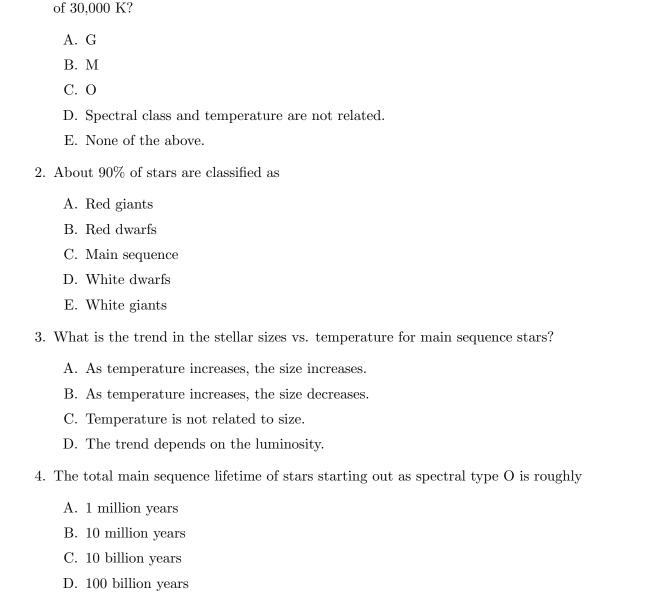
ASTRO 1050 – Survey of Astronomy October 24, 2008 Midterm Examination #3 Practice Quiz

1. Which of the following spectral classes would most represent a star with a surface temperature

Stars



- 5. Star A's fusion rate is two times Star B's fusion rate. How does Star A's mass compare to Star B's mass?
 - A. Star A's mass will be more than two times that of Star B.
 - B. Star A's mass will be two times that of Star B.
 - C. Star A's mass will be more than Star B, but less than twice as massive.
 - D. Star A's mass will be the same as that of Star B.
 - E. Star A's mass will be half that of Star B.
- 6. Star C has a mass that is three times the mass of Star D. If both stars are main sequence stars, which is true about the temperatures of Star C and Star D?
 - A. Star D is hotter than Star C.
 - B. Star D is cooler than Star C.
 - C. Star D is the same temperature as Star C.
 - D. There is insufficient information to determine temperature.

Galaxies & the Universe

- 7. Stars A and B have the same apparent brightness or flux. Star A is 10 parsecs away from you while Star B is 30 parsecs away from you. Which of the following is a possible combination of absolute magnitudes for Stars A and B?
 - A. Star A: M=0 Star B: M=0
 - B. Star A: M = 0 Star B: M = 2.5
 - C. Star A: M = 2.5 Star B: M = 0
 - D. Star A: M = -2.5 Star B: M = 2.5
 - E. None of the above.
- 8. As the distance to galaxies increase,
 - A. its apparent velocity increases.
 - B. its apparent velocity decreases.
 - C. apparent velocity stays the same.
 - D. Apparent velocity and distance of a galaxy are not related.

- 9. The conclusion that the universe is expanding is a consequence of
 - A. Hubble's law
 - B. Kepler's laws
 - C. Newton's laws
 - D. Einstein's law
- 10. Why are spiral galaxies generally blue and elliptical galaxies generally red?
 - A. Spiral galaxies are moving toward you so they are blueshifted while elliptical galaxies are moving away from you so they are redshifted.
 - B. The gas and dust in spiral galaxies filter out all but the blue light from stars.
 - C. Stars are forming in the spiral galaxies so there are many more high mass, hot, blue stars present, whereas there are no new stars forming in elliptical galaxies.
 - D. Only red stars form in elliptical galaxies and only blue stars form in spiral galaxies.