**1. Metaplasia is:**

1. the replacement of one differentiated cell type with another
2. malignant transformation of the cells
3. an irreversible cellular adaptation
4. benign transformation of the cells
5. degenerative cell derangements

**3. Which of the following tissues is NOT capable of regeneration:**

1. epithelial
2. cardiac
3. skin
4. liver
5. kidney

**5. Characteristic of wound healing by first intention:**

1. is observed in the wounds with lesion not only of the skin but also of the underlying tissue
2. is the simplest healing
3. is encountered in extensive traumatic lesions
4. the epidermis is restored under the crust
5. new capillaries is formed in 3-7 days

**6. Characteristic of wound healing by second intention:**

1. is observed in the wounds with lesion not only of the skin but also of the underlying tissue
2. is the simplest healing
3. is encountered in extensive traumatic lesions
4. the epidermis is restored under the crust
5. new capillaries is formed in 3-7 days

**8. Physiological hypertrophy of the myocardium is caused by:**

1. heart defects
2. cardiosclerosis
3. high physical activity
4. hypertension
5. toxic myocarditis

**9. Which of the following are types of local atrophy:**

1. dysfunctional atrophy
2. ischemic atrophy
3. reparative atrophy
4. compensatory atrophy
5. cachexia

**10. Regenerative hypertrophy due cell hyperplasia is characteristic of the:**

1. liver
2. myocardium
3. kidney
4. brain
5. pancreas

**11. Identify types of pathological regeneration:**

1. hyperregeneration
2. hyporegeneration
3. metaplastic regeneration
4. dysplastic regeneration
5. complete regeneration

**12. In decompensated heart develops:**

1. eccentric hypertrophy
2. concentric hypertrophy
3. adaptive hypertrophy
4. vicarious hypertrophy
5. neurohormonal hypertrophy

**13. Neurohormonal hypertrophy develops in the following organs:**

1. heart: in hypertensive disease
2. mammary glands: in pregnancy
3. urinary bladder: in prostatic hypertrophy
4. kidneys: in hydronephrosis
5. wall of the stomach: in pyloric stenosis

**14. The reduction in size of cells, with decrease of their functional activity is called:**

1. hypertrophy
2. hypoplasia
3. hyperplasia
4. dysplasia
5. atrophy

**15. Organization process includes:**

1. wound healing
2. metaplasia
3. substitution of necrosis area with connective tissue
4. histological accommodation
5. encapsulation

**16. Cause of generalized atrophy is:**

1. alimentary
2. dysfunctional
3. neurotic
4. ischemic
5. compressional

**17. Atrophy due to compression develops in the following case:**

1. **bone marrow irradiation**
2. muscle atrophy due to fracture
3. kidney atrophy due to stones
4. myocardium atrophy due to atherosclerosis
5. brain atrophy due to ischemia

**18. Adaptation processes are:**

1. wound healing
2. atrophy
3. regeneration
4. restructuration of tissues
5. metaplasia

**19. Wich of the following are examples of pathological regeneration:**

1. obliteration of umbilical vessels
2. keloid scar formation
3. obliteration of arterial duct
4. excessive bone formation
5. metaplasia

**20. Choose the example of vascular atrophy:**

1. focal atrophy of the myocardium due to coronary artery atherosclerosis
2. atrophy of the adrenal cortex due to corticosteroids administration
3. skeletal muscle atrophy due to fracture
4. atrophy of the optic nerve due to eye ablation

 e. brain atrophy in hydrocephalus

**21. Transformation of one differentiated tissue type to another is called:**

1. dysplasia
2. metaplasia
3. anaplasia
4. malignancy
5. hyperplasia

**23. Which of the followings may develop on the background of bronchial epithelium metaplasia:**

1. dystrophy
2. malignant neoplasm
3. atrophy
4. inflammation
5. necrosis

**24. Disturbance of cell proliferation and differentiation with the development of cellular atypia in some cells is called:**

1. hyperplasia
2. dysplasia
3. metaplasia
4. organization
5. anaplasia

**25. Which of the following is the type wound healing:**

1. organization
2. primary intention
3. encapsulation
4. metaplasia

e. dysplasia

**26. Recovering of structural elements instead of those destroyed is called:**

1. organization
2. dysplasia
3. regeneration
4. anaplasia
5. metaplasia

**27. What does granulation tissue mean:**

1. fibrous connective tissue
2. young connective tissue
3. mature connective tissue
4. newly formed blood vessels

e. young muscular tissue

**29. Pathologic regeneration is manifested by:**

1. restitution
2. hyporegeneration
3. hyperregeneration
4. substitution
5. tissue accommodation

**30. Myocardial infarction is followed** **by:**

**a)** restitution

**b)** substitution

**c)** cardiomyocytes hyperplasia

**d)** cardiomyocytes hypertrophy

**e)** necrosis

**32. Vicarious hypertrophy may develop in the following organs:**

**a)** heart

**b)** lungs

**c)** kidneys

**d)** liver

**e)** urinary bladder

**33. Which of the following are generalized pathological atrophy** **types:**

**a)** senile atrophy

**b)** cancerous cachexia

**c)** cerebral cachexia

**d)** dysfunctional atrophy

**e)** compression atrophy

**34. Label cells are characteristic of the** **following tissues:**

**a)** endocrine organs

**b)** hematopoietic system

**c)** smooth muscles

**d)** serous membranes

**e)** vegetative nervous system

**35. The following regeneration types can be** **distinguished:**

**a)** cellular regeneration

**b)** tissue regeneration

**c)** physiologic regeneration

**d)** pathologic regeneration

**e)** organic regeneration

 **36. Which of the following are the pathological regeneration** **causes:**

**a)** acute inflammation

**b)** chronic inflammation

**c)** disturbed innervations

**d)** excessive intake of protein

**e)** insufficient intake of protein

 **37. Regenerative hypertrophy due to only cell hypertrophy is characteristic of the following organs:**

**a)** liver

**b)** myocardium

**c)** kidneys

**d)** brain

**e)** pancreas

**39. The following regeneration types can be** **distinguished:**

**a)** neurohormonal regeneration

**b)** compensatory regeneration

**c)** physiological regeneration

**d)** reparative regeneration

**e)** pathological regeneration

**40. Which of the following are the examples of histological accommodation:**

**a)** transformation of stratified squamous epithelium into cylindrical one

**b)** transformation of gastric glandular epithelium into stratified squamous one

**c)** transformation of the alveolar flattened epithelium into cubical one

**d)** transformation of the flattened glomerular nephrotelium into cubical one

**e)** transformation of connective tissue into cartilaginous one

**41. Atrophy due to compression may develop in:**

**a)** ichthiosis

**b)** hydronephrosis

**c)** cachexia

**d)** hydrocephaly

**e)** cirrhosis

 **42. Adaptation processes are manifested in:**

**a)** degeneration

**b)** atrophy

**c)** regeneration

**d)** tissue reorganisation

**e)** metaplasia

**44. Which of the following are the causes of pathological atrophy:**

**a)** obesity

**b)** malnutrition

**c)** dysfunction of the exocrine glands

**d)** circulatory disorders

**e)** inervation disorders

 **45. Morphogenesis of regenerative process consists of the following phases:**

**a)** alteration

**b)** exudation

**c)** proliferetion

**d)** emigration

**e)** differentiation

**46. Which pigment accumulates in cachexia:**

**a)** hemomelanin

**b)** melanin

**c)** lipofuscin

**d)** lipochrome

**e)** adrenochrome

 **47. Which of the following are myocardial hypertrophy changes:**

**a)** increased sarcoplasmic volume

**b)** cardiomyocytes dystrophy

**c)** cardiomyocytes necrosis

**d)** increased number of myofilaments

**e)** increased nuclear dimension

**49. Liver regeneration is realized through the following mechanisms:**

**a)** cellular regeneration

**b)** intracellular regeneration

**c)** histological accommodation

**d)** atrophy

**e)** dysplasia

**51. Which of the following are the causes of localized atrophy:**

**a)** Simmonds disease

**b)** ischemia

**c)** dysfunctional atrophy

**d)** neurotic atrophy

**e)** cerebral cachexia

 **52. The examples of tissue restructuration are:**

**a)** collateral circulation

**b)** atrophy

**c)** dystrophy

**d)** necrosis

**e)** histological accommodation

**53. Vicarious hypertrophy is characteristic of the following organs:**

**a)** spleen

**b)** brain

**c)** kidneys

**d)** adrenals

**e)** liver