

Electrical and Electronic, preliminary Q&A's

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Q&A #1

1. Which are the main specific characteristics of space environment affecting electrical and electronic equipment?
 - a. Vacuum, Radiation, Maintenance Free, Gravity
 - b. Vacuum, Radiation, Temperature, Gravity
 - c. Vacuum, Radiation, Maintenance Free, Temperature

2. Which are the main types of radiation effects on electrical components and equipment?
 - a. Total Ionizing Dose and Cosmic Rays
 - b. Total Ionizing Dose and Single Event Effects, Displacement Damage
 - c. Single Event Effects and Total Ionizing Dose

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Q&A #2

1. How long does a GEO satellite take to rotate around the Earth?
 - a. 12 hours
 - b. Variable time
 - c. 24 hours

2. What is a Lagrange point?
 - a. A point of equilibrium of between Sun and Earth attraction
 - b. A point of equilibrium of a Earth orbit
 - c. A point of equilibrium of a Sun orbit

3. What is the LTAN (Local Time of Ascending Node) of a dawn/dusk orbit?
 - a. 8:00
 - b. 18:00 / 24:00
 - c. 6:00 / 18:00

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Q&A #3

1. For a GEO telecom satellite with rotating solar array wings, would you select a power system based on
 - a. S3R
 - b. MPPT
 - c. It does not matter

2. For a LEO satellite with body-mounted solar array and Nadir pointed, would you select a power system based on
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3. Explain why...

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