# 24A (20 points)

1- Scientifically, what is one of the biggest limitations of studying stars?

3 – How did Bayer name the brightest or main star in a constellation?

4- How does the apparent brightness of stars change as their stellar magnitude numbers increase?

6- What unit of distance is more convenient for measuring the distance to stars than miles or kilometers?

8- What are the two main properties that astronomers use to classify stars?

# 24B

1- What was the original reason for identifying and naming nebulas?

3 – How can astronomers tell if groups of stars actually form a star cluster?

6- Why are quasars similar to both galaxies and stars?

# 24C

2 – What is the study of the origin of the universe called? What is the starting point for people who work in this area of knowledge?

3- What are two pieces of evidence that secular cosmologists use to justify a very large universe.

4- Why do some say that a very large universe suggests a very old universe?

5- Both cosmological red shift and the CMBR are the result of what prediction of the Big Bang Theory?

6 – Why does the phrase “stellar evolution” mean something different from biological evolution?”

7 – Explain the statement, “Dark matter is just another way of saying, “We don’t know.”

# Chapter Review

2 – What is the main reason for using constellations in modern astronomy?

5 – What are the two kinds of motion that describe stars’ real motion?

6- For stars on the main sequence on the H-R diagram, what two properties have the most influence on luminosity and color class?

7 – How does the sun compare to other stars in mass, color, and luminosity?

8- What condition in a star leads to stellar death?

10- What is the difference between a black hole left over from a star and a galactic black hole?

# Vocabulary (25 points)

Cosmology

Asterisms v. Constellations v. star clusters

Apparent magnitude v. Absolute magnitude

Declination

Celestial Equator, Celestial North Pole

Light-year

Parallax

Luminosity

Supergiants

Hertzsprung-Russell diagram

Spectroscopy (p.595)

Red shift

Neutron star

Supernova

Black hole

Nebula

Binary stars

Galaxy

Dark matter

Quasars

SETI (p.604)

Georges Lemaitre

Cosmic microwave Background Radiation

Stellar evolution

General Theory of Relativity