

OJEE Basic BSc Nursing Sample Paper 02

A) Mode and Time: The exam is a Computer Based Test (CBT) lasting 120 minutes.

B) Total Questions: The exam contains 100 questions.

C) Marking Scheme & Rules:

- Each question carry 1 mark and there is no negative marking for wrong answer.

Q1. What is the dimensional formula for force?

A. MLT^{-1}

B. MLT^{-2}

C. ML^2T^{-2}

D. M^2LT^{-2}

Q2. According to Ohm's Law, the relationship between voltage (V), current (I), and resistance (R) is given by:

A. $V = I/R$

B. $V = R/I$

C. $V = I \times R$

D. $I = V \times R$

Q3. The work done by a centripetal force on an object moving in a circular path is:

A. Positive

B. Negative

C. Zero

D. Infinite

Q4. The escape velocity from the surface of the Earth is approximately:

A. 11.2 km/s

B. 9.8 km/s

C. 3×10^8 m/s

D. 330 m/s

Q5. What is the SI unit of the power of a lens?

- A. Meter
- B. Watt
- C. Diopter
- D. Joule

Q6. The speed of light in a vacuum is approximately:

- A. 3×10^5 m/s
- B. 3×10^8 m/s
- C. 3×10^{10} m/s
- D. 340 m/s

Q7. Which instrument is used to measure electric current in a circuit?

- A. Voltmeter
- B. Galvanometer
- C. Ammeter
- D. Barometer

Q8. The standard value of acceleration due to gravity (g) on the surface of the Earth is:

- A. 9.8 m/s^2
- B. 10.5 m/s^2
- C. 8.5 m/s^2
- D. 11.2 m/s^2

Q9. The boiling point of pure water on the Kelvin scale is:

- A. 100 K
- B. 273 K
- C. 373 K
- D. 0 K

Q10. What is the frequency of the domestic AC supply in India?

- A. 50 Hz

- B. 60 Hz
- C. 110 Hz
- D. 220 Hz

Q11. The energy (E) of a photon of frequency ν is given by the equation:

- A. $E = mc^2$
- B. $E = h\nu$
- C. $E = \frac{1}{2}mv^2$
- D. $E = mgh$

Q12. The kinetic energy of an object of mass m moving with velocity v is:

- A. mv
- B. mgv
- C. $\frac{1}{2}mv^2$
- D. mv^2

Q13. Which type of mirror is commonly used by dentists to see larger images of teeth?

- A. Plane mirror
- B. Convex mirror
- C. Concave mirror
- D. Cylindrical mirror

Q14. Sound waves traveling through the air are:

- A. Transverse waves
- B. Electromagnetic waves
- C. Longitudinal waves
- D. Matter waves

Q15. An alpha particle is identical to the nucleus of which element?

- A. Hydrogen
- B. Helium
- C. Lithium

D. Carbon

Q16. What is the electrical resistance of an ideal voltmeter?

A. Zero

B. One ohm

C. 100 ohms

D. Infinity

Q17. The defect of vision known as Myopia (short-sightedness) can be corrected by using a:

A. Convex lens

B. Concave lens

C. Cylindrical lens

D. Bifocal lens

Q18. The process of heat transfer that does not require any material medium is:

A. Conduction

B. Convection

C. Radiation

D. Evaporation

Q19. The First Law of Thermodynamics is a statement of the law of conservation of:

A. Momentum

B. Mass

C. Energy

D. Charge

Q20. What is the fundamental charge of an electron?

A. 1.6×10^{-19} C

B. 9.1×10^{-31} C

C. 6.02×10^{23} C

D. 6.67×10^{-11} C

Q21. Who is widely known as the Father of Modern Chemistry?

- A. Dmitri Mendeleev
- B. Antoine Lavoisier
- C. John Dalton
- D. Niels Bohr

Q22. What is the pH value of pure, neutral water at 25°C?

- A. 0
- B. 7
- C. 14
- D. 10

Q23. The common name for sodium bicarbonate ($NaHCO_3$) is:

- A. Washing soda
- B. Baking soda
- C. Bleaching powder
- D. Plaster of Paris

Q24. Which gas is the most abundant in the Earth's atmosphere?

- A. Oxygen
- B. Carbon Dioxide
- C. Nitrogen
- D. Hydrogen

Q25. Deuterium is an isotope of hydrogen that contains:

- A. 1 proton and 0 neutrons
- B. 1 proton and 1 neutron
- C. 1 proton and 2 neutrons
- D. 2 protons and 1 neutron

Q26. What is the oxidation state of oxygen in hydrogen peroxide (H_2O_2)?

- A. -2

- B. -1
- C. 0
- D. +1

Q27. Which gas is commonly known as “laughing gas”?

- A. Nitric oxide (NO)
- B. Nitrogen dioxide (NO_2)
- C. Nitrous oxide (N_2O)
- D. Ammonia (NH_3)

Q28. The functional group characteristic of all alcohols is:

- A. $-COOH$
- B. $-CHO$
- C. $-OH$
- D. $-O-$

Q29. What is the valency of carbon in most of its organic compounds?

- A. 2
- B. 3
- C. 4
- D. 6

Q30. The acid naturally present in an ant sting is:

- A. Acetic acid
- B. Formic acid (Methanoic acid)
- C. Citric acid
- D. Hydrochloric acid

Q31. The process by which a solid directly changes into a gas without passing through the liquid state is called:

- A. Evaporation
- B. Condensation
- C. Sublimation

D. Melting

Q32. Which of the following is the strongest acid?

A. HF

B. HCl

C. HBr

D. HI

Q33. Brass is an alloy primarily composed of:

A. Copper and Tin

B. Copper and Zinc

C. Iron and Carbon

D. Lead and Tin

Q34. What is the molecular geometry (shape) of a methane (CH_4) molecule?

A. Linear

B. Planar

C. Tetrahedral

D. Octahedral

Q35. The general chemical formula for alkanes is:

A. C_nH_{2n}

B. C_nH_{2n-2}

C. C_nH_{2n+2}

D. C_nH_{2n+1}

Q36. The monomer unit used to manufacture polythene is:

A. Propene

B. Ethene

C. Styrene

D. Vinyl chloride

Q37. Which noble gas is commonly used to fill weather balloons because of its low density and inertness?

- A. Argon
- B. Neon
- C. Helium
- D. Radon

Q38. Which of the following is the main ore of iron?

- A. Bauxite
- B. Hematite
- C. Galena
- D. Cinnabar

Q39. How many moles are present in 18 g of water (H_2O)?

- A. 1 mole
- B. 2 moles
- C. 0.5 moles
- D. 10 moles

Q40. The chemical name for Vitamin C is:

- A. Retinol
- B. Calciferol
- C. Ascorbic acid
- D. Thiamine

Q41. Which cell organelle is commonly referred to as the “powerhouse of the cell”?

- A. Nucleus
- B. Ribosome
- C. Mitochondria
- D. Golgi apparatus

Q42. What is the basic structural and functional unit of life?

- A. Tissue
- B. Organ
- C. Cell
- D. Atom

Q43. How many chromosomes are present in a normal human somatic cell?

- A. 23
- B. 46
- C. 44
- D. 22

Q44. Which blood group is known as the “Universal Donor”?

- A. Type A
- B. Type B
- C. Type AB
- D. Type O

Q45. The pigment responsible for the color of human skin and hair is:

- A. Hemoglobin
- B. Melanin
- C. Chlorophyll
- D. Carotene

Q46. Who is known as the Father of Genetics?

- A. Charles Darwin
- B. Gregor Mendel
- C. Louis Pasteur
- D. Robert Hooke

Q47. What is the largest organ in the human body?

- A. Liver
- B. Brain

- C. Skin
- D. Heart

Q48. How many bones are there in a normal adult human skeleton?

- A. 206
- B. 300
- C. 108
- D. 250

Q49. Which of the following nitrogenous bases is found in DNA but NOT in RNA?

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

Q50. A deficiency of Vitamin D primarily causes which disease in children?

- A. Scurvy
- B. Beriberi
- C. Rickets
- D. Night blindness

Q51. Saliva contains an enzyme that begins the digestion of carbohydrates. Name the enzyme.

- A. Pepsin
- B. Lipase
- C. Salivary Amylase
- D. Trypsin

Q52. Which gland is often called the “master gland” of the endocrine system?

- A. Thyroid gland
- B. Adrenal gland
- C. Pituitary gland
- D. Pancreas

Q53. The process by which green plants make their own food using sunlight is called:

- A. Respiration
- B. Transpiration
- C. Photosynthesis
- D. Osmosis

Q54. Which component of the blood is primarily responsible for fighting infections?

- A. Red Blood Cells (RBCs)
- B. White Blood Cells (WBCs)
- C. Platelets
- D. Plasma

Q55. The male reproductive part of a flower is called the:

- A. Pistil
- B. Stigma
- C. Stamen
- D. Ovary

Q56. Which gas is released into the atmosphere as a byproduct of photosynthesis?

- A. Carbon dioxide
- B. Nitrogen
- C. Oxygen
- D. Hydrogen

Q57. Which part of the human brain is responsible for maintaining posture and balance?

- A. Cerebrum
- B. Cerebellum
- C. Medulla oblongata
- D. Hypothalamus

Q58. What is the normal body temperature of a healthy human?

- A. 37°C (98.6°F)

- B. 30°C (86°F)
- C. 40°C (104°F)
- D. 35°C (95°F)

Q59. Malaria is transmitted by the bite of infected female Anopheles mosquitoes, but the actual pathogen causing the disease is a:

- A. Virus
- B. Bacteria
- C. Fungus
- D. Protozoan (Plasmodium)

Q60. The liquid portion of the blood, without the cells, is called:

- A. Lymph
- B. Serum
- C. Plasma
- D. Cytoplasm

Q61. Choose the most appropriate synonym for the word “HAPPY”:

- A. Sad
- B. Angry
- C. Joyful
- D. Tired

Q62. What is the antonym of the word “ARRIVE”?

- A. Enter
- B. Depart
- C. Reach
- D. Come

Q63. Fill in the blank with the correct article: “He is _____ honest man.”

- A. a
- B. an
- C. the

D. no article needed

Q64. Complete the sentence with the correct preposition: "The book is _____ the table."

A. in

B. on

C. at

D. under

Q65. What is the correct plural form of the word "Child"?

A. Childs

B. Childrens

C. Children

D. Childes

Q66. What is the past tense of the verb "Go"?

A. Goes

B. Gone

C. Went

D. Going

Q67. Identify the correctly spelled word:

A. Nessesary

B. Necessary

C. Neccesary

D. Necessery

Q68. The idiom "A piece of cake" means:

A. Something very easy to do

B. A delicious dessert

C. A hard task

D. To share equally

Q69. Change the sentence to passive voice: “She writes a letter.”

- A. A letter is written by her.
- B. A letter was written by her.
- C. A letter is being written by her.
- D. A letter has been written by her.

Q70. Select one word for: “A medical professional trained to diagnose and treat illnesses.”

- A. Teacher
- B. Engineer
- C. Doctor
- D. Lawyer

Q71. Fill in the blank: “They _____ to the market yesterday.”

- A. go
- B. will go
- C. went
- D. gone

Q72. Choose the antonym for the word “BRAVE”:

- A. Courageous
- B. Cowardly
- C. Bold
- D. Strong

Q73. Fill in the blank with the correct word: “I have been living in this city _____ 2010.”

- A. for
- B. from
- C. since
- D. in

Q74. Choose the synonym for the word “BEAUTIFUL”:

- A. Ugly
- B. Gorgeous
- C. Plain
- D. Ordinary

Q75. Identify the grammatically correct sentence:

- A. He are a good student.
- B. He am a good student.
- C. He is a good student.
- D. He be a good student.

Q76. Complete the proverb: “Barking dogs seldom _____.”

- A. sleep
- B. eat
- C. bite
- D. run

Q77. Identify the adjective in the following sentence: “The quick nurse attended to the patient.”

- A. nurse
- B. attended
- C. patient
- D. quick

Q78. What is the plural form of the word “Mouse”?

- A. Mouses
- B. Mice
- C. Meese
- D. Mices

Q79. What is the antonym of the word “FRESH”?

- A. New
- B. Clean

C. Stale

D. Bright

Q80. The idiom “To let the cat out of the bag” means:

A. To buy a pet

B. To reveal a secret by mistake

C. To go hunting

D. To trap an animal

Q81. Who is universally recognized as the founder of modern nursing?

A. Clara Barton

B. Mother Teresa

C. Florence Nightingale

D. Mary Seacole

Q82. According to standard medical practice, what is the most effective way to prevent the spread of infections?

A. Wearing a mask

B. Washing hands regularly

C. Taking antibiotics

D. Staying indoors

Q83. Which instrument is used by medical professionals to measure blood pressure?

A. Thermometer

B. Stethoscope

C. Sphygmomanometer

D. ECG machine

Q84. What is the normal resting breathing rate for a healthy adult?

A. 5-10 breaths per minute

B. 12-20 breaths per minute

C. 30-40 breaths per minute

D. 50-60 breaths per minute

Q85. If a medication is prescribed to be taken “sublingually,” how should it be administered?

- A. Swallowed with water
- B. Injected into a muscle
- C. Placed under the tongue
- D. Applied to the skin

Q86. The primary purpose of performing CPR (Cardiopulmonary Resuscitation) on an unconscious patient is to:

- A. Wake them up
- B. Maintain blood circulation and oxygenation
- C. Cure heart disease
- D. Clear their throat

Q87. In a hospital setting, what does the medical abbreviation “NPO” stand for?

- A. New Patient Only
- B. Nothing by mouth
- C. Nurse Practitioner On-duty
- D. Normal Pulse Outcome

Q88. What does the abbreviation “PPE” stand for in a healthcare environment?

- A. Patient Protection Equipment
- B. Personal Protective Equipment
- C. Primary Patient Evaluation
- D. Professional Practice Ethics

Q89. When a nurse checks a patient’s radial pulse, where are they placing their fingers?

- A. On the neck
- B. On the chest
- C. On the wrist
- D. On the foot

Q90. The medical abbreviation “PRN” on a prescription means:

- A. Give every morning
- B. Give immediately
- C. Give as needed
- D. Give before meals

Q91. In basic first aid and emergency response, what does the "A" in the ABC protocol stand for?

- A. Accident
- B. Airway
- C. Ambulance
- D. Allergy

Q92. An injection that is given directly into a muscle is called:

- A. Intravenous (IV)
- B. Subcutaneous (SQ)
- C. Intramuscular (IM)
- D. Intradermal (ID)

Q93. What is the safest and most accurate way for a nurse to identify a patient before giving medication?

- A. Ask the patient their room number
- B. Look at the name on the door
- C. Ask the patient to state their name and check their ID wristband
- D. Ask another nurse

Q94. In a hospital, a red cross symbol primarily universally signifies:

- A. Danger
- B. Poison
- C. Medical or Humanitarian Aid
- D. Fire Exit

Q95. Showing empathy as a nurse means:

- A. Feeling pity for the patient

- B. Ignoring the patient's feelings
- C. Understanding and sharing the patient's feelings
- D. Telling the patient everything will be fine

Q96. What is considered a normal systolic blood pressure reading for a healthy adult?

- A. Around 80 mmHg
- B. Around 120 mmHg
- C. Around 160 mmHg
- D. Around 200 mmHg

Q97. To prevent back injuries when lifting a heavy patient, a nurse should primarily use the strength of their:

- A. Back
- B. Arms
- C. Legs
- D. Shoulders

Q98. The medical term for abnormally high blood pressure is:

- A. Hypotension
- B. Hyperglycemia
- C. Hypertension
- D. Tachycardia

Q99. To prevent bedsores (pressure ulcers) in a bedridden patient, the nurse should reposition the patient at least:

- A. Once a day
- B. Every 2 hours
- C. Every 12 hours
- D. Only when the patient asks

Q100. If a patient is upset and complaining about their food, what is the most professional nursing response?

- A. Tell them to stop complaining
- B. Ignore them and leave the room
- C. Listen calmly, acknowledge their frustration, and see if an alternative is available
- D. Argue that the food is healthy for them

Solutions

1. B

Explanation: Force is the product of mass and acceleration. Mass has dimension M , and acceleration is LT^{-2} , giving MLT^{-2} .

2. C

Explanation: Ohm's Law states that the voltage across a conductor is directly proportional to the current flowing through it, mathematically expressed as $V = I \times R$.

3. C

Explanation: Centripetal force acts perpendicular to the direction of motion. Since work is $F \cdot d \cos(90^\circ)$, the work done is zero.

4. A

Explanation: The escape velocity of Earth is the minimum speed needed for an object to break free from Earth's gravitational pull, which is approximately 11.2 km/s.

5. C

Explanation: The power of a lens is defined as the reciprocal of its focal length in meters. Its SI unit is the Diopter (D).

6. B

Explanation: The speed of light in a vacuum is a universal physical constant, exactly 299,792,458 m/s, commonly approximated as 3×10^8 m/s.

7. C

Explanation: An ammeter is a measuring instrument used to measure the electric current in a circuit. It is always connected in series.

8. A

Explanation: The standard acceleration due to Earth's gravity (g) is generally accepted as 9.8 m/s^2 for most basic physics calculations.

9. C

Explanation: Water boils at 100°C at standard atmospheric pressure. To convert to Kelvin, add 273.15, making it approximately 373 K.

10. A

Explanation: In India, the standard domestic AC alternating current power supply operates at a frequency of 50 Hz and a voltage of 220 V.

11. B

Explanation: According to the Planck-Einstein relation, the energy of a photon is proportional to its frequency ν , given by $E = h\nu$ where h is Planck's constant.

12. C

Explanation: Kinetic energy is the energy an object possesses due to its motion, defined mathematically as half of its mass times the square of its velocity ($\frac{1}{2}mv^2$).

13. C

Explanation: Dentists use concave mirrors because when an object is placed very close to them, they produce an enlarged, erect, and virtual image of the tooth.

14. C

Explanation: Sound waves in air are longitudinal waves, meaning the particles of

the medium vibrate parallel to the direction of wave propagation.

15. B

Explanation: An alpha particle consists of two protons and two neutrons bound together, making it identical to the nucleus of a helium atom (${}^4_2\text{He}$).

16. D

Explanation: An ideal voltmeter should draw no current from the circuit to accurately measure potential difference, so it is considered to have infinite resistance.

17. B

Explanation: Myopia, or short-sightedness, is caused by the light rays focusing in front of the retina. It is corrected using a diverging (concave) lens.

18. C

Explanation: Radiation is the transfer of heat energy through electromagnetic waves, which means it does not require any physical medium (like solid, liquid, or gas) to travel.

19. C

Explanation: The First Law of Thermodynamics is a version of the law of conservation of energy, stating that energy cannot be created or destroyed, only transformed.

20. A

Explanation: The fundamental charge of an electron is approximately 1.602×10^{-19} Coulombs, which is the smallest isolated charge found in nature.

21. B

Explanation: Antoine Lavoisier is known as the Father of Modern Chemistry for his role in discovering the role of oxygen in combustion and establishing the law of conservation of mass.

22. B

Explanation: Pure water is neutral, meaning it has an equal concentration of H^+ and OH^- ions. At 25°C , its pH is exactly 7.

23. B

Explanation: Sodium bicarbonate (NaHCO_3) is a widely used chemical leavening agent in baking, hence its common name "baking soda".

24. C

Explanation: Nitrogen is the most abundant gas in the Earth's atmosphere, making up approximately 78%.

25. B
Explanation: Deuterium (${}^2_1\text{H}$) is a stable isotope of hydrogen containing one proton and one neutron, whereas regular hydrogen has no neutrons.

26. B

Explanation: In peroxides like H_2O_2 , the oxidation state of oxygen is -1, which is an exception to its usual -2 oxidation state in most other compounds.

27. C

Explanation: Nitrous oxide (N_2O) is a colorless gas commonly known as "laughing gas" due to its euphoric effects when inhaled. It is used as an anesthetic.

28. C

Explanation: Alcohols are organic compounds characterized by the presence of one or more hydroxyl (-OH) functional groups attached to a carbon atom.

29. C

Explanation: Carbon belongs to Group 14 of the periodic table and has four valence electrons, meaning it typically forms four covalent bonds (tetravalency).

30. B

Explanation: The painful sting of ants and bees is primarily due to the injection of formic acid (methanoic acid) into the skin.

31. C

Explanation: Sublimation is the phase transition where a substance goes directly from a solid state to a gaseous state without passing through the liquid phase (e.g., dry ice).

32. D

Explanation: Acid strength increases down the halogen group as the bond dissociation energy decreases. Thus, HI gives up its proton most easily, making it the strongest acid.

33. B

Explanation: Brass is a substitutional alloy composed primarily of copper and zinc, known for its workability and acoustic properties.

34. C

Explanation: In methane (CH_4), the central carbon undergoes sp^3 hybridization, resulting in a tetrahedral geometry with bond angles of roughly 109.5° .

35. C

Explanation: Alkanes are saturated hydrocarbons containing only single bonds. Their general chemical formula is C_nH_{2n+2} .

36. B

Explanation: Polythene (polyethylene) is a common plastic polymer produced by the polymerization of the simple monomer ethene (ethylene).

37. C

Explanation: Helium is an inert, non-flammable noble gas that is lighter than air, making it the ideal and safe choice for lifting weather balloons and blimps.

38. B

Explanation: Hematite (Fe_2O_3) is the primary and most important mineral ore from which iron is commercially extracted.

39. A

Explanation: The molar mass of water (H_2O) is approximately 18 g/mol (2 for H, 16 for O). Therefore, 18 g of water corresponds to exactly 1 mole.

40. C

Explanation: The chemical name for Vitamin C is ascorbic acid, a water-soluble vitamin essential for tissue repair and scurvy prevention.

41. C

Explanation: Mitochondria are membrane-bound organelles that generate most of the chemical energy needed to power the cell's biochemical reactions, hence "pow-

erhouse”.

42. C

Explanation: The cell is the smallest, basic unit of life that is responsible for all of life’s processes. Tissues and organs are made up of cells.

43. B

Explanation: A normal human somatic (body) cell contains 23 pairs of chromosomes, which totals 46 individual chromosomes.

44. D

Explanation: Blood Type O negative is considered the universal donor because it lacks A, B, and Rh antigens, meaning it can be transfused to almost any patient.

45. B

Explanation: Melanin is the complex polymer pigment produced by melanocytes that determines the color of human skin, hair, and the iris of the eyes.

46. B

Explanation: Gregor Mendel is the Father of Genetics. His foundational experiments on pea plants established the basic rules of heredity and trait inheritance.

47. C

Explanation: The skin is the body’s largest organ, covering the entire outside of the body and serving as a protective barrier against the environment.

48. A

Explanation: While babies are born with more, many bones fuse during growth. A typical adult human skeleton consists of 206 bones.

49. C

Explanation: Thymine is a pyrimidine base found exclusively in DNA. In RNA, thymine is replaced by the base uracil.

50. C

Explanation: Vitamin D is essential for calcium absorption. Its deficiency in children leads to rickets, a condition characterized by soft, weak, and deformed bones.

51. C

Explanation: Salivary amylase (ptyalin) is the enzyme present in saliva that initiates the chemical digestion of starches into simpler sugars in the mouth.

52. C

Explanation: The pituitary gland is called the ”master gland” because its hormones regulate the functions of many other endocrine glands in the body.

53. C

Explanation: Photosynthesis is the process used by plants, algae, and certain bacteria to harness energy from sunlight and turn it into chemical energy (food).

54. B

Explanation: White Blood Cells (leukocytes) are part of the body’s immune system and are primarily responsible for identifying and destroying infectious pathogens.

55. C

Explanation: The stamen is the male reproductive organ of a flower, consisting

of the anther (which produces pollen) and the filament.

56. C

Explanation: During photosynthesis, plants take in carbon dioxide and water, use light energy to make glucose, and release oxygen as a biological byproduct.

57. B

Explanation: The cerebellum is located at the back of the brain and coordinates voluntary muscle movements, maintaining posture, balance, and equilibrium.

58. A

Explanation: The normal core body temperature for a healthy human adult is widely established as 37°C or 98.6°F.

59. D

Explanation: While transmitted by mosquitoes, malaria is fundamentally caused by microscopic, single-celled protozoan parasites belonging to the genus Plasmodium.

60. C

Explanation: Plasma is the yellowish, liquid component of blood that holds the blood cells in suspension and carries nutrients, hormones, and proteins throughout the body.

61. C

Explanation: A synonym is a word with the same or similar meaning. "Joyful" is a direct synonym for "Happy," conveying a feeling of great pleasure.

62. B

Explanation: An antonym is a word opposite in meaning. The opposite of arriving at a destination is leaving or "Departing" from it.

63. B

Explanation: The word "honest" begins with a silent 'h' and a vowel sound ('o'). Therefore, the correct indefinite article to use is "an".

64. B

Explanation: When indicating that an object is resting on the surface of another object, the correct spatial preposition is "on".

65. C

Explanation: "Child" is an irregular noun. Its correct plural form changes the root word entirely to "Children" without adding an 's'.

66. C

Explanation: The verb "go" is an irregular verb. Its past simple tense is "went," while "gone" is the past participle.

67. B

Explanation: The correct English spelling is "Necessary," containing one 'c' and double 's'. It means required or essential.

68. A

Explanation: The idiom "a piece of cake" is a common phrase used to describe a task, job, or activity that is incredibly easy to complete.

69. A

Explanation: To convert to passive voice, the object (a letter) becomes the subject, followed by the "be" verb in the present tense (is) and the past participle (written).

70. C

Explanation: A "Doctor" (or physician) is the specific single-word term for a medical professional qualified to practice medicine and treat illnesses.

71. C

Explanation: The sentence contains the time marker "yesterday," indicating the action happened in the past. Therefore, the simple past tense verb "went" is required.

72. B

Explanation: An antonym is an opposite word. Someone who lacks bravery is "Cowardly," making it the direct opposite of "Brave."

73. C

Explanation: The preposition "since" is used with the present perfect continuous tense to indicate the starting point of an action that continues to the present.

74. B

Explanation: A synonym is a word with a similar meaning. "Gorgeous" means exceptionally beautiful, making it the closest match.

75. C

Explanation: In English grammar, the third-person singular pronoun "He" must be paired with the singular "be" verb "is" in the present tense.

76. C

Explanation: The complete proverb is "Barking dogs seldom bite," which means people who make loud threats rarely carry them out.

77. D

Explanation: An adjective modifies a noun. In this sentence, "quick" describes the noun "nurse," making it the adjective.

78. B

Explanation: "Mouse" is an irregular noun in English. Its plural form completely changes the vowel sound to become "Mice."

79. C

Explanation: The antonym (opposite) of "Fresh" (meaning newly made or harvested) is "Stale" (meaning no longer fresh and pleasant to eat).

80. B

Explanation: The idiom "To let the cat out of the bag" means to accidentally or carelessly reveal a secret that was supposed to be kept hidden.

81. C

Explanation: Florence Nightingale is universally regarded as the founder of modern nursing for her pioneering work in sanitation and nursing education during the Crimean War.

82. B

Explanation: According to the WHO and CDC, consistent and proper hand hygiene (washing hands) is the single most effective way to prevent the transmission of infections.

83. C

Explanation: A sphygmomanometer, often consisting of an inflatable cuff and a pressure dial, is the specific medical instrument used to measure a patient's blood pressure.

84. B

Explanation: For a healthy, resting adult, the normal respiratory rate is typically between 12 and 20 breaths per minute.

85. C

Explanation: The pharmacological term "sublingual" literally translates to "under the tongue." Medications given this way are absorbed quickly through the mucous membranes.

86. B

Explanation: CPR involves chest compressions and rescue breaths to artificially pump oxygenated blood to the brain and vital organs until normal heart rhythm is restored.

87. B

Explanation: The abbreviation "NPO" comes from the Latin phrase "nil per os," which translates to "nothing by mouth," meaning the patient should not eat or drink anything.

88. B

Explanation: PPE stands for Personal Protective Equipment, which includes gloves, gowns, masks, and face shields designed to protect healthcare workers from infectious agents.

89. C

Explanation: The radial artery runs along the thumb-side of the inner wrist, making the wrist the correct anatomical location to palpate a radial pulse.

90. C

Explanation: The abbreviation "PRN" stands for "pro re nata" in Latin, meaning the medication should be administered "as needed" or "as the situation arises."

91. B

Explanation: In emergency life support (ABC), "A" stands for Airway, reminding the responder to first ensure the victim's airway is clear and open for breathing.

92. C

Explanation: An intramuscular (IM) injection delivers medication deep into the muscle tissue, allowing for rapid absorption into the bloodstream (e.g., vaccines).

93. C

Explanation: The Joint Commission mandates using at least two patient identifiers. Asking the patient to state their name and verifying their hospital wristband is standard protocol.

94. C

Explanation: The Red Cross emblem is internationally recognized as a symbol of protection, humanitarian aid, and medical care, especially in conflict zones and hospitals.

95. C

Explanation: Empathy in nursing is the therapeutic ability to understand, validate, and share the emotional state or feelings of a patient without simply feeling pity (sympathy).

96. B

Explanation: A normal and healthy systolic blood pressure reading for an adult is typically considered to be at or slightly below 120 mmHg.

97. C

Explanation: To maintain proper body mechanics and prevent spinal injuries, nurses are trained to lift heavy objects or patients using the strong muscles of their legs, not their back.

98. C

Explanation: The prefix "hyper-" means high or excessive, and "tension" refers to pressure. Hypertension is the clinical medical term for high blood pressure.

99. B

Explanation: Immobile patients are at high risk for tissue necrosis (bedsores). Standard nursing practice dictates repositioning them at least every 2 hours to relieve pressure.

100. C

Explanation: Professional nursing communication involves active listening and acknowledging a patient's concerns (validation) while attempting to find a practical and compassionate solution.