**1. The definition of malformation is:**

a) stopping development of the organ or body portion previously developed normally

 b) primary error of morphogenesis, usually polyetiological

c) extrinsic developmental disturbances caused by biomechanical factors

d) a complex of development abnormalities

e) a sequence of abnormalities initiated by a single causal factor, followed by secondary defects in other organs

**2.** **Which of the following is an example of deformation:**

a) congenital heart defects

b) amniotic bands

c) uterine constraint

d) Turner syndrome

e) Potter sequence (oligohydramnios)

**3.** **Which of the following are variants of organ anomalies:**

a) atresia

b) dysplasia

c) apoptosis

d) agenesia

e) necrosis

**4.** **Which are the causes of congenital malformations:**

a) genetic

b) combined

c) environmental

d) unknown

e) all statements are correct

**5.** **What are the mechanisms of initiation of teratogenic genetic defects:**

a) cell migration

b) apoptosis

c) necrosis

d) cell proliferation

e) cellular interaction

**6) All of the following are non-cyanotic cardiac defects, EXCEPT:**

a) atrial septal defect

b) ventricular septal defect

c) persistent arterial duct

### d) tetralogy Fallot

e) obstruction of bloodstream

**7) Which of the following are cyanotic heart defects:**

a)tetralogy Fallot

b) atresia of tricuspid valve

c) persistent arterial duct

d) pulmonary atresia

e) transposition of great vessels

**8) What includes Fallot tetralogy:**

a) pulmonary artery stenosis

b) interventricular communication

c) deviation of the origin of the aorta to the right

d) interatrial communication

e) right ventricular hypertrophy

**9) Identify congenital kidney malformations:**

a) agenesia

b) atresia

c) hypoplasia

d) ectopia

e) horseshoe kidney

**10) What is porencephaly:**

a) agenesia of brain, in which its anterior, middle and posterior compartments are missing

b) excessive accumulation of cerebrospinal fluid in cerebral ventricles or subarachnoid spaces

c) appearance in the brain of cysts of varying size which communicate with the lateral brain ventricles, covered with ependyma

d) prominence of the cerebral and medullary substances through the defects of the skull bones, its sutures and the vertebral canal

e) a rare defect characterized by the presence of one or two eyeballs located in orbit

**11) What are the manifestations of heart defects with cyanosis :**

a) reduced bloodstream in small circulation

b) hypoxia

c) orientation of blood flow from left to right

d) orientation of blood flow from right to left

e) lack of hypoxia

**12) Which congenital combined malformations includes Lutembacher's disease:**

a) interventricular septal defect and dextroposition of aorta

b) interventricular septal defect with stenosis of left atrioventricular orifice

c) ramification of the left coronary artery from the pulmonary trunk

d) primary pulmonary hypertension

e) deplasation of aortic orifice to the right

**13) What are the variants of atresia and stenosis of the rectum and anal orifice:**

a) atresia only at the level of anal orifice

b) atresia only at the level of rectum

c) atresia with fistulas

d) atresia of the rectum and anal orifice

e) all statements are correct

**14) Identify the etiology of Hirschprung disease:**

a) lack of neurons of the submucosal plexus (Meissner)

b) lack of neurons of the myenteric plexus (Auerbach)

c) congenital hypertrophy of the colon wall muscles

d) lack of neurons of the myenteric plexus (Meissner)

e) lack of neurons of the submucosal plexus (Auerbach)

**15.** **Congenital malformations of the liver and bile ducts are:**

a) liver polycystosis

b) atresia and stenosis of extrahepatic bile ducts

c) Hirschprung disease

d) agenesis and hypoplasia of intrahepatic bile ducts

e) congenital hyperplasia of intrahepatic bile ducts

**16. Adult type polycystic kidney is characteristic for:**

a) hypoplastic kidneys

b) dysplastic kidneys

c) macrocystic kidneys

d) concrescent kidneys

e) agenetic kidneys

**17.** **What are the manifestations of congenital emphysema:**

a) causes the movement of the mediastinal organs to the opposite side

b) does not cause movement of the mediastinal organs to the opposite side

c) it is established only in the postnatal period

d) it is established only in the prenatal period

e) promotes the development of congenital bronchiectasis

**18.** **Identify systemic osteoarticular malformations:**

a) chondrodysplasia

b) acondroplasia

c) polydactyly

d) imperfect osteogenesis

e) phocomelia

**19.** **Identify isolated osteoarticular malformations:**

a) phocomelia

b) polydactyly

c) congenital amputation and extremities aplasia

d) imperfect osteogenesis

e) acondroplasia

**20.** **Identify congenital malformations of the face:**

a) cheiloschisis

b) micrognatia

c) phocomelia

d) hypertelorism

e) palatoschisis

**21.** **What are the manifestations of fetal alcohol syndrome:**

a) prenatal growth retardation

b) postnatal growth retardation

c) facial anomalies

d) psychomotor disorders

e) cardiac anomalies

**22.** **The manifestations of diabetic embryopathy are:**

a) fetal macrosomia

b) facial anomalies

c) cardiac anomalies

d) neural tube defect

e) prenatal growth retardation

**23.** **What is the causal factor of the infant sudden death syndrome**

a) alcohol

b) smoking

c) viruses

d) thalidomide

e) all statements are false

**24. Identify the genetic causes of human congenital malformations:**

a) chromosomal aberrations

b) phenylketonuria

c) mendelian transmission

d) endocrinopathies

e) syphilis

**25.** **Retinoic acid embryopathy includes:**

a) malformations of the central nervous system

b) cardiac malformations

c) cheiloschisis

d) palatoschisis

e) fetal macrosomia

**26.** **The pathology and mortality of the perinatal period is divided into:**

a) antenatal

b) intranatal

c) postnatal

d) paranatal

e) neonatal

**27.** **The risk factors of prematurity are:**

a) early rupture of fetal membranes

b) intrauterine infections

c) anomalies of uterus, cervix and placenta

d) mother's age

e) multiple pregnancy

**28.** **What complications occur in premature newborns:**

a) apnea

b) sepsis

c) polycythemia

d) persistent arterial duct

e) hypoglycemia

**29.** **What complications occur in overgrown newborns:**

a) sepsis

b) retinopathy

c) trauma at birth

d) hyperbilirubinaemia

e) hypoglycemia

**30. Cephalohematoma is characterized by:**

a) blood suffusion under pericranium

b) volume 5-150 ml of blood

c) the borders exceed the limits of the involved bones

d) teguments at the level of edema are changed

e) the borders do not exceed the limits of the involved bones

**31.** **Risk factors for asphyxia are:**

a) prematureness

b) adequate ventilation

c) increase heart rate

d) cardiac arrest

e) complicated birth

**32.** **The risk factors for respiratory distress syndrom are:**

a) prematureness

b) cardiac arrest

c) diabetes in pregnancy

d) cesarean intervention

e) structural anomalies of the lungs

**33.** **The macroscopic manifestations of respiratory distress syndrome are:**

a) non-aerated solid lung

b) resembles liver tissue

c) immersed in liquid

d) resembles renal tissue

e) flaccid lung

**34.** **The microscopic manifestations of respiratory distress syndrome are:**

a) atelectasis and dilation of the alveoli

b) hyaline membranes composed of fibrin and cellular debris

c) sclerosing of the alveoli

d) minimal inflammation

e) leukocyte infiltration at the periphery

**35.** **Neonatal infections include all of the following, EXCEPT:**

a) syphilis

b) toxoplasmosis

c) rubella

d) varicella-zoster

e) viral hepatitis B

**36.** **What are the transmission ways of fetus and newborn infection**

a) transcervical

b) placental

c) cervical

d) transplacental

e) descending

**37.** **Which hormones play a role in regulating surfactant synthesis:**

a) estrogens

b) corticosteroids

c) androgens

d) catecholamines

e) mineralocorticoids

**38.** **Identify the microscopic manifestations of necrotic enterocolitis:**

a) coagulative necrosis of the mucosa

b) ulcerations

c) bacterial colonization

d) inflammation

e) granulomatosis

**39.** **Identify clinical manifestations of necrotic enterocolitis:**

a) bloody stools

b) abdominal distension

c) absence of stools

d) arterial hypertension

e) circulatory shock

**40.** **The proposed model of triple risk for the infant sudden death syndrome includes:**

a) vulnerable child

b) endogenous factors

c) infections

d) critical period of development of homeostatic control

e) exogenous stress factors

**41.** **The characteristic macroscopic sign of lungs in the infant sudden death syndrome is:**

a) congested lungs

b) non-aerated lungs

c) flaccid lungs

d) lungs diminished in size

e ) all statements are false

**42.** **Identify the causes of fetal hydrops:**

a) non-immune

b) bacterias

c) immune

d) viruses

e) environmental factors

**43.** **For which tumor are characteristic spindle cells that are compactly arranged with spaces containing blood:**

a) lymphangioma

b) hemangioma

c) sacro-coccigian teratoma

d) adenoma

e) rhabdomyoma

**44.** **What are the main differences between malignant tumors in infants and children from those in adults:**

a) close relationship between abnormal development and tumor induction

b) prevalence of constitutional genetic anomalies which predispose to cancer

c) the more unfavorable survival or healing rate in many tumors of the children

d) tendency of fetal and neonatal malignant tumors to regress spontaneously

e) the more favorable survival or healing rate in many tumors of the children

**45.** **Histological features of classic neuroblastoma are:**

a) large cells

b) small cells

c) hyperchromatic nuclei

d) reduced cytoplasm

e) hyporchromatic nuclei

**46.** **For which tumor are characteristic perivascular pseudorosettes:**

a) neuroblastoma

b) ependymoma

c) lymphangioma

d) retinoblastoma

e) rhabdomyoma

**47.** **What are the clinical manifestations of retinoblastoma:**

a) visual disturbances

b) strabismus

c) whitish nuance of pupil

d) lack of pain

e) ocular sensitivity

**48. Identify the macroscopic manifestations of the Wilms tumor:**

a) flaccid

b) dense

c) foci of hemorrhages

d) brown-gray color

e) foci of necrosis

**49.** **Identify clinical manifestations of the Wilms tumor:**

a) fever

b) proteinuria

c) intestinal obstruction

d) abdominal pain

e) hematuria

**50.** **Which of the following syndromes increases the risk of Wilms tumor development:**

a) Denys-Drash syndrome

b) Beckwith-Wiedemann syndrome

c) Turner syndrome

d) Down syndrome

e) WAGR syndrome

**51.** **The microscopic pattern of brain tissue in toxoplasmosis includes:**

a) cysts in brain tissue

b) edema of adjacent cerebral tissue

c) fibrosis of cerebral tissue

d) inflammatory exudate

e) proteic degeneration of the epithelium

**52.** **Identify complications of toxoplasmosis:**

a) cachexia

b) bleeding

c) paralysis

d) blindness

e) insufficient intellectual development

**53. Identify the more frequent localization of cytomegalovirus:**

a) salivary glands

b) lungs

c) brain

d) intestine

e) liver

**54.** **The microscopic pattern of convolute renal tube metamorphosis in cytomegaloviral infection includes:**

a) cytomegaloviral transformation of kidney tubule epithelium

b) fibrin deposits in glomeruli

c) proteic degeneration of the tubule epithelium

d) lymphohistiocytic infiltration

e) sclerosis of glomeruli

**55) Newborn pneumopathies include:**

a) atelectasia

b) edematous hemorrhagic syndrome

c) lung emphysema

d) hyaline membranes of the lungs

e) pulmonary edema

**56.** **The microscopic pattern of the hyaline membranes in the lungs includes:**

a) densified proteic masses in shape of rings that adhere to the walls of the alveoli

b) large air cavities

c) dilated hyperemic vessels

d) squamous metaplasia of the bronchial epithelium

e) inflammatory exudate in the lumen alveoli and interalveolar septa

**57. The microscopic pattern of the pancreas in cystic fibrosis includes:**

a) cystically dilated ducts

b) eosinophilic condensed content in the lumen of the ducts

c) foci of hemorrhages

d) diffuse fibrosis and lymphohistiocytic infiltration of the stroma

e) necrosis of the glandular tissue

**58.** **Identify complications of cystic fibrosis:**

a) chronic pneumonia

b) meconial peritonitis

c) heart failure

d) liver cirrhosis

e) cachexia