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# (U) Orbit Mechanics

Name\_\_\_\_\_

	Date
	Multiple Choice  indicate your response by circling the letter of the correct answer. Each question is worth point.
1.	The benefit of a HEO orbit is  a. Stationary over a specific point on earth b. Long dwell time in apogee c. Short dwell time in apogee d. Shortest revisit time
2.	The farthest distance that a satellite reaches from the primary body is known as:  a. Apogee b. Inclination c. Perigee d. Perturbation
3.	A orbit is optimal for continuous surveillance of selected priority regions due to its continuous focused dwell (24 hours over fixed areas).
4.	A satellite (in its most basic form) is made up of a and a payload.
5.	(U) What term describes the tilt of the orbit plane with respect to the equatorial plane?

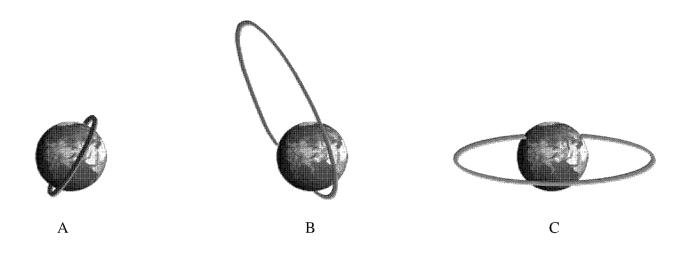
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## Use the following graphics to answer questions 4-9.



- 6. Which orbit is most effective for worldwide surveillance due to its ability to provide frequent revisits?
- 7. Which orbit is optimal for continuous surveillance of selected priority regions?
- 8. Which orbit is most responsive for focused surveillance and geolocation due to its polar dwell?
- 9. What is the name of orbit A? (spell out acronym)
- 10. What is the name of orbit B? (spell out acronym)
- 11. What is the name of orbit C? (spell out acronym)

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# Answer Key

- 1. B
- 2. A
- 3. GEO
- 4. Bus
- 5. Inclination. 1pt
- 6. A lpt
- 7. C 1pt
- 8. B 1pt
- 9. Low Earth Orbit (LEO) 2pts
- 10. Highly Elliptical Orbit (HEO) 2pts
- 11. Geosynchronous Orbit (GEO) 2pts

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