

1. DGPS receivers must have a separate receiver for differential correction signals.

判断题 (5 分) 5 分

A. True

B. False

正确答案: A

2. Obstacles such as trees and buildings interfere less with DGPS beacons than satellite transmission.

判断题 (5 分) 5 分

A. True

B. False

正确答案: B

3. Hills and bluffs can always block ground waves.

判断题 (5 分) 5 分

A. True

B. False

正确答案: B

4. _____ is the most important factor affecting every decision a farm manager makes.

填空题 (5 分) 0 分 (请按题目中的空缺顺序依次填写答案)

yield

回答错误

正确答案:

① Money

5. Of all these possible uses of precision farming techniques, _____ is the most logical starting point for a farmer interested in adopting the technology.

填空题 (5 分) 0 分 (请按题目中的空缺顺序依次填写答案)

to achieve better economic benefits

回答错误

正确答案:

- ① Yield Monitoring

6. A satellite is identified by either its _____ or _____ code.

填空题 (10 分) 0 分 (请按题目中的空缺顺序依次填写答案)

① SVN

回答错误

② PRN

回答错误

正确答案:

- ① Space Vehicle Number
② Pseudorange Noise

7. Beacon signals begin to fade between _____ and _____ miles from the transmitting tower.

填空题 (5 分) 5 分 (请按题目中的空缺顺序依次填写答案)

① 125

② 300

正确答案:

- ① 125
② 300

8. The user places the GPS antenna on the benchmark and records a reading at five different times throughout a day. The results are:

	Longitude, W	Latitude, N
Benchmark	88° 12'34.50"	40° 4'21.20"
Reading 1	88° 12'34.55"	40° 4'21.22"
Reading 2	88° 12'34.43"	40° 4'21.25"
Reading 3	88° 12'34.49"	40° 4'21.11"
Reading 4	88° 12'34.52"	40° 4'21.24"
Reading 5	88° 12'34.54"	40° 4'21.23"

Analyze these readings and express the GPS errors in (a) RMS, (b) 2SD, (c) CEP terms.

(a)_____, (b)_____, (c)_____ (精确到小数点后3位, 单位: 米)

填空题 (30 分) 20 分 (请按题目中的空缺顺序依次填写答案)

① 2.416

② 1.218

回答错误

③ 2.221

正确答案:

- ① 2.416
② 3.026
③ 2.221

9. The concept of treating small areas of a field as separate management units is new.

判断题 (5 分) 5 分

- A. True
- B. False

正确答案: B

10. It is possible to apply pesticide to individual plant while driving across the field.

判断题 (5 分) 5 分

- A. True
- B. False

正确答案: A

11. _____ is the variation in measured crop and soil characteristics over distance and depth.

填空题 (5 分) 0 分 (请按题目中的空缺顺序依次填写答案)

Yield Map

回答错误

正确答案:

① Spatial variability

12. In order for DGPS to work, both the moving GPS receiver and the base station receiver must be able to "see" the same satellites at the same time.

判断题 (5 分) 5 分

- A. True
- B. False

正确答案: A

13. The arrangement of satellites is called a _____.

填空题 (5 分) 5 分 (请按题目中的空缺顺序依次填写答案)

constellation

正确答案:

① constellation

14. Current whole-field management approaches often ignore variability in soil-related characteristics.

判断题 (5 分) 5 分

- A. True

B. False

正确答案: A