

Comprehension Test Questions for SBI Clerk Pre, IBPS Clerk Pre, LIC Assistant Pre and IBPS RRB Asst. Pre Exams.

Passage No. 153

Direction: Read the following passage carefully and answer the following questions.

With the successful pre-dawn launch of RISAT-2B satellite, the Indian Space Research Organisation (ISRO) has added another feather to its cap. The satellite will enhance India's capability in crop monitoring during the monsoon season, forestry mapping for forest fires and deforestation, and flood mapping as part of the national disaster management programme. Given that overcast skies are a constant during the monsoon season and during times of flood, the ability to penetrate the cloud cover is essential. While optical remote sensing that relies on visible light for imaging gets obstructed by clouds, RISAT-2B will not. Much like the RISAT-1 satellite that was launched by ISRO in April 2012, RISAT-2B will also use microwave radiation. Unlike visible light, microwaves have longer wavelength and so will not be susceptible to atmospheric scattering. Microwave radiation can thus easily pass through the cloud cover, haze and dust, and image the ground. Hence, RISAT-2B satellite will be able to image under almost all weather and environmental conditions. Since it does not rely on visible light for imaging, it will be able to image the ground during both day and night. The satellite does not have passive microwave sensors that detect the radiation naturally emitted by the atmosphere or reflected by objects on the ground. Instead, RISAT-2B will be transmitting hundreds of microwave pulses each second towards the ground and receiving the signals reflected by the objects using radar. The moisture and texture of the object will determine the strength of the microwave signal that gets reflected. While the strength of the reflected signal will help determine different targets, the time between the transmitted and reflected signals will help determine the distance to the object.

Questions:

- 1. As per the given passage, how RISAT-2B satellite will image in the cloudy weather?
 - I. With the help of its microwave radiation that can pass through cloud cover and dust easily.
 - II. With the help of visible light that creates images.
 - III. With the help of electronic rays that creates image of an object.

A. Only I

- B. Only II
- C. Only II and III
- D. Only I and II
- E. All I, II and III
- 2. What does the writer want to convey with the text given in italic "the Indian Space Research Organisation (ISRO) has added another feather to its cap."?
 - I. ISRO has worked hard on building its rapport among the other space research organisations of the world.
 - II. ISRO has made an accomplishment that made nation proud on it.
 - III. ISRO has become the apex space research institute of the world.
- A. Only I
- B. Only II
- C. Only II and III
- D. Only I and II
- E. All I, II and III

3. Which of the following has a similar meaning to "penetrate" in the context of the passage?

A. Enlarge

B. Pinch

C. Excess

D. Invade

E. Trespass

4. Which of the following is false in the context of the passage?

- I. RISAT-1 uses visible light technology to create images.
- II. RISAT-2 is helpful in flood mapping and crop monitoring.
- III. The passive microwave sensors of RISAT-2 detect the radiation.

A. Only I

B. Only II

C. Only I and III

D. Only I and II

E. All I, II and III

5. What is the transmission rate of RISAT-2?

I. 100 microwave pulse/second approx.

II. 1000 microwave pulse/second approx.

III. 10000 microwave pulse/second approx.

A. Only I

B. Only II

C. Only II and III

D. Only I and II E. All I, II and III

Smartkeeda

The Question Bank

Correct Answers:

1	2	3	4	5
Α	В	D	С	Α



Explanations:

1. Refer:

Microwave radiation can thus easily pass through the cloud cover, haze and dust, and image the ground. Hence, RISAT-2B satellite will be able to image under almost all weather and environmental conditions. Since it does not rely on visible light for imaging, it will be able to image the ground during both day and night.

With the help of underlined text it is clear that only statement I is true.

Statement III is not even mentioned anywhere in the passage.

Hence option A is correct.

2. "Add a feather to cap" is an idiom which means to accomplish a deed one can proud of. Clearly only statement II renders the same meaning.

Hence, option B is correct.

3. Refer:

Given that overcast skies are a constant <u>during the monsoon season and during times of flood, the ability to **penetrate** the cloud cover is essential.</u>

In the given scenario penetrate is used to gain access to the cloud cover so that images from each and every angle can be obtained.

Thus among the given words only "invade" has the similar meaning.

Hence option D is correct.

4. Refer:

Much like the RISAT-1 satellite that was launched by ISRO in April 2012, RISAT-2B will also use microwave radiation.

This confirms statement I to be false.

Refer:

The satellite will enhance India's capability in crop monitoring during the monsoon season, forestry mapping for forest fires and deforestation, and flood mapping as part of the national disaster management programme.

This makes statement II to be true.

Refer:

The <u>satellite does not have passive microwave sensors that detect the radiation</u> naturally emitted by the atmosphere or reflected by objects on the ground.

Clearly, statement III is false.

Hence option C is true.

5. Refer:

RISAT-2B will be transmitting hundreds of microwave pulses each second towards the ground.

Thus statement I is true.

Hence option A is correct.







Presents

TestZone

India's least priced Test Series platform



ALL BANK EXAMS

2020-2021 Test Series



₹599/-300+ Full Length Tests

- ☑ Brilliant Test Analysis
- **Excellent Content**
- ☑ Unmatched Explanations

JOIN NOW