FINAL CLASS OF MODULE 1

Academic discipline «Pediatric Propedeutics»
Self-study guide for the 3rd year
English medium students

ПІДСУМКОВЕ ЗАНЯТТЯ З МОДУЛЮ 1
З дисципліни «Пропедевтика педіатрії»
Методичні вказівки
до самостійної роботи студентів 3-го курсу
медичного факультету
Academic discipline «Pediatric Propedeutics»
Self-study guide for the 3rd year
English medium students

Compiled by: Klymenko V.A.
Syvopoulos-Romanova H.S.


Упорядники: Клименко В.А.
Сивопляс-Романова Г.С.
Number of class periods: practical trainings – 4.

Contents
Evaluation of the knowledge obtained by a student and the level his/her practical training is one of the final stages of student learning activities and definition of learning success.

Evaluation makes it possible to assert that the student receives the necessary knowledge, understanding, skills and competence. Competence means the proven ability of students to use knowledge, learned behavior and personal skills in educational or work situations. Competence is the ability to transfer knowledge into practice.

The forms of monitoring and evaluating are listed pursuant to the program of the work practice ”Pediatric Propedeutics” and the Instruction on the evaluation of academic activities in the course of the European credit transfer system in the organization of the educational process”.

Specific goals:
• to prepare for evaluation by the teacher mastering of the knowledge and skills of Pediatric Propedeutics.

To know:
1. The concept of children's health, criteria for health assessment.
2. The main functions of Pediatrics.
3. To analyze basic statistical rates of health care institutions.
4. The main historical stages of pediatrics in Ukraine.
5. Professors V.S.Chernov, V.D. Yakubovych and others as organizers of the first pediatric departments in Ukraine.
7. Kharkiv pediatric school, basic stages and directions of the development.
   Professors’ contributions (Arkavin Y.S., Frishman N.M., Belousov V.A., Tets G.I. and others) in the development of pediatric science.
8. Modern information about the periods of childhood and meaning of the periodization for the individual approach to healthy and sick children.
9. Modern approaches to biological age of a child and his/her socialization.
11. Methods of objective clinical investigations of healthy and sick children.
   General examination of healthy and sick children.
13. What do you understand by the term “newborn child”?
14. Physiological and transient states of the neonatal period.
15. Conception of maturity of a newborn child.
17. Primary hygienic care and patronage of a newborn child. Care of a newborn child.
19. Sanitary and hygienic conditions in neonatal departments.
20. Conception of children physical development, its meaning and assessments.
23. Semiotics of children’s physical development pathology.
24. Physical education.
25. How to assess the physical development of children of different age, to understand to reasons of the pathology of physical development.
26. The basic criteria and parameters of psychomotor development of children of different ages.
27. The basic criteria and parameters psychomotor development of children of different ages.
28. The features of psychomotor development newborns.
29. Assessment of psychomotor development of children under 1 year of life by months.
30. Assessment of psychomotor development of preschool children, preschool, junior and senior school age.
31. The history factors affect changes in psychomotor development.
32. The modern aspects of breastfeeding of infants.
33. To identify the benefits of breastfeeding for newborn.
34. To define the quantitative and qualitative composition and the immunological role of a breast milk.
35. To demonstrate the calculating of volum of milk for infants using the volumetric feeding method.
36. To provide the correct technique of breastfeeding.
37. To define main difficulties in breastfeeding, the prevention of hypogalactia and mastitis.
38. To define the needs of child with breastfeeding in proteins, fats, carbohydrates and calories.
39. To define needs in proteins, fats, carbohydrates and calories in child which had the introduction of solid foods.
40. To define the modern aspects of mixed or artificial feeding.
41. To define the classification and characteristics of milk formulas.
42. To provide the correct technique of mixed or artificial feeding.
43. To define the needs in proteins, fats, carbohydrates and calories in children with mixed or artificial feeding.
44. To demonstrate the scheme of mixed and artificial feeding.

**Be able to (list of practical skills to the subject):**
- To interpret the child health criteria.
- To analyze the basic statistical indices of medical institutions.
- Interpret the historical stages of pediatrics in Ukraine.
• Determination of the period of childhood of a child taking into account anatomical and physiological characteristics.
• Identification of pathological factors and their hazardous influence on a child during different age periods.
• Training of the use of terminology related the periodization (embryopathies, early and late-term fetopathies, prenatal, anthenatal, intranatal, postnatal and so on).
• Use of the age criteria for identification of the period of childhood to which the child belongs.
• Determinate of the meaning of perinatal and exogenous factors on the development of a child of different age.
• Collect of the medical history of a newborn child.
• Evaluate of the state of a newborn child using Apgar score and Silverman score.
• Determination of the maturity of a newborn child, maturity or prematurity
• Carry out anthropometric measurements, assessment of the physical development of children.
• Carry out clinical examination of a newborn child.
• Determine of transient states of newborn children.
• Identifyate of high-risk newborn children (according to their medical history).
• Carry out the primary hygienic care of newborn children.
• Maintenance of the sanitary and hygienic conditions in the neonatal.
• Measure of the main body parameters (weight, height, head, chest, hip, calf, shoulder circumferences, body mass index).
• Calculate of anthropometric indexes.
• Calculate of appropriate parameters of the physical development according to the empirical equations, sygmal and empirical tables, alignment charts.
• To assess of the physical development based on the received data.
• To assess of psychomotor development of children under 1 year of life by months.
• To assess of psychomotor development of preschool children, preschool, junior and senior school age.
• To interpret the results of clinical investigation (statics, motility, sensory reactions, speech, mental development).
• To conduct syndromic diagnosis of the nervous system diseases of children.
• To collect anamnesis of infants and evaluate it.
• To calculate the amount of food per day for child, according to the age.
• To make a one-day menu for child one year with breastfeeding, taking into account the needs in food ingredients.
• To evaluate the correct techniques of breastfeeding.
• Issues in the prevention of hypogalactia and mastitis.
• To demonstrate the methods of calculation for child with introduction of solid foods, taking into account the needs in food ingredients.
• To explain the definition of mixed or artificial feeding, the classification and characteristics of milk formulas.
• To collect anamnesis of children with mixed or artificial feeding and evaluate it.
• To calculate the amount of food per day for children with mixed and artificial feeding, according to the age.
• To make a one-day menu for child with mixed and artificial feeding, taking into account the needs in food ingredients.
• To evaluate the correct techniques and schemes of mixed and artificial feeding.
• To demonstrate the methods of calculation for child of mixed or artificial feeding with introduction of solid foods, taking into account the needs in food ingredients.

Basic knowledge, abilities, and skills, which are necessary for studying the topic (interdisciplinary integration).

<table>
<thead>
<tr>
<th>The names of previous disciplines</th>
<th>Skills</th>
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<tbody>
<tr>
<td>1. Human Anatomy.</td>
<td>To know the structure and functions of various systems and organs, pathological anatomy and physiology. To be able to figure the basic statistical rates of the pediatrician and medical institutions activities.</td>
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<tr>
<td>2. Histology.</td>
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<td>3. Physiology.</td>
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<td>5. Pathological Physiology.</td>
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Structures of individual issues of the topic.
See self study guides for previous topics.

The list of study materials:
Main:

Additional:
Test questions to the class:
1. Define the subject of Pediatrics, determine its role and basic functions.
2. Determine the main historical stages of Pediatrics in Ukraine.
3. Determine the role of such scientists like S.H. Hotovyskiy and I.V. Troyitskiy in development of Pediatrics in Ukraine.
4. What is the concept of children's health, criteria for health assessment, and health groups?
5. Name the main statistical indexes of child health-care institutions (neonatal mortality, mortality etc.).
7. Name the periods of the intrauterine development.
8. Name the periods of development after the birth of a child.
9. Conception of "embryopathies", "early fetopathies", "late fetopathies" and their characteristics.
10. Characterize the period of intrauterine development (duration, main patterns of physical, neurological and psychical development, typical pathologies).
11. Characterize the neonatal period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
12. Characterize the infancy period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
13. Characterize the pre-school period (duration, main patterns of physical, neurological and psychical development, typical pathologies).
14. Characterize the period of primary school age (duration, main patterns of physical, neurological and psychical development, typical pathologies).
15. Characterize the period of senior school age (duration, main patterns of physical, neurological and psychical development, typical pathologies).
16. What the term “gestation age” means?
17. What the terms “mature, premature and overmature newborn child” mean?
18. List the signs of maturity, prematurity and overmaturity.
19. What the term “low weight at the birth” means?
20. What do you know about the physiology of the respiratory system of a newborn child (mechanism of the first breath, physiological lymphocytolysis tachypnea, abdominal type of breathing)?
21. What do you know about the physiology of the digestive system of a newborn child: (beginning of the enteral feeding, forming of the biocoenosis of the gastrointestinal tract)?
22. What do you know about the physiology of the urinary system of a newborn child: (physiological proteinuria, uric acid infarct of kidneys)?
24. List the characteristics of the clinical examination of a newborn child: questioning; visual inspection; palpation; percussion; auscultation.
25. What is the purpose of Apgar score and Silverman score?
26. Which special features has care of a newborn child?
27. What the term “high-risk newborn” means?
28. How to feed a newborn child?
29. Which are the requirements to the sanitary and hygienic conditions in the neonatal department?
30. Characterize the value in pediatric practice of anthropometric measurements.
31. Describe the techniques of anthropometric measurements of weight, height, head and chest circumferences.
32. Describe the term ‘acceleration’ of physical development.
33. What does the term ‘retardation’ mean of physical development?
34. Semiotics of deviations of children’s physical development.
35. Presentation of existent equations of calculation of weights, height and head and chest circumferences in different age.
36. Listing of clinical methods of children’s physical development assessment.
37. Dynamics of physical development parameters at the child’s first year.
38. What first and second retraction means?
39. Characterization of the main signs of deviations of the children’s physical development.
40. Typical characteristics of somatometry of children of more than two years old.
41. What do the indexes of physical development mean (Erisman, Chulitskaya)?
42. Listing of factors which influence the physical development (genetic, environmental and so on).
43. Listing of children’s diseases which are accompanied by changes of body height and weight (endocrine, chromosomal, chronic infections and so on).
44. What basic criteria and parameters psychomotor development of children of different ages are exist?
45. What features of psychomotor development newborns are exist?.
46. How to make assessment of psychomotor development of children under 1 year of life by months?
47. How to make assessment of psychomotor development of preschool children, preschool, junior and senior school age.
48. What history factors affect injures of psychomotor development?
49. What the notion of psychomotor development includes?
50. What are the criteria of mental development of children?
51. What features of motility of newborns?
52. What signs of static functions do you know?
53. What permanent reflexes do you know?
54. What groups of transitory reflexes do you know?
55. Name the basic oral reflexes.
56. Name the basic spinal reflexes.
57. Name the basic myeloencephalical reflexes.
58. Assessment of psychomotor development of the child comparatively to the age.
59. What is the basic breast anatomy and physiology, including the process of milk production and the composition of human breast milk?
60. What is mean term «breastfeeding»?
61. What are the stages of lactogenesis, or milk production?
62. What is mean term «contact skin to skin»?
63. What are the ten steps to successful breastfeeding according to guidelines WHO/UNICEF?
64. What is mean term «free breastfeeding» and practice «rooming in»?
65. What is correct breastfeeding technique?
66. What are the benefits of breastfeeding for infants, mothers, and society?
67. What are the limited contraindications to breastfeeding?
68. What are the clinical recommendations regarding the use of medications in the breastfeeding mother based upon the pharmacology of the medication, the condition of the baby, and available research, while considering the risks of not breastfeeding?
69. What is the mean term «artificial feeding»?
70. What is the mean term «mixed feeding»?
71. What is correct technique of mixed and artificial feeding?
72. What are absolute indications for the conversion to mixed and artificial feeding?
73. What types of formulae are used for artificial feeding?
74. What is the difference in content of high adapted, partly adapted and non adapted formulae?
75. What are peculiarities of introduction of solid foods in children with mixed or artificial feeding?
76. What are reasons for mixed feeding?
77. How you can know the quantity of the breastmilk if the child has mixed feeding?
78. What are the methods of calculation for child of mixed or artificial feeding with introduction of solid foods?
79. What are the needs in food ingredients in children with mixed or artificial feeding and after introduction of solid foods in different age period?

Tests for self-control.

Topic 1. The subject and place of pediatrics in the general medicine, basic stages of development.

1. The criteria for health assessment are the following except:
   A. physical and neuro-psychological development and the degree of harmony
   B. functional state of basic systems.
   C. social and living conditions.
   D. body resistance and reactivity.
   E. the presence and absence of chronic disease.
2. What does Pediatrics deal with?
   A. anatomical and physiological children features.
   B. peculiarities of feeding of healthy and sick children of different ages.
   C. etiology and pathogenesis of diseases.
   D. diagnosis, treatment and prevention of diseases.
   E. all of the above mentioned.

3. What criteria is used for the child health assessment?
   A. state of basic systems.
   B. body resistance and reactivity
   C. physical and neuro-psychological development
   D. the presence and absence of chronic disease.
   E. all of the above mentioned.

4. The infant mortality rate is a number of deaths of children, per:
   A. 10,000 live births
   B. 100 live births
   C. number of children born in a given reporting year
   D. 1,000 live births
   E. the number of child population in the region

5. Who from noted pediatricians used the antidiphtheric serum for the first time?
   A. Chernov V.Y.
   B. Arkavin Y.S.
   C. Frishman N.M.
   D. Belousov V.A.
   E. Kogemiaka A.I.

6. First Pediatric department in Kiev was established in:
   A. 1890
   B. 1887
   C. 1770
   D. 1654
   E. 1920

7. Pediatric departments were established in all the Faculties of Medicine of all the Ukrainian universities:
   A. at the early XX century
   B. at the end of XX century
   C. in XIX century
   D. at the end of XIX century
   E. in XXI century

8. What is the name of the pediatrician who described the clinical characteristics of infectious mononucleosis firstly?
9. The first Hospital for sick children was established in:
A. New York
B. Kiev
C. Moscow
D. Paris
E. London

10. Who was the author of a book “The Nature of The Child” (460 – 377 BC)?
A. Solomon
B. Antaeus
C. Hippocrates
D. Mikel Angelo
E. Raphael

**The standards of answers to the tests:**
1-C; 2- E; 3-E; 4-D; 5-A; 6- B; 7-A; 8-A; 9- D; 10- C.

**Topic 2. Periods of Childhood.**

1. What is the normal duration of intrauterine development of a child?
   A. 240-250 days starting from conception
   B. 250-260 days starting from conception
   C. 260-270 days starting from conception
   D. 270-280 days starting from conception
   E. 280-290 days starting from conception

2. What is the normal duration of the embryonic phase of development of a child?
   A. up to 2 weeks starting from conception
   B. up to 1 month starting from conception
   C. up to 1,5 months starting from conception
   D. 2-3 months starting from conception
   E. up to 3-4 months starting from the conception

3. Which periods of childhood are combined into one perinatal period?
   A. germinal, embrional, fetal
   B. embrional, neofetal, early fetal
   C. neofetal, early and late fetal
   D. early and late fetal, intranatal
   E. late fetal, intranatal, early neonatal
4. Name the period of childhood when the influence of teratogenic factors is identified.
   A. germinal
   B. embrional
   C. fetal
   D. early neonatal
   E. neonatal.

5. During the examination of a newborn child in the delivery room severe anatomical birth defects were noticed – absence of a right arm, malformations of inner organs. What is the name of this pathology?
   A. gamethopathy
   B. embriopathy
   C. early fetopathies
   D. late fetopathies
   E. stigmas of disembryogenesis

6. The child is 6 days old. Name the period of childhood to which the child belongs.
   A. early neonatal
   B. late neonatal
   C. infancy
   D. pre- preschool period
   E. late fetal

7. Which physiological processes are mostly characteristic for the neonatal period?
   A. intensive physical development
   B. intensive psychomotor development
   C. adaptation processes
   D. sexual maturity
   E. organogenesis

8. During the questioning of the mother of a newborn child, it was established that the period from the beginning of labors till the umbilical ligation was 15 hours. What is the name of this period?
   A. – prenatal
   B. – intranatal
   C. – postnatal
   D. – perinatal
   E. – neonatal

9. District pediatrician is carrying out dispensary examination of a child aged 20 days at home. During the questioning it was established that the child was born in
term with weight 3100 g, height 50 cm. Delivery without complications. The child is breastfed. Determine the period of childhood of this child.

A. – early neonatal  
B. – late neonatal  
C. – infancy  
D. – pre-preschool period  
E. – fetal

10. The child is 8 years old and is in the second year of the school. The physical development has slowed down. Milk teeth have started to change to permanent teeth. Determine the period of childhood of this child.

A. – preschool period  
B. – primary school age  
C. – senior school age  
D. – perinatal  
E. – neonatal

The standards of answers to the tests:
1-D; 2- D ; 3- E; 4- B; 5- B; 6- A ; 7- C; 8- B; 9- B ; 10- B.

Topic 3. Features of neonatal period.

1. Early neonatal period lasts:
   A. first day of life of a child  
   B. first 7 hours of life  
   C. first 8 days of life  
   D. first 10 days of life  
   E. first 42 hours of life

2. To functional signs of prematurity belong:
   A. umbilicus is lower than an average point of the body;  
   B. decreased muscular tonus  
   C. underdevelopment of nails  
   D. prevalence of the brain part of the skull over the facial part of the skull  
   E. divergence of rectus abdominis muscles

3. To transient states of a newborn child belong:
   A. erythema of newborn children  
   B. anaemia of newborn children  
   C. pemphigus of newborn children  
   D. mastitis of newborn children  
   E. asphyxia of newborn children

4. Mature newborn child has:
   A. cyanotic skin  
   B. skin of pink colour
C. lanugo over the whole body, no hair on the head
D. subcutaneous fat is recrudescent
E. auricle cartilages and nose cartilages are dense

5. The state of a newborn child is evaluated as moderately severe if it was assessed according to Apgar score as:
   A. score from 3 to 5
   B. score from 8 to 10
   C. score from 1 to 3
   D. score from 4 to 6
   E. score from 10 to 12

6. Immediately after the birth, the state of a newborn child is being assessed according to the score:
   A. Willebrand
   B. Apgar
   C. Silverman
   D. Shalkov
   E. Kisel-Johnson

7. Physiological decrease of body weight of a newborn child constitutes:
   A. 1-2%
   B. 3-4%
   C. 6-8%
   D. 11-12%
   E. 14-20%

8. To signs of maturity belong:
   A. development of subcutaneous fat
   B. frequency of breathing
   C. number of defecations
   D. heart beat frequency
   E. frequency of urinations

9. Sexual crisis of a newborn child is manifested by:
   A. obstruction of sebaceous glands
   B. swelling of mammary glands
   C. swelling of the face
   D. fever
   E. protein in urine

10. What is the name of the period of childhood from 28 weeks of gestation till the 7th days of life:
    A. prenatal
    B. intranatal
    C. postnatal
11. What is not typical for the healthy newborn child during first days after the birth:
   A. decrease of the initial weight by 6%;
   B. general hyperaemia of skin
   C. jaundice on the third day
   D. swelling of mammary glands
   E. absence of the sucking reflex

12. At the birth, the skin of a healthy newborn child is covered by:
   A. vernix caseosa
   B. impetigo
   C. naevus vasculosus
   D. seborrhoea
   E. acne vulgaris

The standards of answers to the tests:
1- C; 2- B; 3- A; 4- B; 5- D; 6- B; 7- C; 8- A; 9- B; 10- D; 11-E; 12-A.


Evaluation of physical development of children.

1. Low value of the ratio of “weight/height/year of birth” according to the alignment chart means:
   A. normal body weight
   B. increased body weight
   C. insufficient body weight
   D. insufficient height
   E. accelerated height

2. Choose the equation used for the calculation of the head circumference of a child older than 6 months?
   A. 50 cm - 1 x (5 - n)
   B. 50 cm + 0,6 x (n - 5)
   C. 43 cm - 1,5 x (6 - n)
   D. 43 cm + 0,5 x (n - 6)
   E. 45 cm - 2 x (6 - n)

3. For individual assessment of children’s physical development, following methods are used:
   A. sygmal deviations
   B. using of alignment charts
   C. centile method
D. using of empirical equations
E. All abovementioned

4. Body weight of the full-term child is three times increased after the birth
   A. at the age of 1 year
   B. at the age of 1.5-2 years
   C. at the age of 6 months
   D. at the age of 8 months
   E. at the age of 10 months

5. Body height during the first year is increased by:
   A. - 15 cm
   B. - 20 cm
   C. - 27 cm
   D. - 35 cm
   E. - 24 cm

6. Embryo weight at the term of 36 weeks approximately equal:
   A. 2.0 kg
   B. 2.5 kg
   C. 2.8 kg
   D. 3.0 kg
   E. 3.3 kg

7. Body weight of the full-term child is doubled after the birth:
   A. at the age of 4-4.5 months
   B. at the age of 6 months
   C. at the age of 9 months
   D. at the age of 1 year
   E. at the age of 10 months

8. Choose the equation used for the calculation of child’s body weight during the first half-year of life.
   A. body mass at the birth + 800 × n
   B. 10, 5 kg + 2 × n
   C. body mass at the birth + 800 × 6 + 400 × (n - 6)
   D. 19 kg + 3 × (n - 5)
   E. 19 kg - 2 × (5 - n)

9. Determine the mean child’s body weight increase at the 3 month (monthly)?
   A. 600 g
   B. 700 g
   C. 800 g
   D. 500 g
   E. 400 g
10. Chest circumference of the newborn child is:
   A. 39 - 40 cm
   B. 35 - 36 cm
   C. 30 - 32 cm
   D. 33 - 34 cm
   E. 37 - 38 cm

11. Choose the equation used for the calculation of child’s body weight in age after 6 month
   A. $bw + 800 \times n$
   B. $bw \times 600 - 2n$
   C. $bw + 800 \times 6 + 400 \times (n-6)$
   D. $bw + 400 \times 6 + 200 \times (n-6)$
   E. $bw - 800 \times 4 + 400 \times (10 - n)$

12. Choose the equation used for the calculation of the average height of a child older than 4 years:
   A. $100 \text{ cm} - 8 \times (4-n)$
   B. $100 \text{ cm} + 6 \times (n - 4)$
   C. $130 \text{ cm} - 7 \times (8- n)$
   D. $130 \text{ cm} + 5 \times (n - 8)$
   E. $66 \text{ cm} + 1, 5 \times (n - 6)$

13. Provide the normal value of the body weight of a full-term newborn child:
   A. 200-4500 g
   B. 3500-4500 g
   C. 4000-5000 g
   D. 2800-4000 g
   E. 6000-6500 g

14. Average body weight of a child at the age of one year:
   A. 14,5 kg
   B. 12,5 kg
   C. 13 kg
   D. 10,5 kg
   E. 9 kg

15. Head circumference during the first half-year increases monthly at:
   A. 0,5 cm
   B. 1 cm
   C. 2,5 cm
   D. 1,5 cm
   E. 2,0 cm
16. Body height at the term of 36 weeks of gestation is approximately:
A. 40 cm  
B. 36 cm  
C. 46 cm  
D. 50 cm  
E. 56 cm

17. Monthly increase of body height of a child at the age from 4 to 6 months is:
A. 4 cm  
B. 3 cm  
C. 2.5 cm  
D. 1.5 cm  
E. 1 cm

18. Chest circumference and head circumference are equal at the age of:
A. 1 year  
B. 4 months  
C. 5 months  
D. 6 months  
E. 7 months

19. Alignment chart “body weight/ age” is not used for identification of:
   A. exhaustion  
   B. insufficient body weight  
   C. dynamics of the body weight increase  
   D. obesity  
   E. deviation of the neurological/ psychological development

20. Starting for the II half-year till one year a full-term child increases monthly its weight at:
   A. 800 g  
   B. 400 g  
   C. 600 g  
   D. 1 kg  
   E. 500 g

The standards of answers to the tests:
1-C; 2- D; 3-E; 4-A; 5-C; 6- B; 7-B; 8-A; 9- C; 10- C; 11- C; 12- B; 13-D; 14- D; 15-D; 16- C; 17- C; 18- B; 19- E; 20-B.

Topic 5. Psychomotor development of children.
Assessment of psychomotor development of children.
Features of the nervous system in children.
1. The child begins to perform simple actions (hello, by-by) at the request of an adult at the age of:
   a) 6 month
2. Physiological hypertonia of the legs flexors disappears at the age:
   a) 1 month
   b) 2 month
   c) 4 month
   d) 6 month
   e) 8 month

3. Which of the following reflexes may be accompanied by involuntary urination and defecation?
   a) Robinson’s reflex
   b) Bauer’s reflex
   c) Moro’s reflex
   d) Peres’s reflex
   e) Kussmaul’s reflex

4. What is characteristic of the emotional status of a newborn?
   a) Positive emotions
   b) Indifference
   c) Negative emotions
   d) Aggression
   e) Passivity

5. Moro reflex disappear to the
   a) 2nd month
   b) 4th month
   c) 6th month
   d) 8th month
   e) 10th month

6. What the child of 6 months age should be able to do?
   a) Stand without supporting
   b) Walk with supporting
   c) Good crawl
   d) Well sit
   e) Try to sit

7. The development of what analyzer to the three months age has already completed?
8. What is typical for a newborn baby?
   a) loud sounds speech
   b) “revival” complex
   c) absence of hypertonia of flexors
   d) visual concentration
   e) chaotic movements of limbs

9. What is the food transitory reflex?
   a) Robinson’s
   b) Bauer’s
   c) Babkin’s
   d) Swllowing
   e) Galant’s

10. Formation of the grasping reaction begins at
    a) newborn period
    b) the 6 month age
    c) the 4 month age
    d) the 2 month age
    e) the 3 month age

11. Kernig’s reflex disappear to the age
    a) 2 month
    b) 3 month
    c) 4 month
    d) 6 month
    e) 7 month

12. At what age a child takes the toy itself and keeps it?
    a) 2 month
    b) 3 month
    c) 4 month
    d) 5 month
    e) 7 month

13. In 2 months the child is able to
    a) to find the object anywhere by itself
    b) briefly sounds (u-u-u, a-a-a)
c) laugh loudly

d) sit

e) crawl

14. To what age after the birth the "embrionic pose" a child will continue to?
   a) 3 month
   b) 1 month
   c) 2-3 weeks
   d) 1st week
   e) 6 month

15. Specify the age when a child appears babble
   a) at the 1st week of life
   b) at the 1st month of life
   c) after 3rd month
   d) after 8th month
   e) after 4th month

16. Motility of the newborn has the following features
   a) flexors muscle tone is increased
   b) muscle tone is reduced
   c) chaotic movements
   d) purposeful movement
   e) spasm of muscles

17. Physiological nystagmus disappear at the age of:
   a) 2 weeks
   b) 2.5 month
   c) 1.5 month
   d) 2 month
   e) 1 month

18. Upper Landau reflex appears to
   a) 2-3 month
   b) 4-5 month
   c) 6-7 month
   d) 8-9 month
   e) 10-12 month

19. The child turned on his abdomen at the age of
   a) 2 month
   b) 4 month
   c) 5 month
   d) 6 month
e) after 6 month

20. The child begins to walk without supporting at the age of
   a) 10 month
   b) 11 month
   c) about 1 year
   d) 15 month
   e) 2 years

The standards of answers to the tests:
1-E; 2- A; 3-D; 4-B; 5- B; 6-D; 7- A; 8- E; 9- C; 10- E; 11- C; 12- C; 13- B; 14- B;
15- B; 16- C; 17- A; 18- B; 19- C; 20- C.

Topic 6. Natural (breastfeeding) of infants.

1. Which statement is not the absolute contraindication for breastfeeding
   from the mother’s part?
   A. Malaria
   B. Severe neuroses and postpartum psychoses
   C. Breast cancer
   D. Angina, flu, pneumonia
   E. Typhoid fever

2. Which statement is not the absolute contraindication for breast feeding
   from the child’s part?
   A. High degree of the pre-maturity
   B. Severe forms of respiratory insufficiency
   C. Severe disturbances of brain blood circulation with threat of intracranial hemorrhage
   D. Low body weight
   E. Conditions after resuscitation measures

3. Which statement is not the relative contraindication for breast feeding
   from the mother’s part?
   A. Measles, chicken pox.
   B. Angina, flu, pneumonia
   C. Breast cancer
   D. Low degree of the pre-maturity
   E. Active tuberculosis

4. Which statement is not contraindication of breast feeding from the
   mother’s part?
   A. Cracks of a dummy
   B. Acute infections
   C. Hypogalactia
   D. Retracted nipples
   E. Mastitis
5. Which statement is not contraindication of breast feeding from the child’s part?
A. High body weight
B. Thrush
C. Pathology of lips and the hard palate
D. Running nose
E. Idiosyncrasy to female milk.

6. How often baby of 2 months needs to be fed?
A. 5 times
B. 6 times
C. 7 times
D. 8 times
E. 9 times

7. How often baby of 6 months needs to be fed?
A. 5 times
B. 6 times
C. 7 times
D. 8 times
E. 9 times

8. How often baby of 11 months needs to be fed?
A. 5 times
B. 6 times
C. 7 times
D. 8 times
E. 9 times

9. What is the difference between the composition of the breast milk and the colostrum?
A. The breast milk contains more protein and minerals, but less carbohydrate and fat
B. The breast milk contains more protein and fat, but less carbohydrate and minerals
C. The breast milk contains more carbohydrate and fat, but less protein and minerals
D. The breast milk contains more carbohydrate and protein, but less fat and minerals
E. There is no right answer.

10. When are the first introduction of solid foods starting if the mother has good lactation and child has the weight gain according to the age?
A. after 3 months
B. after 4 months
C. after 5 months
D. after 6 months
E. after 7 months

11. In what lactation period should the colostrum produce?
A. 3-5 days
B. 10-14 days  
C. 4-6 weeks  
D. 2 days  
E. 3 month

12. What is content of proteins (g/100ml) in breastmilk?
A. 0.6 g  
B. 1.2 g  
C. 2.0 g  
D. 2.7 g  
E. 3.2 g

13. What is content of carbohydrates (g/100ml) in the breastmilk?
A. 3.0 g  
B. 4.5 g  
C. 5.0 g  
D. 7.5 g  
E. 8.5 g

14. What is content of fats (g/100ml) in the breastmilk?
A. 2.0 g  
B. 3.5 g  
C. 4.5 g  
D. 6.0 g  
E. 6.5 g

15. How many calories per one liter (kcal/l) are in the breastmilk?
A. 600 kcal  
B. 700 kcal  
C. 900 kcal  
D. 1000 kcal  
E. 400 kcal

16. What are the signs of sufficient lactation?
A. The pronounced pigmentation of areola  
B. The pronounced veins of mammary glands  
C. The increased temperature of the skin under the breast more than 0.1-1.0ºS  
D. The milk stream flows from the breast  
E. All about it

17. What are saccharides in breast milk, which promotes bifidum - bacteria in the child's gut?
A. α- lactose  
B. β- lactose  
C. sucrose  
D. glucose
18. What are reasons of hypogalactia?
A. Enocrine disorder
B. Stressful conditions
C. Chronic disease
D. Irrational diet
E. All of the above

19. What is the percentage content of proteins in the diet for children of 2nd half of first year (%)?
A. 50%
B. 75%
C. 80-90%
D. 100%
E. 40%

20. What is the percentage of proteins in the diet for children of 1st half of first year (%)?
A. 50%
B. 75%
C. 80 - 90%
D. 100%
E. 45%

The standards of answers to the tests:
1-D; 2- D; 3-C; 4-B; 5-A; 6- C; 7-A; 8-A; 9- A; 10-D; 11-A; 12-B; 13-D; 14-B; 15-B; 16-E; 17-B; 18-E; 19-C; 20-A.


1. What is mean the term "artificial feeding"?
A. Feeding with expressed breast milk
B. The daily diet chart containing less than 20% of breast milk
C. Feeding with donor breast milk
D. Feeding with breast milk and formula
E. Feeding with unadapted infant formula

2. What are fat grams in an adapted infant formula usually?
A. 3,5-3,6g
B. 1,5-1,8g
C. 2,6-3,0g
D. 4,0-4,5g
3. What are the values the concentration of protein and casein in highly adapted infant formulas:
   A. 40:60
   B. 30:70
   C. 60:40
   D. 20:80
   E. 50:50

4. What is the need of protein (grams per kg of body weight) for feeding children during the first three months of life with feeding of adapted milk formula:
   A. 2,0-2,2 g / kg
   B. 1,2-1,5 g / kg
   C. 2,5-2,8 g / kg
   D. 3,0-3,2 g / kg
   E. 4,5-5,0 g / kg

5. What is the need of carbohydrates (grams per kg of body weight) for feeding children during the first three months of life with feeding of adapted milk formula:
   A. 5,0-5,5 g/kg
   B. 4,0-4,5 g/kg
   C. 12,0-14,0 g/kg
   D. 9,0-11,0 g/kg
   E. 15-16 g/kg

6. What is the need of carbohydrates (grams per kg of body weight) for children with feeding of adapted milk formula after introduction of solid foods:
   A. 16-20 g/kg
   B. 12-14 g/kg
   C. 10-11 g/kg
   D. 5,0-5,5 g/kg
   E. 7-8 g/kg

7. What is the temperature level of ready for using formula:
   A. 40-42
   B. 36-37
   C. 34-35
   D. 28-29
   E. 30-32

8. What is the range of proteins in 100 ml of adapted milk formula:
   A. 2,0-2,5 g
   B. 1,0-1,3 g
   C. 2,6-3,0 g
9. What is the range of carbohydrates in 100 ml of adapted milk formula:
A. 4,0-4,5 g
B. 7,0-7,3 g
C. 5,0-6,0 g
D. 1,5-1,8 g
E. 3,5-4,0 g

10. What is the osmolarity of most adapted milk formulas:
A. 250-280 mOsm/l
B. 300-320 mOsm/l
C. 220-240 mOsm/l
D. 180-200 mOsm/l
E. 150-160 mOsm/l

11. What is the need of fats (grams per kg of body weight) for children with feeding of adapted milk formula:
A. 2,0-2,2 g/kg
B. 3,0-3,5 g/kg
C. 2,7-2,9 g/kg
D. 6,0-6,5 g/kg
E. 4,5-5,0 g/kg

12. What is the need of calories (calories per kg of body weight) for children with feeding of adapted milk formula:
A. 130 kcal/kg
B. 120 kcal/kg
C. 110 kcal/kg
D. 100 kcal/kg
E. 95-100 kcal/kg

13. Introduction of solid foods in children with artificial feeding as compared with the breastfeeding should be:
A. In one week later
B. In one week earlier
C. In three weeks earlier
D. In three weeks later
E. In one month earlier

14. The child, aged 4 months has feeding 6 times per day, 3 times – breastfeeding, 3 times - formula. What is the type of feeding according to WHO recommendations?
A. the breastfeeding
B. the mixed feeding  
C. the artificial feeding  
D. the supplementing while breastfeeding  
E. the symbolic feeding  

15. What are the indications for mixed feeding?  
A. a hypogalactia  
B. an inadequate breast milk  
C. subcompensated congenital heart disease in the mother  
D. social conditions  
E. All of the above  

16. The child, aged 4 months take at most 120 ml of breast milk during breastfeeding and at most 740 ml of formula during artificial feeding. What is feeding regime should be in this child?  
A. 8 times  
B. 7 times  
C. 6 times  
D. free feeding  
E. 5 times  

17. Introduction of solid foods in children with mixed feeding as compared with the breastfeeding should be:  
A. 2-4 weeks earlier  
B. 1 month later  
C. 2 months before  
D. 2-4 weeks later  
E. Does not matter  

18. The child, aged 2,5 months with the mixed feeding. How many grams of proteins (per 1 kg body weight) should the child receive?  
A. 2,0 g  
B. 2,5 g  
C. 3,5 g  
D. 4,0 g  
E. 1,5 g  

19. The child, aged 1 months with the mixed feeding. How many grams of carbohydrates (per 1 kg body weight) should the child receive?  
A. 13,0 g  
B. 10,0 g  
C. 8,0 g  
D. 16,0 g  
E. 20,0 g
20. The child, aged 6.5 months with the mixed feeding. How much energy (calories per 1 kg body weight) should the child receive?
A. 130 kcal
B. 100 kcal
C. 110 kcal
D. 140 kcal
E. 115 kcal

21. The child, aged 4 months with the mixed feeding. How many grams of fats (per 1 kg body weight) should the child receive?
A. 6.0 g
D. 2.0 g
B. 3.0 g
C. 10 g
E. 8.0 g

22. When should a child with mixed feeding start eating the chicken egg yolk?
A. 6 month
B. 4 month
C. 1 year
D. 5 month
E. 9 month

23. When should a child with mixed feeding start eating meat?
A. 6 month.
D. 1 year
B. 4 month.
E. 9 month.
C. 5 month.

24. When should a child with mixed feeding start eating fish?
A. 5 month.
D. 7 month.
B. 1 year
E. 4 month.
C. 6 month.

25. The child, aged 5 months with the mixed feeding. How many grams of proteins (per 1 kg body weight) should the child receive?
A. 5.0 g
B. 2.0 g
C. 3.5 g
D. 1.5 g
E. 6.0 g

The standards of answers to the tests:
1-C; 2-A; 3-C; 4-A; 5-C; 6-B; 7-B; 8-D; 9-B; 10-A, 11-D, 12-B, 13-C, 14-B; 15-E; 16-D; 17-A; 18-B; 19-A; 20-E; 21-A; 22-A; 23-C; 24-D, 25-C.
Appendix 1

Graphical structure of the topic “Final class, section 1”

Estimation of the theoretical tasks

Estimation of the practical tasks

Estimation of the self-practice

Taking mark for the section
(Students are estimated by traditional grades at the final class)