

Question 1
Correct
Mark 1.00 out of 1.00
Flag question

Optical remote sensors can be installed on a range of platforms at different altitudes. Match the following platforms with the most appropriate altitudes.

Aircraft	10km	✓
Geostationary satellite	36,000km	✓
Polar orbiting satellite	500 – 800km	✓

The correct answer is: Aircraft – 10km, Geostationary satellite – 36,000km, Polar orbiting satellite – 500 – 800km

Question 2
Correct
Mark 1.00 out of 1.00
Flag question

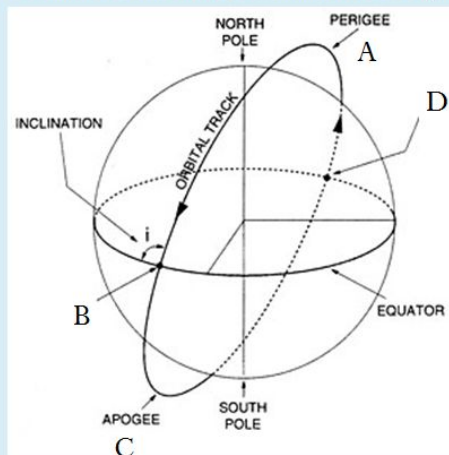
Remote sensing systems can be classified into three broad categories. Match the categories with their representative examples.

Antenna	Radarsat-2	✓
Array Sensor Systems	SPOT	✓
Line Scanning Sensor Systems	Landsat-7	✓

The correct answer is: Antenna – Radarsat-2, Array Sensor Systems – SPOT, Line Scanning Sensor Systems – Landsat-7

Question 3
Correct
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The illustrated satellite orbit has been divided into a few segments.



Select one or more:

- ☐ a. The ascending orbit is represented by BCD.
- ☒ b. The descending orbit is represented by ABC. ✓
- ☐ c. None of the listed statements is correct.
- ☒ d. The ascending orbit is represented by CDA. ✓
- ☐ e. The descending orbit is represented by DAB.

The correct answer is: The descending orbit is represented by ABC., The ascending orbit is represented by CDA.

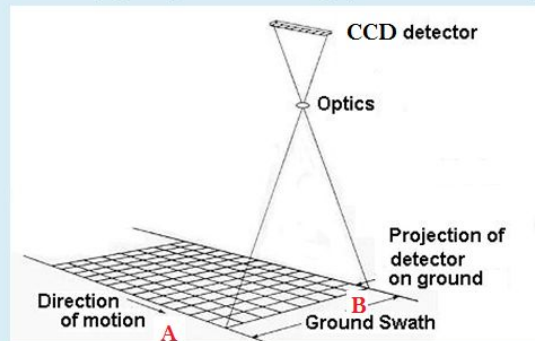
Question 4

Correct

Mark 1.00 out of 1.00

Flag question

The following figure depicts a remote sensing system. Choose one description to match the figure.



Select one:

- ☐ a. Antenna
- ☒ b. Array Sensor Systems ✓
- ☐ c. Line Scanning Sensor Systems

The correct answer is: Array Sensor Systems

Question 5

Correct

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Flag question

Using the figure from the last question, match the labels with the terms

- | | | |
|--------------|-----------------------|---|
| along track | A | ✓ |
| swath | across-track coverage | ✓ |
| across-track | B | ✓ |

The correct answer is: along track – A, swath – across-track coverage, across-track – B

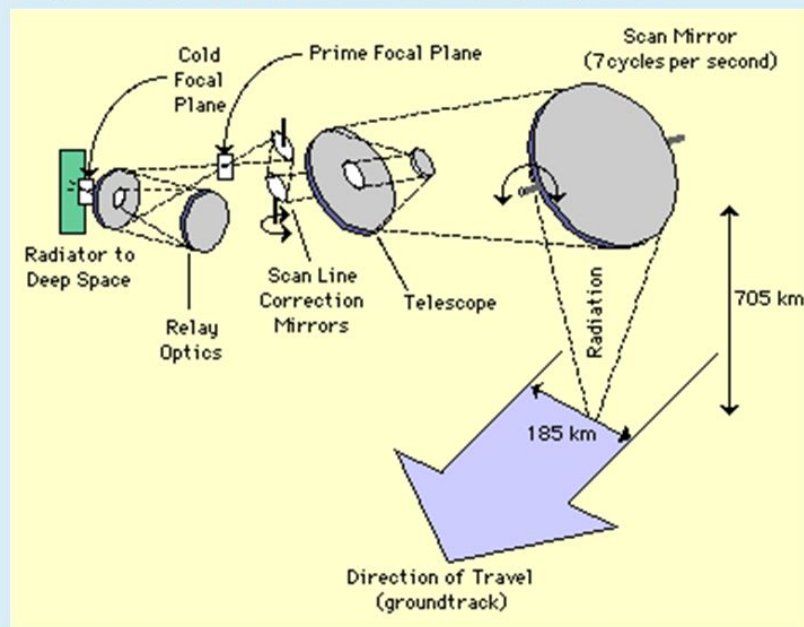
Question 6

Correct

Mark 1.00 out of 1.00

Flag question

The figure shows the optical path of the Landsat ETM+ sensor. Which optical system is used?



Select one:

- ☐ a. Combination of reflective and refractive optics
- ☒ b. Reflective optics ✓
- ☐ c. Refractive optics

The correct answer is: Reflective optics

Question 7

Correct

Mark 1.00 out of 1.00

Flag question

Optical remote sensors are placed on the focal planes in the optical system in order to generate sharp images. Using the figure from the last question, which of the following statement is correct?

Select one or more:

- ☒ a. The thermal infrared sensor is placed at the cold focal plane. ✓
- ☒ b. The near infrared sensor is placed at the prime focal plane. ✓
- ☐ c. The thermal infrared sensor is placed at the prime focal plane.
- ☐ d. The near infrared sensor is placed at the cold focal plane.
- ☐ e. The visible sensor is placed at the cold focal plane.
- ☒ f. The visible sensor is placed at the prime focal plane. ✓

The correct answer is: The visible sensor is placed at the prime focal plane., The near infrared sensor is placed at the prime focal plane., The thermal infrared sensor is placed at the cold focal plane.

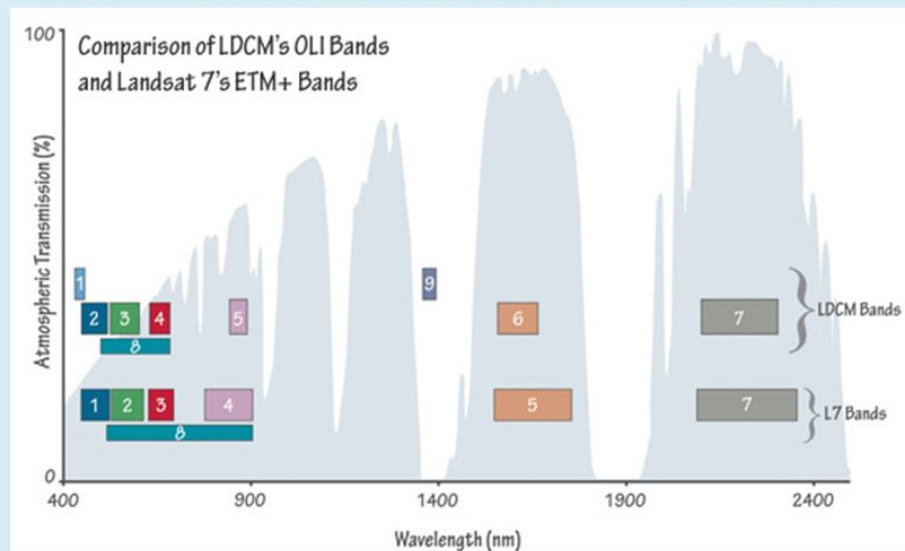
Question 8

Correct

Mark 1.00 out of 1.00

Flag question

From the figure comparing the Landsat-7 (L7) and the Landsat Data Continuity Mission (LDCM), it can be seen that



Select one:

- ☒ a. LDCM has higher spectral resolution than L7 ✓
- ☐ b. LDCM has higher radiometric resolution than L7
- ☐ c. LDCM has higher temporal resolution than L7
- ☐ d. LDCM has higher spatial resolution than L7
- ☐ e. It is impossible to make a comparison between L7 and LDCM.

The correct answer is: LDCM has higher spectral resolution than L7

Question 9

Correct

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Flag question

The SPOT satellites have a nominal re-visit time of 26 days. But it is possible to observe an area every 4 - 5 days at time of emergency while maintaining the same spatial resolution because

Select one:

- ☐ a. Multiple satellites form a constellation.
- ☐ b. Different imaging modes can be used.
- ☒ c. The optical sensors can observe with oblique pointing. ✓

The correct answer is: The optical sensors can observe with oblique pointing.

Question 10

Correct

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Relative to the Landsat satellite series, the SPOT satellites represent a new generation of optical remote sensing systems. Furthermore, the SPOT sensors have more spectral bands than the Landsat sensors.

Select one:

- ☐ True
- ☒ False ✓

The correct answer is 'False'.

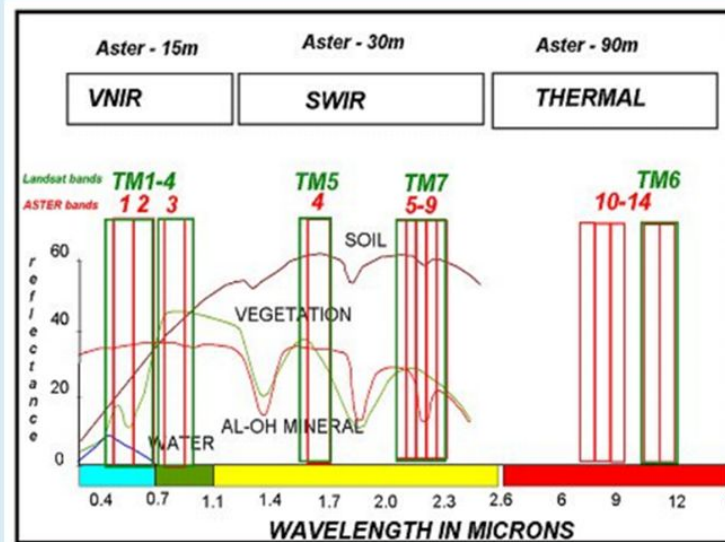
Question 11

Correct

Mark 1.00 out of 1.00

Flag question

From the figure comparing the Landsat-TM and ASTER, it can be seen that



Select one:

- ☐ a. ASTER has higher radiometric resolution than TM
- ☐ b. It is impossible to make a comparison between TM and ASTER.
- ☒ c. ASTER has higher spectral resolution than TM. ✓
- ☐ d. ASTER has higher temporal resolution than TM
- ☐ e. ASTER has higher spatial resolution than TM

The correct answer is: ASTER has higher spectral resolution than TM.