- 1. A cute alcoholic hepatitis includes all of the followings **EXCEPT:**
 - A. Fatty changes.
 - B. Alcoholic hyalinization.
 - C. Hepatocyte necrosis.
 - D. Liver cirrhosis.
 - E. Acute inflammatory infiltrates.
- 2. The best example of dystrophic calcification is seen in:
 - A. A 55 year old female with metastasis from breast carcinoma and hypercalcemia.
 - B. A healing granuloma in a 41 year old male with pulmonary tuberculosis.
 - C. A 65 year old male with recent cerebral infarction.
 - D. A gangrenous extremity in patient with uncontrolled diabetes mellitus.
 - E. An abscess of the left fallopian tube in a young female with Neisseria gonorrhea infection.
- 3. A 40 year old female used to take iron medication every day for 15 years, her liver would most likely show:
 - A. Severe fatty changes.
 - B. Coagulative necrosis.
 - C. Hemochromatosis.
 - D. Anthracosis.
 - E. Biliary cirrhosis.
- 4. Sectioning of a spleen shows a tan to white, wedge-shaped lesion with its base on the capsule of the organ, this lesion is most likely represents the result of:
 - A. Coagulative necrosis.
 - B. Metaplasia.
 - C. Abscess formation.
 - D. Liquefactive necrosis.
 - E. Fat necrosis.
- 5. Focal fat necrosis is most common often associated with which of the following clinical conditions:
 - A. Fibrinous pericarditis.
 - B. Chronic salpingitis.
 - C. Acute pancreatitis.
 - D. Acute hepatitis.
 - E. Acute gastritis.
- 6. Hypertrophy is best illustrated by:
 - A. The uterine myometrium in late pregnancy.
 - B. The female breast at puberty.
 - C. The liver undergoing cirrhosis.
 - D. The ovary following menopause.
 - E. The cervix with chronic inflammation.

- 7. An old female had cerebral infarction. Months later, a computed tomographic (CT) scan shows a cystic area in her cerebral cortex. The CT finding in a lesion that is the consequence of resolution from:
 - A. Liquefactive necrosis.
 - B. Atrophy of brain tissue.
 - C. Coagulative necrosis.
 - D. Caseous necrosis.
 - E. Apoptosis.
- 8. After years of breathing contaminated (polluted) city air with smoke, your lungs have accumulate:
 - A. Anthracotic pigment.
 - B. Lipofuscin.
 - C. Melanin.
 - D. Hemosidrin.
 - E. Asbestos.
- 9. A man with a history of chronic alcoholism, will most often have which one of the following findings in the liver:
 - A. Cholestasis.
 - B. Fatty changes.
 - C. Hemochromatosis.
 - D. Hypertrophy of smooth endoplasmic reticulum.
 - E. Coagulative necrosis.
- 10. The intracellular organelle involved with autolytic removal of cellular debris is:
 - A. Ribosomes.
 - B. Golgi complex.
 - C. Endoplasmic reticulum.
 - D. Lysosomes.
 - E. Mitochondria.
- 11. Coagulative necrosis usually occurs in ischemia of which of the following tissues:
 - A. Smooth muscle.
 - B. Intestinal mucosa.
 - C. Liver.
 - D. Brain.
 - E. Myocardial muscle.

12. An increase in tissue volume without addition of new cells is:

- A. Anaplasia.
- B. Hyperplasia.
- C. Hypertrophy.
- D. Metaplasia.
- E. Hypoplasia.
- 13. Metaplasia is:

- A. A change in which one adult cell type is replaced by another adult cell type.
- B. Always premalignant.
- C. Extreme hyperplasia.
- D. Extreme hypoplasia.
- E. Shrinkage in the size of a cell.

14. The following conditions may cause muscular atrophy **EXCEPT:**

- A. Increased work-load.
- B. Denervation.
- C. Malnutrition.
- D. Ischemia.
- E. Immobilization.
- 15. An old man who is developing an acute myocardial infarction from coronary occlusion has an irreversible injury to myocardium when:
 - A. Glycogen is depleted.
 - B. Cytoplasmic sodium increase.
 - C. Nuclei undergo Karyorrhexis.
 - D. Intracellular pH diminishes.
 - E. Blebs form on cell membrane.
- 16. Autolysis involves which organelle system as a major factor?
 - A. Golgi complex.
 - B. Nucleus.
 - C. RER (rough endoplasmic reticulum).
 - D. Lysosomes.
 - E. Nucleolus.
- 17. Liquefaction is seen especially in:
 - A. Lungs.
 - B. Kidney.
 - C. Brain.
 - D. Heart.
 - E. Liver.
- 18. The main cellular target for the action of radiation is:
 - A. DNA.
 - B. Cell membrane.
 - C. Mitochondria.
 - D. Ribosomes.
 - E. Endoplasmic reticulum.
- 19. Regarding loss of tissue architecture, with a cheesy appearance and consistency, which of the following is correct?
 - A. Fibrinoid necrosis.

- B. Coagulative necrosis.
- C. Caseous necrosis.
- D. Cloudy swelling.
- E. Fatty changes.
- 20. Apoptosis brings about a reduction in organ or tissue volume by:
 - A. Atrophy.
 - B. Calcification.
 - C. Induction of intense inflammatory response.
 - D. Deletion (Removal).
 - E. None of the above.
- 21. Fat necrosis may be seen after:
 - A. Carbon tetrachloride intoxication.
 - B. Dystrophic calcification.
 - C. Severe anemia.
 - D. Release of pancreatic enzymes in the peritoneum.
 - E. None of the above.
- 22. Enlargement of an organ by combined hyperplasia and hypertrophy may be seen in the:
 - A. Remaining kidney after unilateral nephrectomy (removal of kidney).
 - B. Left ventricle in mitral stenosis.
 - C. Uterus in pregnancy.
 - D. Remaining testis after orchidectomy (removal of the testis).
 - E. Skeletal muscle in athletes.
- 23. Fatty degeneration is the accumulation of triglycerides within cells such as those of the hepatic parenchyma, this material is seen in the :
 - A. Nucleus.
 - B. RER (rough endoplasmic reticulum).
 - C. Lysosme system.
 - D. Cytoplasm.
- 24. These definitions are correct **EXCEPT**:
 - A. Sequelae: the complication of a disease.
 - B. Pathogenesis: is the mechanism by which a disease is caused.
 - C. Etiology: is the cause of the disease.
 - D. Prognosis: is the expected outcome of a disease.
 - E. Idiopathic: known cause of a disease.
- 25. Gas gangrene is a form of necrosis associated with:
 - A. Mycotic infections.
 - B. Emphysema.
 - C. Tuberculosis.
 - D. Infection with clostridia.
 - E. Muscle trauma.
- 26. The best example of dystrophic calcification is seen in:
 - A. A 65 year old male with recent cerebral infarction.
 - B. A gangrenous extremity in patient with uncontrolled diabetes mellitus.

- C. A 55 year old female with metastasis from breast carcinoma and hypercalcemia.
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- E. An abscess of the left fallopian tube in a young female with Neisseria gonorrhea infection.
- 27. A 40 year old female used to take iron medication every day for 15 years, her liver would most likely show:
 - A. Anthracosis.
 - B. Severe fatty changes.
 - C. Hemochromatosis.
 - D. Coagulative necrosis.
 - E. Biliary cirrhosis.
- 28. Which of the following has the greatest regenerative capacity:
 - A. Cartilage.
 - B. Myocardium.
 - C. Skeletal muscle.
 - D. Connective tissue.
 - E. Central nervous system neurons.
- 29. The main cellular target for the action of radiation is:
 - A. DNA.
 - B. Cell membrane.
 - C. Mitochondria.
 - D. Ribosomes.
 - E. Endoplasmic reticulum.
- 30. Fat necrosis may be seen after:
 - A. Carbon tetrachloride intoxication.
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 - D. Release of pancreatic enzymes in the peritoneum.
 - E. None of the above.