

Demography of the Cosmos

Astro-demographics · Practice Test · 10 Questions

1. As of 2024, which classification describes the majority of confirmed exoplanets discovered in the Milky Way?

- A) Super-Earths
- B) Gas Giants
- C) Terrestrial planets
- D) Sub-Neptunes

2. What is the approximate 'population' density of stars in the core of a globular cluster compared to the solar neighborhood?

- A) 10 times higher
- B) 100 to 1,000 times higher
- C) 10,000 times higher
- D) 1,000,000 times higher

3. In the context of stellar demography, what percentage of stars in the Milky Way are estimated to be M-dwarfs?

- A) About 15%
- B) About 40%
- C) About 75%
- D) About 95%

4. Which planet in our solar system has the highest density of confirmed natural satellites (moons) as of recent IAU counts?

- A) Jupiter
- B) Saturn
- C) Uranus
- D) Neptune

5. What is the estimated 'demographic' distribution of galaxy types in the observable universe?

- A) 70% Elliptical, 20% Spiral, 10% Irregular
- B) 20% Elliptical, 70% Spiral, 10% Irregular
- C) 10% Elliptical, 20% Spiral, 70% Irregular
- D) 50% Elliptical, 50% Spiral

6. Among the known asteroid population in the Solar System, which region contains the highest count of objects?

- A) The Kuiper Belt
- B) The Oort Cloud
- C) The Main Asteroid Belt
- D) The Trojan points of Jupiter

7. What is the approximate age distribution of the 'population' of stars in the thin disk of the Milky Way?

- A) 0 to 2 billion years
- B) 1 to 8 billion years
- C) 8 to 12 billion years
- D) 12 to 13.5 billion years

8. Which taxonomic class of stars accounts for the smallest fraction of the stellar population in the solar neighborhood?

- A) O-type stars
- B) K-type stars
- C) M-type stars
- D) G-type stars

9. In astronomical terms, what is the estimated 'population' count of galaxies within the observable universe?

- A) 100 million
- B) 10 billion
- C) 2 trillion
- D) 100 trillion

10. When analyzing the orbital distribution of exoplanets, which semi-major axis distance exhibits the 'planet desert' phenomenon?

- A) Inner 0.1 AU
- B) Between 1 and 2 AU
- C) Between 5 and 10 AU
- D) Beyond 30 AU