Question 1

Most comets spend the majority of their time beyond the orbit of _____, yet many of them have perihelions very close to the Sun.
Answer: https://biology-forums.com/index.php?topic=394258

Question 2

Which statement about young stars is FALSE?
A) Being young, they will have more pure hydrogen than earlier generations.
B) They are more likely to have planets forming with them than earlier generations.
C) The high mass stars will be more likely to produce heavier elements as they evolve.
D) They contain a larger fraction of heavy elements than previous generations.
E) They are born in a dustier environment than earlier generations.
Answer: https://biology-forums.com/index.php?topic=395187

Question 3

In composition, mass, and density, Jupiter is most like:
A) a gigantic asteroid.
B) a large terrestrial planet.
C) the Sun.
D) a huge Kuiper belt Object.
E) a huge comet.
Answer: https://biology-forums.com/index.php?topic=394201

Question 4

Taking the total number of stars in the Milky Way and dividing by the age of the Milky Way is a way to estimate:
A) the star formation rate in the Milky Way.
B) the average age of a star in the Milky Way.
C) the age of the stars in the Milky Way.
D) the average age of a low mass main sequence star in the Milky Way.
E) the rate of formation of high mass stars in the Milky Way.
Answer: https://biology-forums.com/index.php?topic=395601

Question 5

Planets found in the habitable zone of other stars:
A) include hot Jupiters.
B) have been demonstrated to be barren of all life.
C) include some Earths and super-Earths.
D) are all rocky planets, like the terrestrial planets in our solar system.
E) are all jovian planets.
Answer: https://biology-forums.com/index.php?topic=394787

Question 6

What are the characteristics of an open cluster of stars?
A) All stars are much more massive than our Sun.
B) old age and millions of members
C) a few hundred, mainly main sequence stars
D) mostly found above and below the galactic plane
E) All stars are about the same age and luminosity.
Answer: https://biology-forums.com/index.php?topic=395054

Question 7

In size, Mercury is intermediate between:
A) Earth and Venus.
B) the Moon and Mars.
C) Ceres and Pluto.
D) Mars and Earth.
E) Pluto and the Moon.
Answer: https://biology-forums.com/index.php?topic=394333

Question 8

The brightest stars of a young open cluster will be:
A) T Tauri variables.
B) yellow main sequence stars like the Sun.
C) massive blue main sequence stars.
D) Cepheid variables.
E) red giants.
Answer: https://biology-forums.com/index.php?topic=395106

Question 9

The lensing of a distant quasar is produced by _____ of a foreground galaxy.
A) all the normal matter and dark matter
B) an individual star
C) only the mass of the black hole in the nucleus
D) a pulsar's intense magnetic field
E) a relativistic jet
Answer: https://biology-forums.com/index.php?topic=395416

Question 10

When a star's inward gravity and outward pressure are balanced, the star is said to be:
A) in hydrostatic equilibrium.
B) a stage 2 protostar.
C) in thermal expansion.
D) in rotational equilibrium.
E) in gravitational collapse.
Answer: https://biology-forums.com/index.php?topic=395072

Question 11

How does Drake define a technological civilization?
A) one that can get into space
B) one that can construct metal tools
C) one that has a written language
D) one that can communicate over interstellar distances
E) one that can have the intelligence not to destroy itself
Answer: https://biology-forums.com/index.php?topic=395595

Question 12

An iron core cannot support a star because:
A) iron is in the form of a gas, not a solid, in the center of a star.
B) iron is the heaviest element, and sinks upon differentiation.
C) iron supplies too much pressure.
D) iron has poor nuclear binding energy.
E) iron cannot fuse with other nuclei to produce energy.
Answer: https://biology-forums.com/index.php?topic=395139

Question 13

Compared with the other jovian planets, Neptune is:
A) small with features similar to Jupiter.
B) average, but featureless.
C) much larger and featureless.
D) small and featureless.
E) much larger with features similar to Saturn.
Answer: https://biology-forums.com/index.php?topic=394657

Question 14

Rhea, Saturn's second largest moon, might best be described as:
A) having a very reflective, icy surface that is heavily cratered.
B) being composed of the densest material of any Saturnian moon and dark in appearance.
C) being the only major moon of any planet not in synchronous rotation.

D) having the leading hemisphere six times darker than the following one.
E) orbiting in a highly elliptical orbit, far from Saturn.
Answer: https://biology-forums.com/index.php?topic=394612

Question 15

The distances to other stars is best measured in _____.
Answer: https://biology-forums.com/index.php?topic=393943

Question 16

The Milky Way galaxy contains about _____ stars.
Answer: https://biology-forums.com/index.php?topic=393944

Question 17

The plane in which almost all planets orbit the Sun is called the:
A) galactic plane.
B) equator of the solar system.
C) ecliptic.
D) equant.
E) node.
Answer: https://biology-forums.com/index.php?topic=394194

Question 18

If the density of the universe is greater than critical, then:
A) the universe will end up as nothing but black holes.
B) the universe is closed, gravity wins, and will shrink to the Big Crunch.
C) there is more matter than energy.
D) the Universe will continue expanding forever.
E) the universe is flat, and Euclid is right.
Answer: https://biology-forums.com/index.php?topic=395457

Question 19

In which of the following models will the universe stop expanding?
A) Open Universe
B) Critical Density Universe
C) Steady State Universe
D) Closed Universe
E) All have an ultimate collapse.
Answer: https://biology-forums.com/index.php?topic=395448

Question 20

Consider this diagram. Which statement is true?
graphic(Ch 3.2_3,5.JPG)
A) The amplitude cannot be determined from this diagram.
B) The amplitude is 4.
C) The amplitude is 6.
D) The amplitude is 8.
E) The amplitude is 12.
Answer: https://biology-forums.com/index.php?topic=394015