1. In sequencing a newborn examination, the preferred order is:
   a. auscultation, palpation, observation
   b. palpation, observation, auscultation
   c. observation, auscultation, palpation

2. In examining a newborn infant, the maneuver that is best done last is the examination of the:
   a. hips
   b. kidneys
   c. Moro reflex

3. The Bruckner test assesses:
   a. astigmatism
   b. bilateral red reflex
   c. pupillary accommodation

4. The bell of the stethoscope is best at detecting sounds that are of what type of frequency?
   a. both high and low
   b. high
   c. low

**Course Objectives**

1. List the principles of physical assessment relevant to the newborn.
2. Outline the salient information that should be recorded in the newborn history.
3. Describe the components of a gestational age assessment.
4. Describe the elements of a complete newborn physical assessment.
5. Outline the components of a newborn behavioral assessment.
6. Discuss an approach to the assessment of the dysmorphic infant.
5. In a newborn, the otoscopic examination is omitted because the ear canals are:
   a. fragile and prone to injury
   b. often filled with vernix
   c. too small to admit the otoscope

6. Maternal ingestion of high doses of aspirin during pregnancy places the neonate at risk for:
   a. hypotonia
   b. pulmonary hypertension
   c. respiratory depression

7. Fetal effects of maternal phenytoin treatment include:
   a. bleeding disorder
   b. hypoplastic kidneys
   c. cardiac defects

8. Neonatal side effects of maternal tocolysis with magnesium sulfate include:
   a. hypoglycemia
   b. hypotonia
   c. respiratory depression

9. An infant born to a mother taking large doses of vitamin D should be monitored for:
   a. hypercalcemia
   b. hypotension
   c. hypomagnesemia

10. In Rh negative women, Rho(D) immune globulin is normally given at _____ weeks gestation.
    a. 20
    b. 28
    c. 32

11. Hypocalcemia in the newborn is more common with a history of maternal:
    a. hypothyroidism
    b. diabetes mellitus
    c. myasthenia gravis

12. Maternal Grave’s disease predisposes the newborn to:
    a. congestive heart failure
    b. respiratory distress syndrome
    c. thrombocytopenia

13. Compared to conceptional age, gestational age is _____ weeks longer.
    a. 1
    b. 2
    c. 3

14. According to data from Pediatrix Medical Group, the percentage of 24 week gestational age infants who survive without severe intraventricular hemorrhage or retinopathy of prematurity is:
    a. 16.3
    b. 39.3
    c. 58.9

15. According to Näegele’s rule, the due date of a woman whose last menstrual period began on May 15 would be:
    a. February 8
    b. February 22
    c. March 8

16. A dating ultrasound is most accurate when performed between _____ weeks of gestation.
    a. 6–13
    b. 14–20
    c. 21–27

17. Which of the following ultrasound measurements is most accurate in determining gestational age?
   a. biparietal diameter
   b. femur length
   c. head circumference

18. An examination of the anterior vascular capsule of the lens is inaccurate if performed after _____ hours of age.
    a. 24
    b. 36
    c. 48

19. It is generally advised that the gestational age examination be done within how many hours of birth?
    a. 48
    b. 72
    c. 96

20. A very low birth weight infant is defined as one weighing <_____ g at birth.
    a. 1,250
    b. 1,500
    c. 1,750

21. A pigmented, flat spot less than one centimeter in diameter is referred to as a:
    a. macule
    b. papule
    c. wheal

22. An infant is said to be polycythemic when the central hematocrit exceeds _____ percent.
    a. 60
    b. 65
    c. 70

23. Persistent cutis marmorata is seen in which of the following conditions?
    a. Marfan syndrome
    b. trisomy 18
    c. Turner syndrome
24. An immature autonomic nervous system is thought to be responsible for which of the following newborn findings?
   a. acrocyanosis
   b. erythema toxicum
   c. harlequin color change

25. The Latin term for prickly heat rash is:
   a. erythema toxicum
   b. miliaria rubra
   c. sebaceous nevus

26. A plaque that is yellow-orange in color and found on the scalp is most likely a:
   a. melanocytic nevus
   b. sebaceous nevus
   c. subcutaneous fat necrosis

27. Which of the following statements is true of neonatal pustular melanosis? It:
   a. is a benign condition
   b. increases later risk of skin cancer
   c. is most common in Caucasian infants

28. The majority of patients with neurofibromatosis have:
   a. ash leaf macules
   b. café au lait patches
   c. Mongolian spots

29. Auscultation of the fontanel should be performed on infants with:
   a. congestive heart failure
   b. microcephaly
   c. petechiae

30. The posterior fontanel normally closes when the infant is how many weeks of age?
   a. 5–7
   b. 8–12
   c. 13–15

31. The presence of a third fontanel may be associated with:
   a. congenital hypothyroidism
   b. osteogenesis imperfecta
   c. Turner syndrome

32. Scaphocephaly results from premature fusion of which sutures?
   a. coronal
   b. lambdoidal
   c. sagittal

33. Craniotabes is a finding in:
   a. hypothyroidism
   b. hypophosphatemia
   c. vitamin D deficiency

34. Excessive ear hair is seen in infants with:
   a. congenital adrenal hyperplasia
   b. poorly controlled maternal diabetes
   c. maternal antiepileptic medication exposure

35. Findings of Cornelia de Lange syndrome include the presence of:
   a. abnormal hair whorls
   b. a coloboma
   c. eyebrows that meet at the glabella

36. Macroglossia is one of the findings in:
   a. galactosemia
   b. mucopolysaccharidosis
   c. Pierre Robin sequence

37. How many pairs of true ribs does a human have?
   a. 5
   b. 7
   c. 12

38. Causes of bradypnea in newborns include:
   a. asphyxia
   b. hyperthermia
   c. postmaturity

39. Seesaw respirations in newborns are suggestive of:
   a. aspiration pneumonia
   b. loss of lung volume
   c. neurologic injury

40. In extremely premature infants, periodic breathing may persist up until how many weeks postconceptional age?
   a. 38
   b. 40
   c. 43

41. Snuffles is a finding in congenital:
   a. parvovirus infection
   b. rubella syndrome
   c. syphilis

42. In term infants the chest circumference is normally how many centimeters less than the head circumference?
   a. 1
   b. 2
   c. 3

43. A barrel chest is a finding commonly seen in infants with:
   a. pneumonia
   b. respiratory distress syndrome
   c. transient tachypnea of the newborn

44. Maternal alcohol abuse is associated with which of the following type of heart defect in offspring?
   a. coarctation of the aorta
   b. septal defects
   c. tetralogy of Fallot
45. Maternal lupus erythematosus increases the risk of the fetus having:
   a. aortic aneurysm
   b. congenital heart block
   c. hypertrophic cardiomyopathy

46. Which of the following extracardiac anomalies is associated with an increased risk of congenital heart disease?
   a. diaphragmatic hernia
   b. port wine stain over the nose
   c. supernumerary nipples

47. In newborns with a normal hemoglobin level, central cyanosis is not usually visible until the arterial saturation falls below ______ percent.
   a. 80–85
   b. 85–90
   c. 90–95

48. Lesions that result in bounding pulses include:
   a. coarctation of the aorta
   b. patent ductus arteriosus
   c. ventricular septal defect

49. In the immediate newborn period, the point of maximal intensity is usually best felt in which intercostal space?
   a. third
   b. fourth
   c. fifth

50. Sinus bradycardia is common in neonates because of the predominance of which nervous system?
   a. parasympathetic
   b. somatic
   c. sympathetic

51. In neonates, a third heart sound, if present, is best heard at the apex of the heart during:
   a. early diastole
   b. late diastole
   c. early systole

52. In neonates, abdominal circumference is less than head circumference until how many weeks gestational age?
   a. 28–30
   b. 30–32
   c. 32–34

53. A flaccid, lumpy, abdominal wall is characteristic of:
   a. diaphragmatic hernia
   b. meconium ileus
   c. Eagle-Barrett syndrome

54. Bilious vomiting is associated with a gastrointestinal obstruction below the level of the:
   a. ampulla of Vater
   b. ligament of Treitz
   c. ileocecal valve

55. An umbilical hernia is a feature of:
   a. congenital adrenal hyperplasia
   b. hypothyroidism
   c. Turner syndrome

56. A patent urachus connects the umbilicus and the:
   a. bladder
   b. duodenum
   c. ileum

57. Anomalies associated with gastroschisis include:
   a. bowel atresia
   b. cardiac defects
   c. renal hypertension

58. In neonates, a normal spleen should not extend more than how many centimeters below the costal margin?
   a. 1
   b. 2
   c. 3

59. Neonates with a history of oligohydramnios should be observed for:
   a. bowel obstruction
   b. esophageal atresia
   c. pulmonary hypoplasia

60. Rugae begin to develop on the scrotum at _____ weeks of gestation.
   a. 32
   b. 34
   c. 36

61. The descent of the testes from the abdomen into the scrotum begins at approximately how many weeks gestation?
   a. 25–27
   b. 28–30
   c. 31–33

62. In term, female infants the effects of maternal estrogen can persist for up to how many weeks?
   a. 8
   b. 10
   c. 12

63. Renal anomalies associated with Eagle-Barrett syndrome include:
   a. hydronephrosis
   b. pelvic cysts
   c. posterior urethral valves

64. Penile hypospadias is often accompanied by:
   a. chordee
   b. cryptorchidism
   c. endocrine disorders
65. Cryptorchidism occurs in what percentage of term, male infants?
   a. 1–2
   b. 2–3
   c. 3–4

66. In cases of testicular torsion, the gonad is usually unsalvageable when ischemia exceeds _____ hours.
   a. 1–2
   b. 2–4
   c. 4–6

67. The average daily weight gain for a term newborn is _____ g/kg/day.
   a. 10–20
   b. 20–30
   c. 30–40

68. The average head circumference of a term newborn at birth is _____ cm.
   a. 31–33
   b. 33–35
   c. 35–37

69. A fractured clavicle often results in which reflex being asymmetric?
   a. grasp
   b. incurving
   c. Moro

70. Macroductyly is a finding in which of the following?
   a. Down syndrome
   b. lipoma
   c. trisomy 18

71. Puffy hands and feet are a characteristic finding of what syndrome?
   a. Cornelia de Lange
   b. Marfan
   c. Noonan

72. The Ortolani maneuver is considered positive if:
   a. a “clunk” is felt over the femoral head
   b. the femur can be displaced in a downward direction
   c. no clicks or clunks are felt

73. Undetected torticollis may result in the development of:
   a. plagiocephahy
   b. Sprengel's deformity
   c. scoliosis

74. Infants with radial hypoplasia should be investigated for:
   a. Klippel-Feil syndrome
   b. Pierre Robin sequence
   c. VACTERL association

75. Port wine stains involving areas innervated by the trigeminal nerve are markers for:
   a. neurofibromatosis
   b. Sturge-Weber syndrome
   c. tuberous sclerosis

76. Klumpke's palsy results from damage to the spinal roots between which vertebrae?
   a. C4 and C6
   b. C6 and C8
   c. C8 and T1

77. Phasic tone is evaluated by testing the:
   a. deep tendon reflexes
   b. pull-to-sit maneuver
   c. traction response

78. The strength of the lower extremities can be evaluated by eliciting which reflex?
   a. Babinski
   b. Galant
   c. stepping

79. Opisthotonus is sometimes seen in cases of:
   a. bacterial meningitis
   b. infantile botulism
   c. myasthenia gravis

80. Pupillary response to light is normally present by how many weeks gestational age?
   a. 25–27
   b. 28–30
   c. 31–33

81. Apnea, weakness, and jitteriness are seen in infants with severe encephalopathy in _____ hours after birth.
   a. 0–10
   b. 12–24
   c. 28–72

82. Neurologic signs of in utero exposure to tobacco include:
   a. apnea
   b. hyper-tonicity
   c. tremors

83. In newborns, irregular respirations are most often seen in which behavioral state?
   a. active alert
   b. drowsy
   c. quiet alert

84. How many behavioral states are identified on the Anderson Behavioral State Scale?
   a. 6
   b. 9
   c. 12
85. In a newborn, avoidance behaviors include:
   a. dilated pupils
   b. grasping movements
   c. yawning

86. Habituation is best assessed in which state?
   a. active alert
   b. drowsy alert
   c. crying

87. The optimal distance for a newborn infant to focus on an object is how many inches?
   a. 10–12
   b. 13–15
   c. 16–18

88. What percentage of newborn deaths is attributed to a birth defect?
   a. 10
   b. 20
   c. 30

89. Which of the following birth defects is known to be inheritable?
   a. cataracts
   b. microcephaly
   c. omphalocele

90. Genetic syndromes associated with redundant skin in the neck include:
   a. DiGeorge
   b. Klinefelter
   c. Turner

91. Osteogenesis imperfecta should be suspected in infants with:
   a. blue sclera
   b. epicanthal folds
   c. cloudy corneas

92. What percentage of infants with a single umbilical artery have associated anomalies?
   a. 20
   b. 30
   c. 40

93. Neurofibromatosis is an example of a disorder that is:
   a. autosomal dominant
   b. autosomal recessive
   c. x-linked recessive

94. Clinical findings in Beckwith-Wiedemann syndrome include:
   a. hooded eyelids
   b. large tongue
   c. web neck

95. The most common cardiac defect seen in fetal alcohol syndrome is:
   a. coarctation of the aorta
   b. total anomalous pulmonary venous return
   c. ventricular septal defect

96. Which of the following is characteristic of a cry face?
   a. dilated pupils
   b. nasolabial furrow
   c. slack mouth

97. Physiologic indicators of pain scored on the PIPP-R scale include:
   a. blood pressure
   b. work of breathing
   c. oxygen saturation

98. The CRIES instrument was originally developed to measure:
   a. level of sedation
   b. pain in term infants
   c. postoperative pain in preterm infants

99. Behavioral parameters evaluated with the NIPS tool include:
   a. breathing pattern
   b. sleeplessness
   c. state of arousal

100. During heel lancing, infants exposed to SSRIs have been shown to have:
   a. decreased facial reactions
   b. elevated heart rate
   c. prolonged crying
ANSWER FORM: Physical Assessment of the Newborn, 5th Edition
Please completely fill in the circle of the one best answer using a dark pen.

Numbered vertically.

1. a. 12. a. 23. a. 34. a. 45. a. 56. a. 67. a. 78. a. 89. a. 99. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

2. a. 13. a. 24. a. 35. a. 46. a. 57. a. 68. a. 79. a. 90. a. 100. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

3. a. 14. a. 25. a. 36. a. 47. a. 58. a. 69. a. 80. a. 91. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

4. a. 15. a. 26. a. 37. a. 48. a. 59. a. 70. a. 81. a. 92. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

5. a. 16. a. 27. a. 38. a. 49. a. 60. a. 71. a. 82. a. 93. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

6. a. 17. a. 28. a. 39. a. 50. a. 61. a. 72. a. 83. a. 94. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

7. a. 18. a. 29. a. 40. a. 51. a. 62. a. 73. a. 84. a. 95. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

8. a. 19. a. 30. a. 41. a. 52. a. 63. a. 74. a. 85. a. 96. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

9. a. 20. a. 31. a. 42. a. 53. a. 64. a. 75. a. 86. a. 97. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

10. a. 21. a. 32. a. 43. a. 54. a. 65. a. 76. a. 87. a. 98. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

11. a. 22. a. 33. a. 44. a. 55. a. 66. a. 77. a. 88. a.
b. b. b. b. b. b. b. b. b. b.
c. c. c. c. c. c. c. c. c. c.

Physical Assessment of the Newborn, 5th Edition

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**Evaluation Directions**

Thank you for taking the time to assist us in evaluating the effectiveness of this course. Using the scale below, darken the circles corresponding to your responses. If an item is not applicable, leave it blank.

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**Objectives:**
After reading the book, studying the content, and taking the test, the learner will be able to:

1. List the principles of physical assessment relevant to the newborn.  
   1 2 3 4 5
2. Outline the salient information that should be recorded in the newborn history.  
   1 2 3 4 5
3. Describe the components of a gestational age assessment.  
   1 2 3 4 5
4. Describe the elements of a complete newborn physical assessment.  
   1 2 3 4 5
5. Outline the components of a newborn behavioral assessment.  
   1 2 3 4 5
6. Discuss an approach to the assessment of the dysmorphic infant.  
   1 2 3 4 5

**Presentation**

1. The CNE activity is relevant to my practice.  
   1 2 3 4 5
2. The content of this CNE activity is likely to engender a change in my clinical practice.  
   1 2 3 4 5
3. The questions on the test reflected the content of the book.  
   1 2 3 4 5
4. The activity content was comprehensive.  
   1 2 3 4 5
5. The activity directions were clear.  
   1 2 3 4 5
6. The CNE activity was free of commercial bias.  
   1 2 3 4 5
7. I would recommend this CNE activity to colleagues.  
   1 2 3 4 5
8. I perceive the education level of this course to be:  
   1 = Basic; 2 = Intermediate; 3 = Advanced  
   1 2 3
9. How long did it take you to complete the course?  
   ___ hours ___ minutes
10. In what level unit do you practice?  
    I ___ II ___ III ___
I am a  □ staff nurse  □ NNP  □ nurse manager  ________________________________ other (please state)

What subjects would you like to see offered for CE courses?  
______________________________________________________________________________
______________________________________________________________________________

Additional comments:  
______________________________________________________________________________
______________________________________________________________________________