

NOTE ON FINAL EXAM GRADING:

I decided to throw out question 32:

Which of the following prevents the transfer of electrical excitation between the atria and ventricles, so that the atria contract before the ventricles?

- a. intercalated disks
- b. AV node
- c. bundle of His
- d. fibrous connective tissue skeleton associated with the valves
- e. papillary muscles

A greater number of students chose an incorrect choice (b-AV node) rather than the correct choice (d-fibrous connective tissue skeleton associated with the valves). The AV node is part of the cardiac **conduction** system and therefore **does** transfer electrical excitation to the ventricles (i.e. does not prevent it). Electrical activity conducts via electrically coupled cardiac muscle and does not conduct through connective tissue. However, as you heard in lecture, cardiac action potential conduction does slow down in the AV node, allowing the atria to finish contracting before the ventricles start contracting, and this was probably the source of confusion.

Everyone was awarded 2 extra points.