



الطب والجراحة لجنة

MSS Final Exam

دفعة نبض 2019

Biochemistry

21) The following events in procollagen biosynthesis occur within cells EXCEPT?

- A. Oxidation of lysyl residues ✓✓✓
- B. Formation of disulfide bonds.
- C. Chain alignment,
- D. O-linked glycosylation.
- E. Hydroxylation of lysyl residues.

22) For collagen synthesis, choose the incorrect statement?

Select one:

- A. a. Lysyl oxidase and extracellular enzyme produces the final step in the collagen synthesis pathway.
- B. b. The beginning of collagen synthesis begins with turning on genes
- C. c. There are approximately 34 genes associated with collagen formation
- D. d. In the Golgi apparatus, the procollagen goes through one last post-translational modification before being secreted
- E. e. Collagen carboxylase, removes the "loose ends" of the procollagen molecule ✓✓✓

25) For elastin, choose the incorrect statement?

Select one:

- A. The ELN gene provides instructions for making a protein called tropoelastin
- B. Elastin is made by linking many soluble tropoelastin protein molecules
- C. Elastin production continues throughout the life. ✓✓✓
- D. The expression of ELN gene mainly occurs before birth.
- E. It is mainly made up of amino acids- valine, glycine, alanine and proline

30) For melanin, all of the following are correct except?

Select one:

- A. Eumelanin is the most abundant type of melanin in humans
- B. Pheomelanin is a red-yellow pigment
- C. Eumelanin can be found only as a black eumelanin ✓✓✓

- D. Melanin possesses photochemical qualities that make it a photoprotectant
- E. Neuromelanin can be found in the medulla, and in the adrenal gland

35) For collagen, choose the incorrect statement?

Select one:

- A. Type IV forms the bases of cell basement membrane
- B. Type II collagen is the main component of cartilage
- C. Type III collagen is found in the walls of arteries
- D. Type V forms cell surfaces, hair and placenta
- E. Type V collagen and type XI collagen are major components of tissue

✓✓✓

50) The severity of receptor defect rickets is due to?

Select one:

- A. Recognition of several mutant forms of receptor defect rickets
- B. Very severe hypocalcaemia
- C. Totally resistant to therapy ✓✓✓
- D. Secondary risks of calcium therapy
- E. Elevation of serum calcitriol level