

# Physical Assessment of the Newborn, 5th Edition

## TEST DIRECTIONS

1. Please fill out the answer form and provide all requested information. We are unable to issue a certificate without complete information.
2. All questions and answers are developed from the information provided in the book. Select the one best answer and fill in the corresponding circle on the answer form.
3. Mail the answer form to NICU INK, 1425 N. McDowell Blvd., Ste. 105, CA 94954-6513 with a check for \$50 (processing fee) made payable to NICU INK. This fee is nonrefundable.
4. You will be notified of your test results within 6–8 weeks. Please retain a copy of the completed test for your records.
5. An answer key is available upon request with completion of the exam.
6. If you pass the test (80%) you will earn 10 contact hours\* for the course (0.7 hour pharmacology credit).

Provider, Academy of Neonatal Nursing, approved by the California Board of Registered Nursing, Provider #CEP 6261; and Florida Board of Nursing, Provider #FBN 3218, content code 2505.

The Academy of Neonatal Nursing is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

No relevant financial interest or affiliation with any commercial interests was disclosed by members of the activity test panel.

\*Contact hours based on a 60-minute hour.

## NATIONAL CERTIFICATION CORPORATION (NCC) COMPETENCY CATEGORIES BY SPECIALTY AND CODES

NCC Code	Total 10 Contact Hours
<b>NIC</b>	
General Assessment (1)	10
<b>NNP</b>	
Physical Assessment (1)	10

NCC competency categories are provided for your information. The category breakdown is an estimate. The final decision regarding competency categories is at the discretion of NCC.

### Before you begin...

This course is subject to periodic review and update. To access the most recent update, visit Continuing Education at [nicuink.net](http://nicuink.net).

Current course release date: December 31, 2017

## 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.

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1. In sequencing a newborn examination, the preferred order is:

- a. auscultation, palpation, observation
- b. palpation, observation, auscultation
- c. observation, auscultation, palpation

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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

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3. The Bruckner test assesses:

- a. astigmatism
- b. bilateral red reflex
- c. pupillary accommodation

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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

- 
5. In a newborn, the otoscopic examination is omitted because the ear canals are:
- fragile and prone to injury
  - often filled with vernix
  - too small to admit the otoscope
- 
6. Maternal ingestion of high doses of aspirin during pregnancy places the neonate at risk for:
- hypotonia
  - pulmonary hypertension
  - respiratory depression
- 
7. Fetal effects of maternal phenytoin treatment include:
- bleeding disorder
  - hypoplastic kidneys
  - cardiac defects
- 
8. Neonatal side effects of maternal tocolysis with magnesium sulfate include:
- hypoglycemia
  - hypertonia
  - respiratory depression
- 
9. An infant born to a mother taking large doses of vitamin D should be monitored for:
- hypercalcemia
  - hyponatremia
  - hypomagnesemia
- 
10. In Rh negative women, Rho(D) immune globulin is normally given at \_\_\_\_\_ weeks gestation.
- 20
  - 28
  - 32
- 
11. Hypocalcemia in the newborn is more common with a history of maternal:
- hypothyroidism
  - diabetes mellitus
  - myasthenia gravis
- 
12. Maternal Grave's disease predisposes the newborn to:
- congestive heart failure
  - respiratory distress syndrome
  - thrombocytopenia
- 
13. Compared to conceptional age, gestational age is \_\_\_\_\_ weeks longer.
- 1
  - 2
  - 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:
- 16.3
  - 39.3
  - 58.9
- 
15. According to Nägele's rule, the due date of a woman whose last menstrual period began on May 15 would be:
- February 8
  - February 22
  - March 8
- 
16. A dating ultrasound is most accurate when performed between \_\_\_\_\_ weeks of gestation.
- 6–13
  - 14–20
  - 21–27
- 
17. Which of the following ultrasound measurements is most accurate in determining gestational age?
- biparietal diameter
  - femur length
  - head circumference
- 
18. An examination of the anterior vascular capsule of the lens is inaccurate if performed after \_\_\_\_\_ hours of age.
- 24
  - 36
  - 48
- 
19. It is generally advised that the gestational age examination be done within how many hours of birth?
- 48
  - 72
  - 96
- 
20. A very low birth weight infant is defined as one weighing <\_\_\_\_\_ g at birth.
- 1,250
  - 1,500
  - 1,750
- 
21. A pigmented, flat spot less than one centimeter in diameter is referred to as a:
- macule
  - papule
  - wheal
- 
22. An infant is said to be polycythemic when the central hematocrit exceeds \_\_\_\_\_ percent.
- 60
  - 65
  - 70
- 
23. Persistent cutis marmorata is seen in which of the following conditions?
- Marfan syndrome
  - trisomy 18
  - Turner syndrome
-

- 
24. An immature autonomic nervous system is thought to be responsible for which of the following newborn findings?
- acrocyanosis
  - erythema toxicum
  - harlequin color change
- 
25. The Latin term for prickly heat rash is:
- erythema toxicum
  - miliaria rubra
  - sebaceous nevus
- 
26. A plaque that is yellow-orange in color and found on the scalp is most likely a:
- melanocytic nevus
  - sebaceous nevus
  - subcutaneous fat necrosis
- 
27. Which of the following statements is true of neonatal pustular melanosis? It:
- is a benign condition
  - increases later risk of skin cancer
  - is most common in Caucasian infants
- 
28. The majority of patients with neurofibromatosis have:
- ash leaf macules
  - café au lait patches
  - Mongolian spots
- 
29. Auscultation of the fontanel should be performed on infants with:
- congestive heart failure
  - microcephaly
  - petechiae
- 
30. The posterior fontanel normally closes when the infant is how many weeks of age?
- 5–7
  - 8–12
  - 13–15
- 
31. The presence of a third fontanel may be associated with:
- congenital hypothyroidism
  - osteogenesis imperfecta
  - Turner syndrome
- 
32. Scaphocephaly results from premature fusion of which sutures?
- coronal
  - lambdoidal
  - sagittal
- 
33. Craniotabes is a finding in:
- hypothyroidism
  - hypophosphatasia
  - vitamin D deficiency
- 
34. Excessive ear hair is seen in infants with:
- congenital adrenal hyperplasia
  - poorly controlled maternal diabetes
  - maternal antiepileptic medication exposure
- 
35. Findings of Cornelia de Lange syndrome include the presence of:
- abnormal hair whorls
  - a coloboma
  - eyebrows that meet at the glabella
- 
36. Macroglossia is one of the findings in:
- galactosemia
  - mucopolysaccharidosis
  - Pierre Robin sequence
- 
37. How many pairs of true ribs does a human have?
- 5
  - 7
  - 12
- 
38. Causes of bradypnea in newborns include:
- asphyxia
  - hyperthermia
  - postmaturity
- 
39. Seesaw respirations in newborns are suggestive of:
- aspiration pneumonia
  - loss of lung volume
  - neurologic injury
- 
40. In extremely premature infants, periodic breathing may persist up until how many weeks postconceptional age?
- 38
  - 40
  - 43
- 
41. Snuffles is a finding in congenital:
- parvovirus infection
  - rubella syndrome
  - syphilis
- 
42. In term infants the chest circumference is normally how many centimeters less than the head circumference?
- 1
  - 2
  - 3
- 
43. A barrel chest is a finding commonly seen in infants with:
- pneumonia
  - respiratory distress syndrome
  - transient tachypnea of the newborn
- 
44. Maternal alcohol abuse is associated with which of the following type of heart defect in offspring?
- coarctation of the aorta
  - septal defects
  - tetralogy of Fallot
-

- 
45. Maternal lupus erythematosus increases the risk of the fetus having:
- aortic aneurysm
  - congenital heart block
  - hypertrophic cardiomyopathy
- 
46. Which of the following extracardiac anomalies is associated with an increased risk of congenital heart disease?
- diaphragmatic hernia
  - port wine stain over the nose
  - supernumerary nipples
- 
47. In newborns with a normal hemoglobin level, central cyanosis is not usually visible until the arterial saturation falls below \_\_\_\_\_ percent.
- 80–85
  - 85–90
  - 90–95
- 
48. Lesions that result in bounding pulses include:
- coarctation of the aorta
  - patent ductus arteriosus
  - ventricular septal defect
- 
49. In the immediate newborn period, the point of maximal intensity is usually best felt in which intercostal space?
- third
  - fourth
  - fifth
- 
50. Sinus bradycardia is common in neonates because of the predominance of which nervous system?
- parasympathetic
  - somatic
  - sympathetic
- 
51. In neonates, a third heart sound, if present, is best heard at the apex of the heart during:
- early diastole
  - late diastole
  - early systole
- 
52. In neonates, abdominal circumference is less than head circumference until how many weeks gestational age?
- 28–30
  - 30–32
  - 32–34
- 
53. A flaccid, lumpy, abdominal wall is characteristic of:
- diaphragmatic hernia
  - meconium ileus
  - Eagle-Barrett syndrome
- 
54. Bilious vomiting is associated with a gastrointestinal obstruction below the level of the:
- ampulla of Vater
  - ligament of Treitz
  - ileocecal valve
- 
55. An umbilical hernia is a feature of:
- congenital adrenal hyperplasia
  - hypothyroidism
  - Turner syndrome
- 
56. A patent urachus connects the umbilicus and the:
- bladder
  - duodenum
  - ileum
- 
57. Anomalies associated with gastroschisis include:
- bowel atresia
  - cardiac defects
  - renal hypertension
- 
58. In neonates, a normal spleen should not extend more than how many centimeters below the costal margin?
- 1
  - 2
  - 3
- 
59. Neonates with a history of oligohydramnios should be observed for:
- bowel obstruction
  - esophageal atresia
  - pulmonary hypoplasia
- 
60. Rugae begin to develop on the scrotum at \_\_\_\_\_ weeks of gestation.
- 32
  - 34
  - 36
- 
61. The descent of the testes from the abdomen into the scrotum begins at approximately how many weeks gestation?
- 25–27
  - 28–30
  - 31–33
- 
62. In term, female infants the effects of maternal estrogen can persist for up to how many weeks?
- 8
  - 10
  - 12
- 
63. Renal anomalies associated with Eagle-Barrett syndrome include:
- hydronephrosis
  - pelvic cysts
  - posterior urethral valves
- 
64. Penile hypospadias is often accompanied by:
- chordee
  - cryptorchidism
  - endocrine disorders
-

- 
65. Cryptorchidism occurs in what percentage of term, male infants?
- 1–2
  - 2–3
  - 3–4
- 
66. In cases of testicular torsion, the gonad is usually unsalvageable when ischemia exceeds \_\_\_\_\_ hours.
- 1–2
  - 2–4
  - 4–6
- 
67. The average daily weight gain for a term newborn is \_\_\_\_\_ g/kg/day.
- 10–20
  - 20–30
  - 30–40
- 
68. The average head circumference of a term newborn at birth is \_\_\_\_\_ cm.
- 31–33
  - 33–35
  - 35–37
- 
69. A fractured clavicle often results in which reflex being asymmetric?
- grasp
  - incurving
  - Moro
- 
70. Macroductyly is a finding in which of the following?
- Down syndrome
  - lipoma
  - trisomy 18
- 
71. Puffy hands and feet are a characteristic finding of what syndrome?
- Cornelia de Lange
  - Marfan
  - Noonan
- 
72. The Ortolani maneuver is considered positive if:
- a “clunk” is felt over the femoral head
  - the femur can be displaced in a downward direction
  - no clicks or clunks are felt
- 
73. Undetected torticollis may result in the development of:
- plagiocephaly
  - Sprenge’s deformity
  - scoliosis
- 
74. Infants with radial hypoplasia should be investigated for:
- Klippel-Feil syndrome
  - Pierre Robin sequence
  - VACTERL association
- 
75. Port wine stains involving areas innervated by the trigeminal nerve are markers for:
- neurofibromatosis
  - Sturge-Weber syndrome
  - tuberous sclerosis
- 
76. Klumpke’s palsy results from damage to the spinal roots between which vertebrae?
- C4 and C6
  - C6 and C8
  - C8 and T1
- 
77. Phasic tone is evaluated by testing the:
- deep tendon reflexes
  - pull-to-sit maneuver
  - traction response
- 
78. The strength of the lower extremities can be evaluated by eliciting which reflex?
- Babinski
  - Galant
  - stepping
- 
79. Opisthotonus is sometimes seen in cases of:
- bacterial meningitis
  - infantile botulism
  - myasthenia gravis
- 
80. Pupillary response to light is normally present by how many weeks gestational age?
- 25–27
  - 28–30
  - 31–33
- 
81. Apnea, weakness, and jitteriness are seen in infants with severe encephalopathy in \_\_\_\_\_ hours after birth.
- 0–10
  - 12–24
  - 28–72
- 
82. Neurologic signs of *in utero* exposure to tobacco include:
- apnea
  - hypertonicity
  - tremors
- 
83. In newborns, irregular respirations are most often seen in which behavioral state?
- active alert
  - drowsy
  - quiet alert
- 
84. How many behavioral states are identified on the Anderson Behavioral State Scale?
- 6
  - 9
  - 12
-

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85. In a newborn, avoidance behaviors include:

- dilated pupils
- grasping movements
- yawning

---

86. Habituation is best assessed in which state?

- active alert
- drowsy alert
- crying

---

87. The optimal distance for a newborn infant to focus on an object is how many inches?

- 10–12
- 13–15
- 16–18

---

88. What percentage of newborn deaths is attributed to a birth defect?

- 10
- 20
- 30

---

89. Which of the following birth defects is known to be inheritable?

- cataracts
- microcephaly
- omphalocele

---

90. Genetic syndromes associated with redundant skin in the neck include:

- DiGeorge
- Klinefelter
- Turner

---

91. Osteogenesis imperfecta should be suspected in infants with:

- blue sclera
- epicanthal folds
- cloudy corneas

---

92. What percentage of infants with a single umbilical artery have associated anomalies?

- 20
- 30
- 40

---

93. Neurofibromatosis is an example of a disorder that is:

- autosomal dominant
- autosomal recessive
- x-linked recessive

---

94. Clinical findings in Beckwith-Wiedemann syndrome include:

- hooded eyelids
- large tongue
- web neck

---

---

95. The most common cardiac defect seen in fetal alcohol syndrome is:

- coarctation of the aorta
- total anomalous pulmonary venous return
- ventricular septal defect

---

96. Which of the following is characteristic of a cry face?

- dilated pupils
- nasolabial furrow
- slack mouth

---

97. Physiologic indicators of pain scored on the PIPP-R scale include:

- blood pressure
- work of breathing
- oxygen saturation

---

98. The CRIES instrument was originally developed to measure:

- level of sedation
- pain in term infants
- postoperative pain in preterm infants

---

99. Behavioral parameters evaluated with the NIPS tool include:

- breathing pattern
- sleeplessness
- state of arousal

---

100. During heel lancing, infants exposed to SSRIs have been shown to have:

- decreased facial reactions
- elevated heart rate
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- c.           c.           c.           c.           c.           c.

**Physical Assessment of the Newborn, 5th Edition**

Name \_\_\_\_\_  
Please Print

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(optional)

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Test expires December 31, 2019

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**Include an additional \$10.00 for rush processing.**  
International Participants: International Money Order drawn on U.S. Bank only.

I have enclosed an additional \$10 for rush processing.

## 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.

①	②	③	④	⑤
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

### 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:<br>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: \_\_\_\_\_

\_\_\_\_\_