

# Geo-Informatics and Nano-technology for Precision Farming

## MCQ

- The navigation system based on a network of satellites that helps users to record positional information  
A) **GPS**  
B) GIS  
C) Remote sensing  
D) All the above  
**ANS: A**
- The concept of SSNM in rice was developed in cooperation with researchers across \_\_\_\_\_.  
A) Africa  
B) South America  
C) Asia  
D) Europe  
**ANS: C**
- The required fertiliser N is distributed in several applications during the crop growing season using tool like the \_\_\_\_\_.  
A) Specific leaf area  
B) Leaf area index  
C) Leaf colour chart  
D) None of the above  
**ANS: C**
- \_\_\_\_ are automatic and may be applied to numerous farming operations.  
A) Variable rate application  
B) Variable rate applicator  
C) Variable rate technologies  
D) All the above  
**ANS: C**
- Geoinformatics is a new discipline concerned with the \_\_\_\_\_ of spatial data and the processing techniques in spatial information systems.  
A) Modelling  
B) Probabilistic model  
C) Deterministic model  
D) None of the above  
**ANS: A**
- \_\_\_\_\_ Can be defined as a system for capturing , storing , checking and displaying data , which are spatially referenced to the earth .  
A) GIS  
B) GPS  
C) Variable rate applicator  
D) Remote sensing  
**ANS: A**
- \_\_\_\_\_ is used to operationalise precision farming at the farm level  
A) Variable rate applicator  
B) Variable rate technology  
C) Variable rate application  
D) None of the above  
**ANS: A**
- \_\_\_\_\_ is the process of defining image characteristics or features which effectively provides meaningful information for image interpretation .  
A) **Feature extraction**  
B) Spectro radiometer GIS  
C) Hydrospectral data  
D) None of the above  
**ANS: A**
- Band selection is one of the important steps in \_\_\_\_\_.  
A) Remote sensing  
B) Hydrospectral data  
C) Hyperspectral remote sensing  
D) All the above  
**ANS: C**
- \_\_\_\_\_ can be used as potential variables for crop type discrimination .  
A) **Narrow band vegetation indices**  
B) Physiological indices  
C) Stress indices  
D) All the above  
**ANS: A**
- \_\_\_\_\_ includes water , pigments , other nitrogen – rich compounds and plant structural materials .  
A) Structural properties  
B) **Biochemical properties**  
C) Spectral indices  
D) None of the above  
**ANS: B**

12. The most important assets of the LBP operator in real world applications is its robustness to monotonic \_\_\_\_ changes instigated

- A) **Gray – scale**
- B) Blue - scale
- C) Spectral indices
- D) All the above

**ANS: A**

13. \_\_\_\_ utilise the spectral variations for classification .

- A) **Computer aided techniques**
- B) Visual image interpretation
- C) Computer techniques
- D) None of the above

**ANS: A**

14. \_\_\_\_ information is used in conjunction with crop area statistics to obtain crop production

- A) **Crop yield**
- B) Crop productivity
- C) Both A & B
- D) None of the above

**ANS: A**

15. Scale used for mapping multispectral satellite data is \_\_\_\_\_

- A) 1:20000
- B) 1:500
- C) **1:50,000**
- D) 1:5000

**ANS: C**

16. Fertilizer recovery efficiency of N in rice ranges from

- A) 20-30 per cent
- B) 80-90 per cent
- C) **40-60 per cent**
- D) 60-70 er cent

**ANS: C**

17. Fertilizer recovery efficiency of P in rice ranges from

- A) 10-20 per cent
- B) 60-70 per cent
- C) 30-40 per cent
- D) **20-30 per cent**

**ANS: D**

18. \_\_\_\_ is most populat nutrient decision support software that uses principles of SSNM

- A) **Nutrient Expert**
- B) Nutrient wizard
- C) Fertilizer Expert
- D) Fertilizer support

**ANS: A**

19. A precision instrument used to measure chlorophyll content is

- A) **SPAD meter**
- B) LCC
- C) Green Seeker
- D) Quantum sensor

**ANS: A**

20. The co-ordinate reference system used by GPS is known as

- A) WGS 45
- B) **WGS 84**
- C) WGS 89
- D) WGS 88

**ANS: B**

21. Ratio of semi-major and semi minor axis is called \_\_\_\_\_

- A) **Inverse flattening**
- B) Outward flattening
- C) Inverse Curving
- D) Straightening

**ANS: A**

22. The zero degree longitude is termed as \_\_\_\_\_

- A) Anti meridian
- B) **Prime meridian**
- C) Equator
- D) Tropic of cancer

**ANS: B**

23. The science of measurement and mapping of earth's surface is \_\_\_\_\_

- A) **Geodesy**
- B) Geoid
- C) CRS
- D) OGC

**ANS: A**

24. The idea of nanotechnology was first time introduced by \_\_\_\_\_

- A) **Richard Feynman**
- B) Nori Taniguchi
- C) Richard Flemming
- D) Richard Williams

**ANS: A**

25. The word nano came from \_\_\_\_\_

- A) **Greek word**
- B) Italian word
- C) Latin word
- D) French word

**ANS: A**

26. The term nanotechnology was first time used by \_\_\_\_\_

- A) Richard Feynman
- B) **Nori Taniguchi**
- C) Richard Flemming
- D) Richard Williams

**ANS: B**

27. The process of identifying a location by one or more attributes from a base layer is \_\_\_\_\_

- A) Georeference
- B) Geoid
- C) GIS
- D) **Geocode**

**ANS: D**

28. A pillar like structure on the wing of an aircraft used for carrying an engine, weapon or other load is \_\_\_\_\_

- A) **Pylon**
- B) Pilose
- C) Boot
- D) Cabin

**ANS: A**

29. The ratio between distance or area on a map and corresponding distance or area on ground is \_\_\_\_\_

- A) Model
- B) Chart
- C) **Scale**
- D) Image

**ANS: C**

30. Size range on a nanoscale usually ranges from

- A) 1-10 nm
- B) **1-100 nm**
- C) 100-200nm
- D) 0-1 nm

**ANS: B**