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## Ex. 2, p. 130, orally

1. What does the Equivalence Principle state?

The Equivalence Principle states that the gravitational mass of a body is the same as its inertial mass.

- 2. What was Einstein's attitude to the concept of an expanding Universe?

  Einstein admitted that the static Universe is unstable, but still didn't like the concept of an expanding Universe. He even called it abominable.
- 3. What did Vesto Slipher find working at the Lowell Observatory?

  Working at the Lowell Observatory, Vesto Slipher based on the redshifts of distant nebulae found that they were moving faster than the Milky Way escape velocity and hence could not be part of our galaxy.
- 4. What does Hubble's law state?

  Hubble's law states that the distance to a galaxy is proportional to its radial recession velocity.
- 5. What is the Cosmological Principle?

  The Cosmological Principle is the concept of a homogeneous and isotropic Universe.
- 6. Who discovered the CMB radiation? The Cosmic Microwave Background was discovered by Arno Penzias and Robert Wilson, who were awarded the Nobel Prize in Physics in 1978.