

VERBAL

Choose the word most similar in meaning to the capitalized ones.

1. VEIL:

- A. conceal
- B. disclose
- C. uncover
- D. beauty

2. RECREATION:

- A. business
- B. labor
- C. profession
- D. hobby

Four lettered pairs (A to D) follow a related pair of words given in capitals. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair in capitals.

3. CURATOR: ART::

- A. archivist: documents
- B. referee: laws
- C. physician: research
- D. raconteur : stories

4. STRAY: GROUP::

- A. improvise: suggestion
- B. slur: pronunciation
- C. delete: change
- D. digress: subject

5. FIRM: IRONCLAD::

- A. bruised: broken
- B. polished: shining
- C. smart: brilliant
- D. hard: stiff

Complete the sentences by choosing the most appropriate word, from the given lettered choices (A to D) below each.

6. The director of purchasing can _____ the best price.

- A. negotiable
- B. negotiate
- C. negotiator
- D. negotiation

7. Your speech was not relevant _____ the topic.

- A. by
- B. with
- C. to
- D. about

8. It is _____ rather than moderate inflation that distorts prices and sends economies tumbling.

- A. a galloping inflation rate
- B. because a galloping inflation rate
- C. by a galloping inflation rate
- D. an inflation rate is galloping

9. The world is _____ a serious energy problem.

- A. heading
- B. braving
- C. facing
- D. confronting



10. _____ of human resources is interviewing applicants. .

- A. Director
- B. The directors
- C. The director
- D. Directors

PHYSICS

11. The earth's magnetic field:

- A. Varies in both magnitude and direction
- B. Is centered exactly on the centre of the earth
- C. Varies in magnitude but not in direction
- D. Varies in direction but not magnitude

12. Electromagnetic waves travel in vacuum with speeds that are:

- A. equal to speed of light
- B. near to speed of light
- C. greater than speed of light
- D. lesser than speed of light

13. The gravity at the center of earth is called:

- A. 10
- B. 1
- C. Infinity
- D. Zero

14. Newton's second law gives information of

- A. Force
- B. Acceleration
- C. Mass
- D. Both B and C

15. The shortest distance between two points is:

- A. Distance
- B. Displacement
- C. Speed
- D. velocity

16. The slope of the distance time graph gives:

- A. Acceleration
- B. Speed
- C. Intensity of light
- D. Power

17. Rate of doing work is called:

- A. Energy
- B. Power
- C. Momentum
- D. Impulse

18. When a wave enters from rare to denser medium then which quantity will remain the same?

- A. Wavelength
- B. Velocity
- C. Both an and b
- D. frequency

19. At the highest point during the upward motion of object, the value of kinetic energy of body is:

- A. Zero
- B. 10
- C. 1
- D. Infinity



20. First law of motion is also called:

- A. Law of inertia
- B. Law of mass
- C. Law of body
- D. Law of surface

21. Static friction is independent of:

- A. Area of contact
- B. Nature of surface
- C. Both A and B
- D. Applied force

22. The study of motion of body is called:

- A. Mechanics
- B. Heat
- C. Light
- D. Sound

23. The value of pressure decreases as:

- A. Height decreases
- B. Height increases
- C. Independent of height
- D. Depth decreases

24. Light has various unique properties, sometimes behaving like a wave and sometimes behaving like a particle. Name experiment(s) that demonstrates light behaving like a wave.

- A. Photoelectric Effect
- B. Young's Double Slit Interference
- C. Doppler's Effect
- D. Both A and B

25. Which of the following is scalar quantity?

- A. Speed
- B. Displacement
- C. Velocity
- D. Force

26. The electric potential is zero:

- A. Midway between two equal charges of same sign
- B. Midway between any two charges of opposite sign
- C. Inside a conductor
- D. At any point to equal distances from equal charges of opposite sign

27. The unit of co-efficient of friction is:

- A. joule
- B. No unit
- C. Newton
- D. Coulomb

28. A steel wire 12 mm in diameter is fastened to a log and then pulled by tractor. The length of steel wire between the log and the tractor is 11 m. A force of 10,000 N is required to pull the log. What is the stress in the wire?

- A. 44.12 MPa
- B. 66.15 MPa
- C. 77.29 MPa
- D. 88.46 MPa



29. Electromagnetic waves travel in vacuum with speeds that are:

- A. equal to speed of light
- B. near to speed of light
- C. greater than speed of light
- D. lesser than speed of light

30. The value of pressure decreases as:

- A. Height decreases
- B. Height increases
- C. Independent of height
- D. Depth decreases

31. Which of the following pairs are both scalar quantities?

- A. Speed and mass
- B. Volume and weight
- C. Time and acceleration
- D. Energy and force

32. If an object's mass and the net force it feels are both known, then Newton's Second Law could be used to directly calculate which quantity?

- A. Displacement
- B. Velocity
- C. Acceleration
- D. Linear momentum

33. An object moving through a fluid experiences a retarding force known as drag force. The drag force _____ as the speed of the object _____.

- A. decreases ... decreases
- B. decreases... increases
- C. increases ... decreases
- D. increases ... increases

34. An object is placed 20 cm from a diverging lens. If the distance between the lens and the image is 8 cm, what is the magnification?

- A. $\frac{1}{15}$
- B. $\frac{2}{5}$
- C. $\frac{1}{2}$
- D. 2

35. Light has various unique properties, sometimes behaving like a wave and sometimes behaving like a particle. Name experiment(s) that demonstrates light behaving like a wave.

- A. Photoelectric Effect
- B. Young's Double Slit Interference
- C. Doppler's Effect
- D. Both A and B

36. If an object is placed 30 cm from a convex lens whose focal length is 15 cm, the size of the image compared to the size of the object will be approximately:

- A. more than twice as large
- B. 1.5 times as large
- C. smaller
- D. the same

37. Those waves in which the part of medium have displacement along the direction of propagation of waves are known as:

- A. Longitudinal waves
- B. Transverse waves
- C. Simple waves
- D. Mechanical waves



38. A pipe has a length of 1m. Determine the frequencies of the fundamental and first two harmonic oscillations if the pipe is opened at both ends. (speed of sound in air = 340 m/s)

- A. 170 Hz, 340 Hz, 510 Hz
- B. 120 Hz, 220 Hz, 390, Hz
- C. 90 Hz, 230 Hz, 440 Hz
- D. 210 Hz, 410 Hz, 510 Hz

39. At points where the displacements of two waves cancel each other's effect, the path difference is an odd integral multiple of half the wavelength. This effect is known as:

- A. Constructive interference
- B. Destructive interference
- C. Stationary interference
- D. Simple interference

40. A steel wire 12 mm in diameter is fastened to a log and then pulled by tractor. The length of steel wire between the log and the tractor is 11 m. A force of 10, 000 N is required to pull the log. What is the stress in the wire?

- A. 44.12 MPa
- B. 66.15 MPa
- C. 77.29 MPa
- D. 88.46 MPa

CHEMISTRY

41. All substance has the same value of Heat capacity, at:

- A. Ambient temperature
- B. Optimum temperature
- C. Absolute zero temperature
- D. Very low temperature

42. At any point on the inversion curve, Joule-Thomson co-efficient is:

- A. Equal to zero
- B. Greater than one
- C. Smaller than one
- D. Equal to infinity

43. Lewis relationship is directly concerned with both:

- A. Heat and mass transfer
- B. Energy and mass transfer
- C. Momentum and heat transfer
- D. Temperature and heat transfer

44. In fertilizer plant, urea is finally obtained:

- A. At high temperature
- B. At low pressure
- C. In liquid form
- D. In vapor form

45. According to _____ the volume of given mass of gas is directly proportional to the temperature of a gas at a given constant pressure.

- A. Gas law
- B. Boyles law
- C. Charles law
- D. Avogadro's law



46. The pressure inside the Crook's tube or Discharge tube is about 0.001 mm of Hg to show the brilliant _____ light.
- A. White
 - B. Blue
 - C. Green
 - D. Yellow
47. The attractive force that holds the two hydrogen containing molecules together in a liquid mixture is called _____.
- A. Hydrogen bonding
 - B. Dipole forces
 - C. Amine binding
 - D. Chemical bond
48. Heat evolved or absorbed during the chemical reaction NOT depends on the _____.
- A. Amount of chemical substance involved
 - B. Temperature
 - C. Physical state of substance
 - D. Presence of Catalyst
49. The term active mass means _____ in terms of moles/dm³.
- A. Moles
 - B. Concentration
 - C. Volume
 - D. Mass
50. The rate of chemical reactions at constant temperature is directly proportional to the active concentrations of the reactants this is according to:
- A. Le-Chatlier's Principle
 - B. The Distribution Law
 - C. Law of Constant Proportions
 - D. Law of Mass Action
51. The lowest whole number ratio of elements present in a compound can be practically depicted by writing:
- A. Formula mass
 - B. Molecular mass
 - C. Formula unit
 - D. Empirical formula
52. One gram molecular mass is possessed by:
- A. One mole of calcium chloride
 - B. One mole of sodium chloride
 - C. One mole of carbon atom
 - D. One mole of water
53. 6.02×10^{23} molecules of water are equivalent to:
- A. One gram formula of water
 - B. One gram formula of sodium chloride
 - C. One gram formula of sulphuric acid
 - D. One gram molecular mass of carbon

54. Alkali metal that is expected to react most vigorously with cold water, is:

- A. Lithium
- B. Sodium
- C. Potassium
- D. Calcium

55. With the aqueous solution of sodium chloride, potassium metal will react through a:

- A. Decomposition reaction
- B. Displacement reaction
- C. Combustion reaction
- D. Neutralization reaction

56. Alkaline earth metals violently react with halogen to give metal halides, through a:

- A. Decomposition reaction
- B. Redox reaction
- C. Combustion reaction
- D. Displacement reaction

57. By passing fluorine gas through aqueous solution of sodium chloride:

- A. No react will occur
- B. Pale yellow gas will liberate
- C. Reddish brown fumes will liberate
- D. Greenish yellow gas will liberate

58. Maximum number of electron accommodated by M-shell, is:

- A. 4
- B. 5
- C. 10
- D. 18

59. Tendency of an element to become negative, can be best measured in terms of its:

- A. Shielding effect
- B. Ionization energy
- C. Electro negativity
- D. Electro affinity

60. Presence of free mobile electrons, is a characteristic feature of:

- A. Ionic bonding
- B. Metallic bonding
- C. Covalent bonding
- D. Dative bonding

61. Phenomenon of allotropy is particularly shown by:

- A. Oxygen and sulphur
- B. Carbon and sodium
- C. Helium and hydrogen
- D. Potassium and calcium

62. Physical property that is typically and predominantly dependant on surface area of the matter, is:

- A. Evaporation
- B. Vapor pressure
- C. Surface tension
- D. Boiling point

63. Mass per unit of a substance can be determined in terms of:

- A. Vapor pressure
- B. Surface tension
- C. Weight
- D. Density

64. Rate of diffusion is particularly limited by
- Boiling point and melting point of substance
 - Evaporation and vapor pressure of substance
 - Temperature and vapor pressure of particles
 - Size and kinetic energy of particles
65. At constant temperature, compressibility of a gas is greatly dependent upon:
- Pressure applied on the gas
 - Atmospheric pressure
 - Mobility of gas molecules
 - Diffusion rate of the gas
66. Solute proportion of a solution can be best governed by measurement of:
- Molarity
 - Molality
 - Concentration
 - Partial fraction
67. Solubility of the majority of substance is predominantly effected by:
- Pressure
 - Vapor pressure
 - Temperature
 - Surface tension
68. Numerical value of equilibrium constant can be compared with numerical value of reaction constant, in order to determine:
- Active masses of products
 - Rate of forward reaction
 - Rate of backward reaction
 - Extent of reaction
69. Active mass of a pure substance is always:
- Equal to one
 - Less than one
 - Greater than one
 - Negative
70. Irreversible reactions are generally associated with:
- Moderate value of chemical equilibrium constant
 - Large value of chemical equilibrium constant
 - Small value of chemical equilibrium constant
 - Negative value of reaction constant
-
71. Ringworm disease in man is caused by:
- Trichosporon*
 - Aspergillus*
 - Sporobolomycus*
 - Microsporum*

72. A facultative parasite is:

- A. An obligate saprophyte
- B. Parasitic but can live as saprophyte
- C. Normally a saprophyte
- D. Normally a saprophyte but can live as parasite under favorable conditions

73. Phyllode is a modified:

- A. Leaf
- B. Petiole
- C. Stem
- D. Branch

74. The phenomenon of 'sulphur shower' is found in:

- A. Mosses
- B. Cyees
- C. Dryopteris
- D. Pinus

75. The cauliflower used as a vegetable is:

- A. A bunch of fertile flowers
- B. An undifferentiated compaction of leaves
- C. A fleshy inflorescence
- D. None of the above

76. The common phase between aerobic and anaerobic respiration is called:

- A. Tricarboxylic acid cycle
- B. Oxidative phosphorylation
- C. Embeden Meyerhof-Parnas pathway or Glycolysis
- D. Kreb's cycle

77. Niche represents:

- A. Habitats
- B. Microhabitats
- C. Habitat as well as interrelations
- D. Habitat as well as climates

78. The relationship between one species and another within a community that has evolved through interaction is based upon:

- A. Requirement and mode of obtaining food only
- B. Requirement and mode of obtaining shelter only
- C. The habits of the species only
- D. All of the above

79. Genetically engineered bacteria have been used in commercial production of:

- A. Thyroxine
- B. Testosterone
- C. Human insulin
- D. Melatonin

80. Photochemical smog always contains:

- A. PAN and O₃
- B. CH₄ and O₃
- C. CO and O₃
- D. PAN and CH₄

81. The UV-rays in atmosphere are checked by:

- A. O₃
- B. O₂
- C. H₂
- D. Cl₂

82. Phosphate pollution is mainly caused by:
- Sewage and phosphate rocks
 - Phosphate rocks only
 - Sewage and agricultural fertilizers
 - Agricultural fertilizers only
83. Synecology is the study of:
- Biosphere
 - Individuals
 - Environment
 - Community in relation to environment
84. Germination of the seed is promoted by:
- Green light
 - Red light
 - Blue light
 - Infrared light
85. In short day plants, flowering is interrupted if:
- Dark period is interrupted by white or red light
 - Dark period is interrupted by far-red light
 - Dark period is interrupted by red followed by far-red light
 - In short day plants, flowering cannot be interrupted
-
86. Which one is the most threatened area on the earth for (wild life):
- Sub-tropical rain forest
 - Tropical rain forest
 - Antarctica forest
 - Both A and B
87. Who gave a cellular concept for protozoans?
- Cuvier
 - Von Seibold
 - Dobell
 - Hall
88. The Pellicle is present in:
- Amoeba Verrucosa
 - Amoeba Proteus
 - Amoeba Dubia
 - Phyllum Sarcodina
89. Which of the following has a clitellum?
- Earthworm
 - Neries
 - Cockroach
 - Flatworm
90. EXCEPT _____ all below mentioned are the characteristics of members of the class Aves.
- Ectothermy
 - Feathers
 - Vertebral column modified for flight
 - Bones lightened by numerous air spaces
91. Which type of feathers is used for flights?
- Down Feathers
 - Contour Feather
 - Quill Feathers
 - Both B & C



92. The ATP is formed in:

- A. Ribosomes
- B. Golgi bodies
- C. Mitochondria
- D. None of the above

93. In the process of DNA replication, topoisomerases plays a prominent role in :

- A. Producing nicks in one strand of the unwinding double helix
- B. Cutting both strands and reseal them
- C. They relieve topological stress created during DNA strand separation
- D. They can relax both positive and negative supercoils of DNA
- E. All of the above

94. N-formyl methionyl-tRNA is closely identified with synthesis of all the following, EXCEPT:

- A. E. coli ribosome
- B. Chloroplast ribosomes
- C. Mitochondrial ribosomes
- D. Eukaryotic cytoplasmic ribosome

95. A pyrimidine that is absent in RNA is:

- A. Uracil
- B. Thymine
- C. Cytosine
- D. Adenine

96. In frog the vein brings blood from the tongue is:

- A. Lingual
- B. Cutaneous
- C. Anterior abdominal
- D. Azygos

97. In our expiratory air, oxygen content is around:

- A. 4%
- B. 20%
- C. 25%
- D. 16%

98. Flexing or bending of our arm is done by:

- A. Biceps
- B. Triceps
- C. Paralysis
- D. Paresis

99. 4th ventricle is present in:

- A. Optic lobes
- B. Diencephalon
- C. Medulla oblongata
- D. Brainstem structure

100. Egg-laying mammals belong to which of the following group :

- A. Placentals
- B. Marsupials
- C. Monotremes
- D. Cetacea



S-21-BS NURSING DNSK - WHITE-2022-10186

BSN NURSING ENTRY TEST KEY 2022

| | | | | |
|------|------|------|------|-------|
| ① A | 21 D | 41 C | 61 A | 81 A |
| ② D | 22 A | 42 A | 62 A | 82 C |
| ③ A | 23 B | 43 A | 63 D | 83 D |
| ④ D | 24 B | 44 A | 64 D | 84 B |
| ⑤ A | 25 A | 45 C | 65 A | 85 C |
| ⑥ B | 26 A | 46 C | 66 A | 86 C |
| ⑦ C | 27 B | 47 A | 67 C | 87 B |
| ⑧ A | 28 C | 48 D | 68 D | 88 A |
| ⑨ C | 29 A | 49 B | 69 A | 89 A |
| ⑩ C | 30 B | 50 D | 70 B | 90 A |
| 11 A | 31 A | 51 D | 71 D | 91 B |
| 12 A | 32 C | 52 D | 72 B | 92 C |
| 13 D | 33 D | 53 A | 73 B | 93 D |
| 14 A | 34 B | 54 B | 74 D | 94 D |
| 15 B | 35 B | 55 B | 75 C | 95 B |
| 16 B | 36 B | 56 B | 76 C | 96 A |
| 17 B | 37 A | 57 B | 77 C | 97 D |
| 18 D | 38 A | 58 D | 78 D | 98 A |
| 19 A | 39 B | 59 C | 79 C | 99 C |
| 20 A | 40 C | 60 B | 80 A | 100 C |