Foundations of Nursing

1. Which of the following is the most accessible and convenient site for temperature taking?
   a- Oral  b- Rectal  c- Tympanic  d- Axillary

2. Which of the following is an example of a subjective data?
   a- Heart rate of 68 beats per minute.  
   b- Yellowish sputum  
   c- Client verbalized "I feel pain when urinating."  
   d- Noisy breathing

3. Which of the following is the most important purpose of hand washing?
   a- To promote hand circulation  
   b- To prevent the transfer of microorganisms  
   c- To avoid touching the client with dirty hands  
   d- To provide comfort

4. Which of the following conditions may require fluid restriction?
   a- Fever  
   b- Bronchial asthma  
   c- Renal failure  
   d- Dehydration

5. Which of the following procedures always require surgical asepsis?
   a- Colostomy irrigation  
   b- Vaginal instillation of estrogen  
   c- Nasogastric tube insertion  
   d- Urinary catheterization

6. What should be done in order to prevent contaminating the environment in bed making?
   a- Avoid fluffing solid linens  
   b- Strip all linens at the same time  
   c- Finish both sides at the time  
   d- Embrace solid linen

7. Which of the following techniques of physical exam involves the sense of sight?
   a- Inspection  b- Palpation  c- Percussion  d- Auscultation

8. What does the term gavage indicate?
   a- Visual examination of the stomach  
   b- Irrigation of the stomach with a solution  
   c- A surgical opening through the abdomen to the stomach  
   d- Administration of a liquid feeding into the stomach
9. What is the most common inexpensive oxygen delivery system?
   a- Laryngeal mask airway  
   b- Venturi mask  
   c- Face mask  
   d- Transtracheal oxygen delivery

10. Which of the following is defined as a painful sensation perceived in a body part that is missing?
    a- Phantom pain  
    b- Neuropathic pain  
    c- Intractable pain  
    d- Radiated pain

11. Which one is an open ended question during data collection from the client by interview?
    a- How old are you?  
    b- How many children do you have?  
    c- Are you having pain now?  
    d- What would you like to talk about your disease?

12. How much is the urinary output for adult per day?
    a- 1400-1500 ml  
    b- 350-400 ml  
    c- 200-350 ml  
    d- 100-200ml

13. What is the most serious problem arising from severe diarrhea?
    a- Constipation  
    b- Bowel incontinence  
    c- Fluid and electrolytes loss  
    d- Flatulence

14. What does Tid abbreviation used in medication order mean?
    a- Twice a day  
    b- Four times a day  
    c- Three times a day  
    d- Every other day

15. What does the movement of the bone away from the midline of the body called?
    a- Extension  
    b- Abduction  
    c- Adduction  
    d- Rotation

16. What is the preferred site for intramuscular injection (I.M) for adult client?
    a- Vastus lateralis muscle  
    b- Gluteal muscle  
    c- Deltoid muscle  
    d- Abdocent muscle

17. Which of the following terms describes the difference between the systolic and diastolic pressure?
    a- Apical rate  
    b- Cardiac rate  
    c- Pulse deficit  
    d- Pulse pressure

18. Constipation is a common problem for immobilized patient's because of:
    a- Decreased peristalsis & positional discomfort  
    b- An increased defecation reflex  
    c- Decreased tightening of the anal sphincter  
    d- Increased colon motility

19. Which element in the circular of infection can be eliminated by preserving skin integrity?
    a- Reservoir  
    b- Mode of transmission  
    c- Host  
    d- Portal of entry
20. Which of the following is the appropriate route of administration for insulin?
   a- Intramuscular  b- Intravenous  
   c- Subcutaneous  d- Intradermal

**Infection Control**

21. Symptoms indicating presence of a local infection include all of the following except:
   a- Redness  b- Pain  
   c- Swelling  d- Hypothermai

22. Which one is considered a patient related risk for development of nosocomial infection:
   a- Contaminated air-conditioning systems.  
   b- Underlying immune compromised state.  
   c- Endotracheal intubation.  
   d- Medical personnel hands.

23. Conjunctival trachoma is caused by:
   a- Tuberculosis  b- Rickettsia  
   c- Chlamydia  d- Mycoplasma

24. The primary host for bovine tuberculosis is:
   a- Cattle  b- Humans  
   c- Birds  d- Sheep

25. In viral life cycle, attachment of the virus to receptors on the cell surface is a process called:
   a- Adsorption  b- Penetration  
   c- Replication  d- Release

26. The usual cause of pneumonia in AIDS patients is:
   a- Mycobacteria  b- Chlamydia  
   c- Pneumocystic carinnii  d- Legionella pneumophilia

27. Stopping multiplication of bacterial cells is a mechanism named:
   a- Bacteriocidal  b- Bacteriostatic  
   c- Immunity  d- Colonization

28. Which one is a quinolone drug:
   a- Gentamycin  b- Penicillin  
   c- Acyclovir  d- Ciprofloxacin

29. Which of the following may cause bone marrow toxicity:
   a- Chloramphenicol  b- Tobramycin  
   c- Tetracycline  d- Cefuroxime

30. Cleaning can be done by the use of:
   a- Disinfectants  b- Alcohol and iodine  
   c- Ultraviolet light  d- Soap and detergents
31. The ideal disinfectant is characterized by all of the following except:
   a- Broadly active  b- Not poisonous  c- Unstable  d- Penetrating to pathogens

32. Guidelines to protect workers from exposure to disease spread by blood and certain body fluids are called:
   a- Universal precautions  b- Personal protective equipment  c- Infection control  d- Disinfection

33. Preventing transmission of infectious disease from patient to others and visa versa can be achieved through:
   a- Isolation  b- Immunization  c- Treatment  d- Admission to intensive care unit

34. Which statement is not true regarding hospital environment cleaning:
   a- Office areas with no patient contact require normal domestic cleaning.
   b- All toilet areas should be cleaned weekly
   c- The use of a neutral detergent solution improves the quality of cleaning.
   d- Routine cleaning is important.

35. Otitis media indicates infection of:
   a- Paranasal sinuses  b- Pharynx  c- Inner ear  d- Middle ear

36. Presence of productive cough lasting 3 months in 2 consecutive years is called:
   a- Acute bronchitis  b- Bronchial asthma  c- Chronic bronchitis  d- Emphysema

37. Which of the following infections is the most serious and potentially life-threatening:
   a- Bronchitis  b- Epiglottitis  c- Sinusitis  d- Otitis media

38. Which of the following carries the least risk of infection:
   a- Mechanical ventilators  b- Nebulizers  c- Humidifiers  d- Suction catheters

39. To be accepted, tubes containing specimens sent for lab testing should have all of the following except:
   a- Properly completed request.  b- Sufficient quantity of specimen.
   c- Labeled.  d- Leaking.

40. Sputum induction is indicated for:
   a- Bronchial asthma patients  b- Diagnosis of tuberculosis  c- Allergic patients  d- Diagnosis of sinusitis

Neonatal Respiratory Care

41. All of the following factors play a significant role in fetal lung development except:
   a- Physical factor  b- Hormonal factor  c- Gender factor  d- Local factor

42. Which is a normal infant respiratory rate is:
   a- 40 / min  b- 20 /min  c- 70 /min  d- 20-90 /min
43. Most pulmonary malformations arise during:
   a- Prematurity stage
   b- More than 30 weeks gestational age
   c- A month after birth
   d- Embryonic stage

44. The normal infant pulse rate is:
   a- 100-120 bpm
   b- 110-120 bpm
   c- 120-160 bpm
   d- More than 160 bpm

45. Apgar score below 3 at 10 minutes indicates the risk of:
   a- Neurological damage
   b- Heart failure
   c- Pneumonia
   d- Respiratory distress syndrome

46. Chest compression in infant should be administrated if the heart rate is:
   a- Less than 100 bpm
   b- Less than 90 bpm
   c- Less than 60 bpm
   d- More than 90 bpm

47. Collapsing force in the alveoli is reduced by:
   a- Pulmonary surfactant
   b- Oxygen therapy
   c- Macrophages
   d- Nasal suction

48. All of the following are equipments needed during transport of a ventilated infant except:
   a- Nasogastric tube
   b- Sterile gloves
   c- Ambo-bag
   d- Oral thermometer

49. Which pulmonary disorder is related to prematurity?
   a- pneumonia
   b- pnemothorax
   c- Respiratory Distress Syndrome
   d- Lung hyperplasia

50. Meconium aspiration occurs most commonly in:
   a- In Neonatal ICU
   b- After birth
   c- Uterus
   d- At 30 weeks of gestational age

51. Which condition causes pneumonia in an infant:
   a- Prematurity
   b- Aspiration of gastric contents
   c- Apnea
   d- Tissue hypoxia

52. Pulmonary vascular resistance is elevated in one of the following conditions:
   a- Pneumonia
   b- Pulmonary hypertension
   c- Respiratory Distress Syndrome
   d- Apnea

53. What is the condition of reduction of oxygen transport below a critical level?
   a- Bronchitis
   b- Pneumonia
   c- Respiratory Distress Syndrome
   d- Tissue hypoxia
54. Failure of normal development of the diaphragm during 1st trimester will result in:
   a- Congenital diaphragmatic hernia
   b- Inguinal hernia
   c- Incisional hernia
   d- Heart failure

55. All of following can impair lung growth in uterus except:
   a- Compression of the chest
   b- Compression of the lung
   c- Reduced of fetal breathing
   d- Pneumonia

56. Which one is used in treatment of infant’s apnea to maintain upper airway patency:
   a- CPAP mask
   b- Physical therapy
   c- Pharmacology therapy
   d- Nasal cannula

57. The mechanical ventilation setting used in treatment of chronic diseases in infant is:
   a- As any lung disease
   b- The highest sitting
   c- The lowest sitting
   d- CPAP only

58. Surfactant replacement therapy is used in treatment of:
   a- Premature infants
   b- Apnea
   c- Chronic lung diseases
   d- Diaphragmatic hernia

59. The most common cardiac problem in new born is:
   a- Atrial Septal Defect
   b- Patent Ductus Arteriosus
   c- Ventricular Septal Defect
   d- Tetralogy Of Fallot

60. Increased main airway pressure can lead to:
   a- Apnea
   b- Pneumonia
   c- Patent Ductus Arteriosus
   d- Impedance of venous return

### Mechanical Ventilators

61. Minute ventilation equals:
   a- Tidal Volume x Residual Volume.
   b- Functional Residual Capacity.
   c- Dead Space x Respiratory Rate.
   d- Tidal Volume x Respiratory Rate.

62. To push air into the lungs, positive pressure ventilators uses pressures:
   a- Above atmospheric pressure.
   b- Below atmospheric pressure.
   c- Sea level pressure.
   d- Depends on the tidal volume.

63. Which of the following is a volume-cycled mode of ventilation?
   a- CPAP
   b- Intermittent Mandatory Ventilation
   c- PEEP
   d- Pressure Support Ventilation

64. Which factor determines how fast the tidal volume is delivered to the patient?
   a- Flow Rate (Peak Flow).
   b- Tidal Volume.
   c- Auto PEEP.
   d- PIP.
65. For patients with severe hypoxia, the initial FiO₂ sitting is:
   a- 50%.
   c- Not more 50%.
   b- 60% - 70%.
   d- 100%.

66. After stabilization of the patient and to avoid oxygen induced lung injury, the FiO₂ is best kept:
   a- Below 90%.
   c- Below 80%.
   b- More than 60%.
   d- Below 50%.

67. Which of the following increases functional residual capacity and is useful to treat refractory hypoxemia:
   a- PEEP.
   c- Tidal Volume.
   b- FiO₂.
   d- PIP.

68. Which of the following is a potential hazard associated with A/C mode?
   a- Hypertension.
   c- Auto PEEP.
   b- Alveolar hyperventilation.
   d- Self extubation.

69. The Mode which does not permit normal spontaneous breathing is:
   a- CMV.
   c- CPAP.
   b- SIMV.
   d- MMV.

70. The primary indication for SIMV mode is to:
   a- Control the tidal volume.
   c- Increase the CO₂ washing.
   b- Provide partial ventilatory support.
   d- Increase oxygenation.

71. What is the mode in which patients breathe independently either through the ventilator circuit or a special mask?
   a- A/C.
   c- SIMV.
   b- ASV.
   d- Non invasive BIPAP.

72. The most important ventilation alarm is:
   a- High tidal volume.
   c- Patient disconnection.
   b- High pressure.
   d- Low frequency.

73. Positive pressure ventilation decreases renal perfusion by:
   a- Improving oxygenation.
   c- Affecting cardiac output.
   b- Increasing CO₂.
   d- Retention of water.

74. A patient with (PaCO₂ 70 mmHg & pH 7.10), this result indicates:
   a- A need for ventolin nebulizer
   c- Mechanical ventilation.
   b- Bronchodilator.
   d- Nasal suction.

75. Mechanical ventilation is indicated in one of the following:
   a- PaO₂ 65 mmHg.
   c- PaO₂ 75 mmHg.
   b- PaO₂ 45 mmHg.
   d- PaO₂ 85 mmHg.
76. Which of the following is a mechanical ventilation hazard:
   a- Renal failure.  
   b- Heart failure.  
   c- Nosocomial infection.  
   d- Urinary tract infection.

77. Which of the following is more likely to develop more complications regarding the use of mechanical ventilation?
   a- No relation with the periods.  
   b- Decreased with long periods.  
   c- Short periods.  
   d- Long periods.

78. Barotrauma is most likely to occur with peak inspiratory pressures of more than:
   a- 20 cmH₂O.  
   b- 50 cmH₂O.  
   c- 10 cmH₂O.  
   d- 5 cmH₂O.

79. Compliance of the lungs means:
   a- Change in volume per unit change in pressure.  
   b- Change in plateau pressure per unit change in volume.  
   c- Change in peak pressure per unit change tidal volume.  
   d- Amount of dead space ventilation.

80. The first rule of health care is:
   a- Machine is always safe.  
   b- Look to the machine first then look to the patient.  
   c- Don not harm the patient.  
   d- Family members have no right to ask about their patient.

81. One of the following is a normal value of serum bicarbonate:
   a- 7.40  
   b- 98%  
   c- 24 mmol/Liter  
   d- 100 mmHg

82. In a patient under stress with (pH = 7.40, PaCO₂ = 20 mmHg and HCO₃⁻ = 20 mmol/L). This patient is having:
   a- Uncompensated respiratory acidosis  
   b- Compensated respiratory alkalosis  
   c- Metabolic alkalosis  
   d- This is a normal ABG’s

83. O₂ requirements for a 70 kg body weight adult is:
   a- 100 ml/minute  
   b- 250 ml/minute  
   c- 450 ml/minute  
   d- 650 ml/minute

84. Signs and symptoms of metabolic acidosis include all of the following except:
   a- Muscle weakness  
   b- Coma  
   c- Warm skin  
   d- Respiratory depression
For a normal healthy adult one of the following statements is not correct:

85. a- $\text{PaO}_2 : 60 \text{ mmHg}$  
b- $\text{O}_2 \text{ saturation : } 98-100\%$

c- $\text{CO}_2 \text{ production : } 200 \text{ ml/min}$  
d- $\text{pH : } 7.35 - 7.45$

The following ABG’s : pH 7.26 , $\text{PaCO}_2 60 \text{ mmHg} , \text{HCO}_3 26.0$ represents:

86. a- Metabolic acidosis  
b- Respiratory alkalosis  
c- Metabolic alkalosis  
d- Respiratory acidosis

A patient with $\text{PaCO}_2 20 \text{ mmHg}$ should have a pH of:

87. a- 7.56  
b- 7.40  
c- 7.30  
d- 7.20

The functional residual capacity is equal to:

88. a- Tidal volume  
b- Residual volume  
c- Expiratory reserve volume and residual volume  
d- Total lung capacity

FEV1 is normally:

89. a- 40% of forced vital capacity  
b- 50% of forced vital capacity  
c- 60% of forced vital capacity  
d- 80% of forced vital capacity

All are bronchodilators except:

90. a- Aminophylline  
b- Salbutamol  
c- $\text{O}_2$ therapy  
d- Ibratropium

The most accurate method for measuring Functional Residual Capacity is:

91. a- Body plethysmopraphy  
b- Helium dilution  
c- Nitrogen washout  
d- Single breath nitrogen elimination

All are true about ventilation/perfusion scan except:

92. a- Measures gas and blood flow distribution  
b- Involves inhalation of radiolabeled gas (xenon) and injection of radioisotope  
c- Can predict pulmonary embolism  
d- Can predict myocardial infarction

Minute ventilation equals:

93. a- Tidal Volume $\times$ Respiratory Rate  
b- Tidal Volume / Respiratory Rate  
c- Tidal Volume $\times$ Dead Space  
d- Tidal Volume / Dead Space
94. Which of the following bronchodilators is an anticholinergic:
   a- Salbutamol  b- Aminophylline  c- Adrenaline  d- Atropine

95. All of the following might be a cause of respiratory acidosis except:
   a- Sedation  b- Hyperventilation  c- Head trauma  d- COPD

96. All of the following are reasons to order an ABG on a patient except:
   a- Severe asthma  b- Cyanosed patient with obstructive sleep apnea  c- Respiratory rate of 12/min in adult patient  d- Diabetic patient with kussmaul's respiration

97. All are true about non-invasive IPPV except:
   a- Increases ventilation by increasing tidal volume  b- Patient should be mechanically ventilated  c- Decreases work of breathing  d- Improves oxygenation

98. Sleep apnea syndromes include all except:
   a- Chronic bronchitis  b- Obstructive sleep apnea  c- Central sleep apnea  d- Mixed sleep apnea

99. Obstructive sleep apnea treatment include all except:
   a- Weight reduction  b- Sedatives  c- Oxygen  d- CPAP

100. The emergency bronchodilators are:
    a- Oral corticosteroids  b- Inhaled corticosteroids  c- Long-acting inhaled beta2  d- Short-acting inhaled beta 2 agonists like salbutamol (Ventolin)