium phosphate (D) sodium phosphate
46. Newlands law of octaves was found to be applicable up to
 (A) nickel (B) cobalt (C) phosphorus (D) calcium

47. Which type of image can not be obtained by a concave mirror?
- (A) real and enlarged
 - (B) real and diminished
 - (C) virtual and enlarged
 - (D) virtual and diminished
48. The lens in human 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) blue
 - (C) red
 - (D) yellow
50. Who discovered the magnetic effect of an electric current?
- (A) Faraday
 - (B) Oersted
 - (C) Volta
 - (D) Ampera