

1. The pulse is commonly checked at the-
 - A. Femoral artery
 - B. Radial artery
 - C. Jugular vein
 - D. Pulmonary artery
2. What is the normal body temperature in an adult?
 - A. 35°C
 - B. 37°C
 - C. 39°C
 - D. 40°C
3. Hand washing is primarily done to prevent-
 - A. Dehydration
 - B. Malnutrition
 - C. Infection
 - D. Hypertension
4. Which of the following is a sign of dehydration?
 - A. Dry mouth
 - B. Excessive urination
 - C. Moist skin
 - D. Low pulse rate
5. The universal donor blood group is-
 - A. A Negative
 - B. B Positive
 - C. AB Positive
 - D. O Negative
6. The instrument used to measure blood pressure is-
 - A. Thermometer
 - B. Stethoscope
 - C. Sphygmomanometer
 - D. Otoscope
7. The nurse's responsibility in maintaining patient confidentiality is part of-
 - A. Nutrition
 - B. Ethics
 - C. Pharmacology
 - D. Anatomy
8. Which infection control practice is most effective in hospitals?
 - A. Keeping windows closed
 - B. Wearing jewellery
 - C. Hand hygiene
 - D. Limiting patient movement
9. Which of the following is an example of nursing intervention?
 - A. Prescribing medications
 - B. Monitoring vital signs
 - C. Diagnosing diabetes
 - D. Performing surgery
10. The primary purpose of oral care in bedridden patients is to-
 - A. Improve eyesight
 - B. Increase appetite only
 - C. Prevent oral infections
 - D. Reduce blood pressure
11. When assisting a patient to walk for the first time after surgery, the nurse should-
 - A. Leave the patient alone
 - B. Support and observe the patient closely
 - C. Encourage rapid walking
 - D. Ask the patient the patient to run

12. A nurse should report immediately if a patient develops-
- Normal sleep
 - Mild hunger
 - Stable vital signs
 - Difficulty breathing
13. A nurse caring for an elderly patient should pay special attention to-
- Fall prevention
 - Hair styling
 - Entertainment only
 - Hospital decoration
14. The most important factor in effective nurse-patient communication is-
- Using medical jargon
 - Active listening
 - Speaking rapidly
 - Avoiding eye contact
15. Which of the following is an important aspect of patient-centred care?
- Involving patients in decision making
 - Ignoring patient preferences
 - Limiting communication
 - Focussing only on disease
16. The primary purpose of patient identification is to-
- Increase admissions
 - Reduce hospital costs
 - Prevent medical errors
 - Improve hospital rating
17. Which patient requires the most urgent attention-
- Patient with mild headache
 - Patient with chest pain and shortness of breath
 - Patient waiting for discharge
 - Patient requesting water
18. Monitoring intake and output helps assess-
- Hearing ability
 - Vision problems
 - Financial status
 - Fluid balance
19. What is the best source of information about a patient's pain?
- Laboratory report
 - Family member
 - The patient
 - Medical record
20. What is the purpose of discharge teaching?
- Increase hospital stay
 - Prepare the patient for care at home
 - Replace treatment
 - Reduce documentation
21. The country which awards the prestigious Nobel prize in PHYSICS is
- U.S.A.
 - U.K.
 - Sweden
 - France
22. A certain body weighs 22.42 g and has a measured volume of 4.7 cc. The possible errors in the measurement of mass and volume are 0.01 g and 0.1 cc. Then maximum error in the density will be
- 22 %
 - 2 %
 - 0.2 %
 - 0.02 %

23. The square of resultant of two equal forces is three times their product . Angle between the forces is
- 180°
 - 90°
 - 45°
 - 60°
24. Two projectiles of same mass have their maximum kinetic energies in the ratio 4 : 1 and ratio of their maximum heights is also 4 : 1 , then what is the ratio of their ranges?
- 2 : 1
 - 4 : 1
 - 8 : 1
 - 16 : 1
25. A car is moving with a constant speed of 20 m/s in a circular horizontal track of radius 40 m . A bob is suspended from the roof of the car by a massless string . The angle made by the string with the vertical will be
- 30°
 - 90°
 - 45°
 - 60°
26. A particle of mass 10 g moves in a straight line with retardation $2x$, where x is the displacement in S I units. Its loss of kinetic energy for above displacement is $(10/x)^{-N}$ Joules. The value of N will be
- 2
 - 1
 - 3
 - 4
27. The moment of inertia of a body about a given axis is 2.4 kg/m^2 . To produce a rotational kinetic energy of 750 J , an angular acceleration of 5 rad / s^2 must be applied about that axis for
- 6 sec
 - 5 sec
 - 4 sec
 - 3 sec
28. If the diameter of the earth becomes twice its present value but its mass remains unchanged , then the weight (W) of an object on the surface of the earth becomes :
- $W/8$
 - $W/2$
 - $W/4$
 - No change
29. An aluminium rod with Young 's modulus $Y = 7.0 \times 10^{10} \text{ N/m}^2$ undergoes elastic strain of 0.04%. The energy per unit volume stored in the rod is S I unit is
- 5600
 - 8400
 - 2800
 - 11200
30. Pressure inside two soap bubbles are 1.01 atm. & 1.03 atm. Ratio between their volume is
- 3 : 1
 - 27 : 1
 - 127 : 101
 - 1 : 1

31. The height of Victoria falls is 63 m. what is the difference in temperature of water at the top and at the bottom of the fall ? Given specific heat of water = $1 \text{ cal g}^{-1} \text{ } ^\circ\text{C}^{-1}$
- A. $0.147 \text{ } ^\circ\text{C}$
 B. $1.476 \text{ } ^\circ\text{C}$
 C. $14.76 \text{ } ^\circ\text{C}$
 D. $0.014 \text{ } ^\circ\text{C}$
32. A cycle tyre bursts suddenly. This represents an
- A. Isobaric process
 B. Isothermal process
 C. Isochoric process
 D. adiabatic process
33. When a particle executes SHM , the nature of graphical representation of velocity as a function of displacement is
- A. Parabolic
 B. Straight Line
 C. Elliptical
 D. Circular
34. Velocity of sound waves in air is 330 m/s. For a particular sound waves in air , a path difference of 40 cm is equivalent to phase difference of 1.6π . The frequency of this wave is
- A. 165 Hz
 B. 150 Hz
 C. 660 Hz
 D. 330 Hz
35. A Carnot engine takes 5000 kcal of heat from a reservoir at $727 \text{ } ^\circ\text{C}$ and gives heat to a sink at $127 \text{ } ^\circ\text{C}$. The work done by the engine is
- A. $3 \times 10^6 \text{ J}$
 B. ZERO
 C. $12.6 \times 10^6 \text{ J}$
 D. $8.4 \times 10^6 \text{ J}$
36. An ideal fluid flows (laminar) through a pipe of non-uniform diameter . The maximum and minimum diameters of the pipes are 6.4 cm and 4.8 cm respectively . The ratio of the minimum and the maximum velocity of fluid in this pipe is
- A. 9/16
 B. $\sqrt{3}/2$
 C. 3/4
 D. 81/256
37. Time period of a simple pendulum is T inside a lift when the lift is stationary . If the lift moves upwards with an acceleration $g/2$, the time period of pendulum will be
- A. $(\sqrt{2}/\sqrt{3}) T$
 B. $\sqrt{3} T$
 C. $(\sqrt{3}/\sqrt{2}) T$
 D. $T/\sqrt{3}$
38. A position dependent force , $F = 7 - 2x + 3x^2 \text{ N}$ acts on a small body of mass 2kg and displaces it from $x = 0$ to $x = 5 \text{ m}$. The work done in joules is
- A. 270
 B. 135
 C. 35
 D. 70

39. The ratio of the radii of gyration of a circular disc to that of a circular ring, each of same mass and same radius about their axes is
- $\sqrt{3} : \sqrt{2}$
 - $1 : \sqrt{2}$
 - $\sqrt{2} : 1$
 - $\sqrt{2} : \sqrt{3}$
40. A bus is moving with a speed of 10 m/s on a straight road. A scooterist wants to overtake the bus in 100 s. If the bus is at a distance of 1 km from the scooterist, with what speed should the scooterist chase the bus?
- 20 m/s
 - 10 m/s
 - 25 m/s
 - 40 m/s
41. Which of the following amines cannot be prepared by Gabriel Phthalimide reaction?
- Benzylamine
 - Aniline
 - Ethylamine
 - Methylamine
42. m-Bromonitrobenzene is formed when
- m-nitrophenol is treated with PBr_3
 - Phenol is treated with dilute HNO_3
 - Nitrobenzene is treated with Br_2 in the presence of Fe
 - Bromobenzene is treated with nitrating mixture
43. 1,2-dibromoethane when heated with alcoholic potash gives
- Ethane
 - Acetylene
 - Ethylene
 - Methane
44. When initial concentration of the reactant is doubled, the half-life period of a zero-order reaction
- is halved
 - is doubled
 - is tripled
 - remains unchanged
45. The quantity of charge requires to obtain 1 mole of aluminium from Al_2O_3 is
- 1F
 - 6F
 - 3F
 - 2F
46. Which of the following aqueous solutions should have the highest boiling point?
- 1M sodium hydroxide
 - 1M sodium sulphate
 - 1M ammonium nitrate
 - 1M potassium nitrate
47. Which compound will give positive Tollen's reagent test but negative Fehling's solution test?
- Methanal
 - Ethanal
 - Dimethyl ketone
 - Benzaldehyde

48. Among the following, which has the maximum no of unpaired electrons?
- Fe^{2+}
 - Mn^{2+}
 - Cr^{2+}
 - Co^{2+}
49. Which compound shows geometrical isomerism?
- Ethyne
 - Ethene
 - 2,3-Dimethylbut-2-ene
 - But-2-ene
50. The number of possible total isomers for $[\text{Co}(\text{en})_2\text{Cl}_2]^+$ is:
- 2
 - 3
 - 4
 - 5
51. Equal volumes of 0.2 M HCl and 0.1 M $\text{Ba}(\text{OH})_2$ are mixed. The pH of the resulting solution is:
- 7
 - 1
 - 10
 - 12
52. Which of the following is NOT aromatic?
- Cyclooctatetraene
 - Pyridine
 - Cyclopropenyl cation
 - Furan
53. The species with maximum bond angle is:
- NH_3
 - H_2O
 - BF_3
 - CH_4
54. Which molecule violates the octet rule but has no lone pair on the central atom?
- BF_3
 - NH_3
 - SF_4
 - XeF_2
55. Which orbital has the maximum number of radial nodes?
- 2s
 - 3d
 - 3p
 - 4p
56. The energy of an electron in the second Bohr orbit of hydrogen atom is:
- 3.4 eV
 - 13.6 eV
 - 1.51 eV
 - 1.51 eV
57. Which pair shows negative deviation from Raoult's law?
- Benzene + Toluene
 - Acetone + Chloroform
 - Hexane + Heptane
 - Benzene + Ethylene
58. One mole of an ideal gas expands isothermally at 300 K from 1 L to 10 L. The value of q is equal to:
- 0
 - K
 - w
 - ΔU

59. How many conformations are obtained during one complete rotation of ethane about the C–C bond?
- Infinite
 - 2
 - 3
 - 12
60. Which of the following is a non-reducing sugar?
- Glucose
 - Sucrose
 - Maltose
 - Lactose
61. Photosynthetic bacteria have pigments in
- Leucoplast
 - Chloroplast
 - Chromoplast
 - Chromatophores
62. Cell wall of diatoms is made up of
- Silica
 - Carbonate
 - Calcium carbonate
 - All of these
63. Mycorrhiza show
- Amensalism
 - Parasitism
 - Commensalism
 - Symbiosis
64. Coralloid roots is a feature of
- Mosses
 - Cycas
 - Pinus
 - Selaginella
65. Petromyzon belongs to the
- Chondrichthyes
 - Osteichthyes
 - Cyclostomata
 - Amphibia
66. Lateral roots emerge from
- Endodermis
 - Cortex
 - Pericycle
 - Epidermis
67. Protein present in cartilage is
- Chondrin
 - Ossein
 - Keratin
 - Thrombin
68. During cell division spindle fibres are attached to which part of the chromosome?
- Chromomere
 - Chromonemata
 - Chromatid
 - Kinetochores
69. In addition to nucleus, DNA is also found in
- Lysosomes
 - Ribosomes
 - Mitochondria
 - Golgi apparatus
70. Sea weeds are good source of
- Calcium
 - Potassium
 - Sulphur
 - Iodine

71. Process of water exudation Through hydathodes
- Guttation
 - Transpiration
 - Excretion
 - Hydrolysis
72. Rods and cones are modified
- Multipolar neurons
 - Unipolar neurons
 - Bipolar neurons
 - Pseudounipolar neurons
73. Which one of the following diseases is NOT related to thyroid gland
- Myxedema
 - Acromegaly
 - Cretinism
 - Goitre
74. Flame cells are excretory organs of
- Planaria
 - Hydra
 - Hydrilla
 - Cockroach
75. The site of respiration in bacteria is
- Episome
 - Plasmid
 - Mesosome
 - Cytoplasm
76. Main excretory product in cockroach and other insects is
- Urea
 - NH_3
 - Amino acid
 - Uric acid
77. Kupffer cells in mammals are present in
- Lungs
 - Spleen
 - Liver
 - Pancreas
78. Seed dormancy is due to
- Ethylene
 - Abscisic Acid
 - Indole Acetic Acid
 - Starch
79. Which one of the following diseases is NOT due to contamination of water
- Hepatitis B
 - Jaundice
 - Cholera
 - Typhoid
80. All the following are included in “ex-situ conservation” EXCEPT
- Botanical gardens
 - Sacred grooves
 - Wildlife safari park
 - Seed banks
81. The board recommended that the proposal _____ immediately.
- is approved
 - be approved
 - was approved
 - approved

82. Rarely _such a comprehensive analysis of the issue.
- A. one finds
B. finds one
C. does one find
D. one does find
83. Had the data been analysed correctly, the anomaly _____ would detect
- A. would have detected
B. would have been detected
C. had detected
84. Each of the reports submitted by the various departments___carefully examined before the final recommendation was issued.
- A. were
B. have been
C. was
D. are
85. It was they, not we, who ___responsible.
- A. was
B. is
C. were
D. has been
86. The cattle _____grazing in the field.
- A. is
B. was
C. are
D. has
87. There was a fight in the school. The Disciplinary Committee _____investigating the matter.
- A. are
B. is
C. has
D. was
88. Neither Rahul nor Mohan brought _____notebook.
- A. his
B. their
C. his own
D. one's
89. Between you and ___, the plan will fail.
- A. I
B. Myself
C. Me
D. Mine
90. The responsibility rests with Riya and _____
- A. I
B. me
C. myself
D. mine
91. Choose the synonym of Pragmatic.
- A. Idealistic
B. Practical
C. Careless
D. Impulsive

92. Choose the synonym of Austere.
- A. Lavish
 - B. Strict
 - C. Flexible
 - D. Innovative
93. Choose the antonym of Ephemeral.
- A. Temporary
 - B. Fleeting
 - C. Lasting
 - D. Brief
94. Choose the antonym of Mitigate.
- A. Reduce
 - B. Alleviate
 - C. Intensify
 - D. Moderate
95. The White Tiger won the Man Booker Prize for:
- A. Kiran Desai
 - B. Aravind Adiga
 - C. Vikas Swarup
 - D. Arundhati Roy
96. Discovery of India was written by:
- A. Mahatma Gandhi
 - B. Jawaharlal Nehru
 - C. Sardar Patel
 - D. B.R. Ambedkar
97. Choose the sentence with no error:
- A. I, you and he are friends.
 - B. You, he and I are friends.
 - C. He, you and I are friends.
 - D. You, I and he are friends.
98. Identify the correct sentence:
- A. The news are true.
 - B. The news is true.
 - C. The news were true.
 - D. The news have been true.
99. Which is the correct passive: Who broke the window?
- A. By whom was the window broken?
 - B. Who was the window broken by?
 - C. By whom the window was broken?
 - D. Was the window broken by whom?
100. Spot the spelling error:
- A. Questionnaire
 - B. Millenium
 - C. Embarrass
 - D. Lieutenant

