MCQs (Agronomy)

Muhammad Zeeshan Umer

(Serial # 1)

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1. PH of saline soils is usually _____.

   a) Less than 10
   b) More than 8.5
   c) More than 10
   d) Less than 8.5

2. Exchangeable sodium per centage for saline soils is _____.

   a) Equal to 15
   b) Less than 15
   c) Less than 18
   d) More than 15

3. EC for alkaline soils is less than _____ mmhos/cm.

   a) 4
   b) 6
   c) 8
   d) 10

4. If salinity is up to ____ mmhos/cm its effect mostly negligible.

   a) 8
   b) 2
   c) 16
   d) 18

5. Most salt tolerant grass is_____.

   a) Para grass
   b) Giant star grass
   c) Kallar grass
   d) Dab grass

6. Most salt tolerant fodder is_____.

   a) Berseem
   b) Oats
   c) Lucerne
   d) Senji

7. Among the following the most salt tolerant crop is_____.

a) Maize
b) Barley
c) Beans
d) Cotton

8. Soluble salts are less than 0.2% in_____.

a) Saline soils
b) Saline sodic soils
c) Sodic soils
d) Water logged soils

9. Saline sodic/sodic soils can be reclaim by using

a) $MgSO_4.2H_2O$
b) $CaSO_4.2H_2O$
c) $BaSO_4.2H_2O$
d) $K_2SO_4.2H_2O$

10. CO_3 and HCO_3 are absent in soils.

a) Saline
b) Saline sodic
c) Sodic
d) Water logged

11. Which one is not the cause of Water Logging?

a) Rainfall
b) Flooding by rivers
c) Defecting system of canals
d) Sowing time

12. Soil salinity cause 'TIRAK' in _____ crop.

a) Cotton
b) Rice
c) Sugarcane
d) Maize

13. Cereals grown on saline culture show_____ colour in leaves when plant approach maturity.

a) Blacking
b) Yellowish
c) Reddish
d) Greenish

14. Which one is not the method to remove excess salts from the surface of the soil?

a) Flushing
b) Scrapping
c) Leaching
d) Eva launching

15. Which one is not the method for eradication of water logging?

a) Lining of canals
b) Planting trees
c) Drainage
d) Use of press mud

16. Which one is not the local name of white alkali soils?

a) Kallar
b) Thur
c) Shor
d) Crust

17. One cusec is equal to _____ gallons.

a) 12.24
b) 6.24
c) 10.24
d) 8.24

18. The top soil layer of ____ cm is considered the principle feeding zone of most of agricultural crops.

a) 12.5 to 22.5
b) 25.5 to 35.5
c) 40.5 to 50.5
d) 50.5 to 60.5

19. The strips laid along the counter at the right angle to the natural direction of the slope is called _____.

a) Wind strip cropping
b) Buffer strip cropping
c) Field strip cropping
d) Contour strip cropping

20. The soils having organic matter more than 50% are called _____.

a) Muck soils
b) Peat soils
c) Colluvial soils
d) Glacial soils

21. Which one is used to raise PH and correct the acidity of soils?

a) Magnesia
b) Lye
c) Ammonia
d) Lime

22. The process of removing the excess soluble salts or excess exchange sodium from soils is called _____.

a) Fertilization
b) Scarification
c) Reclamation
d) Stratification

23. Low infiltration in fine textured soils results in _____.

a) Water erosion
b) Wind erosion
c) Both a & b
d) Glacier erosion

24. In soils _____ act as commenting agent.

a) Organic matter and nitrogen
b) Organic matter and phosphorus
c) Organic matter and Ca
d) Organic matter and S

25. Barani area counts for _____ % of total area in Punjab.

a) 10
b) 20
c) 30
d) 40

26. Final condition of soils after tillage have been performed is called _____.

a) Primary Tillage
b) Zero Tillage
c) Minimum Tillage
d) Tilth

27. The soil particle with _____ mm diameter move by suspension.

a) >0.005
b) <0.05
c) <0.5
d) <5

28. The particle with 0.05 to 0.5 mm in diameter move by _____.

a) Suspension
b) Surface creep
c) Saltation
d) None of them

29. The particle larger than 1 mm in diameter _____.

a) Move by suspension
b) Surface creep
c) Saltation
d) Don't move by wind

30. Which one is not a type of soil movement by wind?

a) Suspension
b) Splash
c) Saltation
d) Surface creep

31. The velocity necessary to start the first particle moving is called _____.

a) Fluid threshold velocity
b) Impact threshold velocity
c) Economic threshold velocity
d) None of them

32. Clean tilled crops _____ erosion.

a) Protect
b) Retard
c) Encourage
d) Do not affect

33. Organic content of soil can be increased by growing _____.

a) Clean tilled crop
b) Close growing crop
c) Leguminous crop
d) No crop

34. Application of agronomic principle to the solution of soil and water management is called _____.

a) Soil and water conservation
b) Conservation agronomy
c) Agronomic conservation
d) None of them

35. The surface area of _____ soil particle is high.

a) Fine
b) Coarse
c) Medium
d) Both a & b

36. There are _____ link canals in Pakistan.

a) 7
b) 8
c) 9
d) 10

37. Downwards movement of water within soil is called _____.

a) Seepage
b) Infiltration
c) Percolation
d) Absorption

38. Which one is not a practice of controlling water erosion?

a) Terracing
b) Contouring
c) Levelling
d) Wind breaks

39. _____ is mechanical manipulation of soil to provide soil conditions suitable for crop growth.

a) Tilth
b) Tillage
c) Mulching
d) Both a & b

40. The objective of tillage is to:

a) Breaking of hard pan
b) Controlling weeds
c) Separate diseased seeds
d) Both a& b

41. Which one is example of natural mulch?

a) Cultivation
b) Crop residue
c) Organic manure
d) Both a & b

42. The soils containing more clay particles are _____ to water erosion.

a) More susceptible
b) Less susceptible
c) None of them
d) Both a & b

43. Which one is not a type of water erosion?

a) Sheet erosion
b) Gully erosion
c) Rill erosion
d) Runoff

44. Soil texture refers to

a) Arrangement of soil particles
b) Relative proportion of soil particles
c) Organic contents of soil
d) None of them

45. Which one is the form of wind erosion?

a) Extrusion
b) Abrasion
c) Suspension
d) Both a & b

46. _____ = $\frac{\%\ \text{sand} + \%\ \text{silt}}{\%\ \text{clay}}$

a) Index of erodiblity
b) Index of texture
c) Index of fertility
d) Index of productivity

47. Which one is not a practice of water conservation?

a) Mulching
b) Fallowing
c) Contouring
d) Terracing

ANSWER KEY (SERIAL # 1)

1	d	**2**	b	**3**	a	**4**	b	**5**	c	**6**	d	**7**	b	**8.**	a	**9**	b	**10**	a
11	d	**12**	a	**13**	c	**14**	c	**15**	d	**16**	d	**17**	b	**18**	a	**19**	d	**20**	b
21	d	**22**	c	**23**	a	**24**	c	**25**	b	**26**	d	**27**	b	**28**	c	**29**	d	**30.**	b
31	a	**32**	c	**33**	c	**34**	b	**35**	a	**36**	c	**37**	c	**38**	d	**39**	b	**40**	d
41	a	**42**	b	**43**	d	**44**	b	**45**	d	**46**	a	**47**	b						

Numrah Hina

(Serial # 2)

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Q 1. As soil dries out soil water potential lowers turgour pressure affecting:

a) Photosynthetic rate
b) Respiration
a) C) Leaf expansion
c) Leaf senescence

Q 2. Shortage of assimilates at root decreases:

a) Leaf growth
b) Flowering
c) Spike growth
d) Root growth

Q 3. Drought can affect the amount of radiation interception by affecting

a) More leaf expansion
b) Slowing leaf senescence
c) Delaying leaf wilting
d) Less canopy development

Q 4) Water stress at grain development stage

a) Lowers rate
b) Less weight
c) Bolder seed
d) Decreases duration

Q 5) after anthesis crop growth is least affected by:

a) High temperature
b) Drought
c) Low light
d) Photo period

Q 6) In photosynthesis light plays role in the range of:

a) Above uv
b) Far red
c) 480-500 nm
d) 550-620 nm

Q 7) Cotton plant belong to:

a) CAM
b) C3 plant
c) C4 plants
d) None of above

Q 8) In cereals contribution of flag leaf is:

a) More than 20%
b) Less than 80%
c) More than 60%
d) None of them

Q 9) At early stages of cereals growth LAI depends upon:

a) High light intensities
b) Low light intensities
c) High temperature
d) Both photoperiod and temperature

Q 10) In C4 plants activity of Ribulose Bisphosphate carboxylase is under the influence of:

a) Nitrogen assimilation
b) Co2 intake
c) Oxygen deficiency
d) None of above

Q 11) Radiation use efficiency can be enhanced by:

a) Changing canopy development
b) Enhancing photoperiod
c) Addition of more inputs
d) Slowing plant growth

Q 12) under water stress plant:

a) Decreases absorbing radiation
b) Cut activities of co2 intake
c) Stomatal closure
d) Respiration rate decreases

Q 13) portioning of dry matter accumulation after anthesis may be attributed by:

a) Decreasing duration
b) Increasing its rate
c) Decreasing duration and increasing its rate
d) Increasing duration and decreasing rate

Q 14) crop growth depends upon:

a) More CO_2 intake
b) Less respiration
c) More radiation interception and its utilization efficiency
d) Less respiration and more CO_2 intake

Q 15) In plant growth analysis great significance is of:

a) Relative growth rate
b) Crop growth rate
c) Net assimilation rate
d) Leaf area index

Q 16) Economical yield is the product of:

a) HI
b) TDM
c) HI and TDM
d) TDM and grain yield

Q 17) size of seed directly related to:

a) More temperature
b) Source sink relationship
c) More photosynthesis activity
d) Photoperiod

Q 18) In grain legumes nodulation is least affected by:

a) PH
b) N and P fertilizers
c) Temperature
d) Potash fertilizer

Q 19) protein content in oils seed crop increases with:

a) Increase in nitrogenous fertilizer
b) Decreases N Fertilizer
c) Increases N fertilizer and decreases P fertilizer
d) All of the above

Q 20) Calculating ET in plant depends upon:

a) Low temperature
b) High temperature
c) High light intensity
d) Dry air and high temperature

Q21) In penman equation calculation of potential ET is done by:

a) Combination approach
b) Aerodynamic approach
c) Energy balance approach
d) All of above

Q 22) response of individual leaf photosynthesis to light is:

a) Curvilinear
b) Linear
c) Hyperbolic
d) None of above at light saturation point

Q 23) In light interception calculation method:

a) Fraction of intercepted light
b) LAI
c) Leaf senescence
d) Intercepted light is more important

Q 24) The pioneer worker in light concept approach is:

a) Ritchie
b) Monteith
c) Gallagher
d) Gallagher and Biscoc

Q 25) bundle sheath cells are present in:

a) Wheat plant
b) Grasses
c) Cactus plant
d) C3 plant

Q 26) RUBP carboxylase is:

a) 4 carbon
b) 5 carbon
c) 3 carbon
d) 6 carbon enzyme

Q 27) first stable compound in C4 plant is:

a) Phosphogylceric acid
b) PEP carboxylase
c) Oxalic acid
d) None of above

Q 28) photorespiration is high in:

a) CAM plants
b) C4 plants
c) C3 plants
d) All of above

Q 29) light saturation is not problem in:

a) Cactus
b) Desert
c) Field
d) Legumes

Q 30) Sa is abbreviation of:

a) Incident light
b) Fraction of intercepted PAR
c) Intercepted light
d) None of above

Q 31) in succulent plant stomata opens at:

a) Night
b) Day
c) Night and day
d) All of above

Q 32) transfer of thermal heat involves process:

a) Conduction
b) Convention
c) Radiation
d) All of the above

Q 33) cooler temperature at early stages of plant gives:

a) Faster growth
b) More duration
c) Less leaf expansion
d) Slow growth rate

Q 34) subtropical zones of Pakistan are:

a) Gilgit and chitral
b) Faisalabad and Jhang
c) Mianwali and Bhakkar
d) Sialkot and Lahore

Q 35) development rate is measured in terms of:

a) Rate
b) Duration
c) Rate and duration
d) All of above

Q 36) leaf area duration explains:

a) Rate and duration
b) Development rate
c) Its conversion efficiency
d) Leaf persistence to stay green

Q 37) crop growth rate requires:

a) More than two dry matter
b) Two dry matter
c) Photosynthesis activities
d) All of above

Q 38) base temperature for spring wheat is:

a) 5◦C
b) 2◦C
c) 4◦C
d) 0◦C

Q 39) for winter crops optimum temperature is:

a) >35◦C
b) <35◦C
c) 35-40◦C
d) 25-30◦C

Q 40) for C4 Plants maximum temperature is:

a) >45◦C
b) <45◦C
c) 35-40◦C
d) 30-35◦C

Q 41) In cereals lifesaving irrigation is:

a) Anthesis
b) Booting
c) At tillering
d) All of above

Q 42) for C4 Plants the soil temperature at germination should be:

a) <5◦C
b) >5◦C
c) 20◦C
d) 10◦C

Q 43) NAR is measured in:

a) mg /week
b) g /m^2
c) g /m^2/day
d) kg /m^2/day

Q 44) satisfactory growth rate for spring crop in kilogram is in kg/ha/day is:

a) 50
b) 100
c) 200
d) 300

Q 45) units of light measurement are:

a) J /m^2
b) M /m^2
c) Watts /m^2
d) All of above

Q 46) CGR for wheat is recommended between:

a) 20-25
b) 10-15
c) 5-10
d) 30-40 g /m^2/day

Q 47) wind is also medium of pollination for:

a) Wheat and barlay
b) Gram and lentil
c) Berseem and maize
d) Groundnut and sesame

Q 48) Yield components of wheat are:

a) Total plants /m^2
b) No of spike /m^2
c) Productive tiller × spike
d) Tiller ×spike ×test weight

Q 49) no of silks in maize are:

a) Equal to cobs
b) Equal to leaves
c) Equal to plants
d) Equal to grains

Q 50) modeling in crop growth started in:

a) Late 90s
b) In 60s
c) In 70s
d) In late 80s

Q 51) critical stages in groundnut are:

a) Branching
b) Flowering
c) Pegging
d) Flowering and pegging

Q 52) climatic effect on crop growth is:

a) >70%
b) <70%
c) ≤50%
d) >30%

Q 53) RUBisco plays important role in CO2 fixation in:

a) Pearl millet
b) Sugarcane and maize
c) Cotton
d) Wheat and oat

Q 54) in C4 plants following enzymes plays important role:

a) Rubisco
b) Amylase
c) Pectase
d) Pep carboxylase

Q 55) photosynthesis rate is measured in:

a) G /m^2/day
b) mg /m^2/week
c) mg /m^2/month
d) mg/m^2/sec

Q 56) bundle sheath is present in:

a) CAM
b) C4
c) C3
d) All of above

Q 57) First stable compound in CAM plant is:

a) 3PGA
b) Malic acid
c) Oxaloacetic acid
d) All of above

Q 58) photorespiration is slow in:

a) Cactus
b) Wheat
c) Maize
d) Cotton

Q 59) in case of cereals yield gap is:

a) >90%
b) <90%
c) <20%
d) >50%

Q 60) No mingle work has been done in major crops on:

a) Physiology
b) Climate
c) Agronomic treatment
d) Breeding

Answer key (Serial # 2)

1.C	11.A.	21.D	31.A	41.C	51.D
2.D	12.C	22.D	32.D	42.D	52.A
3.D	13.D	23.D	33.D	43.C	53.D
4.B	14.C	24.B	34.B	44.D	54.D

5.D	15.A	25.B	35.B	45.D	55.D
6.Photo synthetically active wavelength 400-700nm	16.C	26.B	36.C	46.A	56.B
7.B	17.B	27.C	37.B	47.C	57.C
8.C	18.D	28.C	38.A	48.D	58.A
9.D	19.A	29.B	39.D	49.D	59.D
10.B	20.B	30.C	40.C	50.D	60.B

Muhammad Sohaib Asad

(Serial # 3)

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1. Photorespiration is slow in:

A. Cactus

B. Wheat

C. Maize

D. Cotton

2. In case of cereal yield gap is:

A. Less than 90

B. Greater than 90

C. Greater than 20

D. Less than 50

3. No mingle work has been done in major crop on:

A. Physiology

B. Climate

C. Agronomic Treatments

D. Breeding

4. Mg and S are:

A. Primary

B. Secondary

C. Macrosecondary

D. Microsecondary elements

5. Quick results regarding to fertility can be obtained from:

A. Green manuring

B. Organic fertilizer

C. Inorganic fertilizer

D. All of above

6. Green revolution in agriculture is brought in:

A. Early 50s

B. Late 50s

C. Mid 60s

D. Late 60s

7. For sustainable crop production:

A. More

B. Optimum

C. Minimum

D. Self Sufficieny should be achieved

8. Availability of nitrogen fertilizer is:

A. Very slow.

B. Medium.

C. Very Rapid.

D. All of above.

9. Boron belongs to:

A. Basic.

B. Primary.

C. Secondary.

D. Micoelement.

10. Basic element in plants are:

A. C,H,O.

B. N,P,K.

C. Ca,S,Mg.

D. None of above.

11. Nitrogenous fertilizer to cereal should be applied in a ratio of:

A. 1:2

B. 1:3

C. 2:1

D. None of above

12. All P and K should be applied:

A. In split doses.

B. At sowing.

C. At later stages.

D. At any time.

13. In water logged soil ls:

A. Green manuring

B. FYM

C. Compost

D. All of above.

14. EC is measured in:

A. m mhos/m^2

B. DS/m^2

C. m mhos/ cm^2

D. meq/l

15. Gypsum formula is:

A. Cu SO4

B. CaSO4

C. CuSO4. H2O

D. CaSO4. 2H2O

16. C:N in soil is:

A. 10:1

B. 20:1

C. 40:1

D. 80:1

17. Good C:N is:

A. 100:1

B. 80:1

C. 40:1

D. 20:1

18. Rice growing areas are given name:

A. Rice belt

B. Kallar tract

C. Rice areas

D. All of above

19. In flodded soil r dox potential:

A. Drop suddenly.

B. Goes higher

C. Become medium

D. None of above.

20. Rodox potential is measured in:

A. mm

B. mv

C. m mhos

D. DS

21. Under saline condition:

A. Soil toxicity

B. Nutrients imbalance

C. Non availability

D. All of above

22. High concentration of Na:

A. Enhance.

B. Inhibit growth.

C. Speed up.

D. Checking growth because induces Ca deficiency in plant.

23. One bullock cart holds:

A. 10 tonne

B. 5 tonne

C. 2 tonne

D. 1 tonne

24. One ton of FYM gives:

A. 50

B. 30

C. 10

D. 5 kg of nitrogen

25. Dry tropical forest vegetation is classified as:

A. Indus plain

B. Detached hills

C. Vegetation of sandy hills

D. All of above

26. Heterotrophic bacteria is given another name:

A. Producer

B. Consumers

C. Autotrophs

D. None of above

27. Energy is measured in:

A. $g/m^2/day$

B. $K\ cal/m^2/d$

C. $m\ mhos/cm^2$

D. DS/cm^2

28. Faculative Bacteria are helophytes grow best in:

A. Anaerobic

B. Aerobic condition

C. In shade and sun

D. None of above

29. Plant grow slow in:

A. Red light

B. Violet light

C. Low light

D. All of above

30. In anatomical adaptation of plant to different environment bring changes in:

A. Leaves

B. Roots

C. Stem

D. All of above

31. Light is measured in term of:

A. Quality

B. Quantity

C. Duration

D. All of above

32. Day nuetral plant include:

A. Wheat

B. Sunflower

C. Groundnut and sesamum

D. Tomato

33. Rice plant in flooded condition produces a structure called:

A. Palisade cell

B. Aerenchyma

C. Parenchyma

D. Spongy mesophyll cells

34. Mesophyte plant grow in:

A. Complete dry

B. Complete flooded

C. Waterlogged

D. Nor wet not dry condition

35. Drought avoiding xerophyte are also given name:

A. Perennials

B. Tropophytes

C. Ephemerals

D. None of above.

36. Plant which grow upon larger plant for support are called:

A. Halophytes

B. Epiphytes

C. Alpine

D. Artic plant

37. Nitrogen cycle involve:

A. N fixation

B. Nitrification

C. De nitrification

D. All of above

38. Epiphytes include plants:

A. Alpine

B. Liver worts

C. Zizypus

D. Alocvera

39. Solar anergy in electromagnetic from ranges from:

A. 450-1000

B. 290-5000

C. 300-4000

D. 250- 35000

40. Infrared light falls above:

A. 600

B. 700

C. 500

D. 750 milli micron

41. Problem soils are:

A. Waterlogged

B. Eroded

C. Alkline

D. All of above

42. Nutrient should be applied at:

A. Critical stages

B. With 1st irrigation

C. At sowing

D. None of above

43. Plant that loves to grow in wayer are called:

A. Halophytes

B. Hydrophytes

C. Xerophytes

D. None of above

44. The total geographical area of Pakistan is:

A. 79.64 million ha.

B. 60.50 million ha.

C. 200.5 million ha.

D. 150.0 million ha

45. The cropped area in Pakistan is about:

A. 5 percent

B. 10 percent

C. 25 percent

D. 50 percent

46. In Pakistan the share of Agriculture in GDP is:

A. 10 percent

B. 25 percent

C. 40 percent

D. 50 percent

47. Pakistan earn about its _____ of its foreign exchange through export of cotton, rice and other agricultural products:

A. 20 percent

B. 30 percent

C. 50 percent

D. 80 percent

48. Our national food security ia an issue of:

A. Top priority

B. 2nd priority

C. 3rd priority

D. No priority

49. Water makes up of the fresh weight of green tissue:

A. 40-50 percent

B. 55-60 percent

C. 65-70 percent

D. 85-95 percent

50. Shallow rooted plants require_____ irrigation:

A. Frequent

B. Heavy irrigation

C. Light irrigation

D. Both a & c

Answer key (Serial # 3)

1. A	11. C	21. D	31. D	41. D
2. D	12. B	22. B	32. D	42. A
3. B	13. D	23. D	33. B	43. B
4. C	14. B	24. D	34. D	44. A
5. C	15. D	25. D	35. C	45. C
6. C	16. D	26. B	36. B	46. B
7 . D	17. D	27. B	37. D	47. D
8. C	18. D	28. C	38. B	48. A
9. D	19. A	39. C	39. B	49. D
10. A	20. B	30. D	40. D	50. D

ARSALAN YOUNAS

Serial # 4

Page 25-32

1. Under field conditions the conversion process of solar energy into chemical is:
   a. 1-2 %
   b. 3-4 %
   c. 4-5 %
   d. 5-6 %
2. Increasing CO_2 concentration are expected to _____ plant production:
   a. Increase
   b. Decrease
   c. No effect
   d. None of above
3. Seed priming is done to improve:
   a. Seed maturity
   b. Seed setting
   c. Seed germination
   d. Seed vigor
4. The main Rabi season crop of Pakistan is:
   a. Grain
   b. Maize
   c. Wheat
   d. Barley
5. _____ is known as king of fodder:
   a. Alfalfa
   b. Berseem
   c. Jantar
   d. Sorghum

6. According to Hopkins Law: - Crop production activities (planting, harvesting, etc) and specific morphological development are delayed by _____ for each 1^o latitude, 5^o longitude and 12 meter of altitude.
   a. Early May
   b. Mid June
   c. Mid July
   d. Late December
7. The future food security depends on:
   a. Sustainable agriculture
   b. Organic farming
   c. Genetic engineering

d. Diversified farming

8. For secondary tillage implements _____ is used:
   a. Sub soiler
   b. Mould bold plough
   c. Disc plough
   d. Cultivator
9. Loose smut is common disease of:
   a. Sugarcane
   b. Cotton
   c. Wheat
   d. Sorghum
10. In Pakistan the area under forest is:
   a. 2.5 %
   b. 5 %
   c. 7 %
   d. 25 %
11. The effective precipitation must penetrate to depth of _____ in soil:
   a. 1-5 cm
   b. 5-7 cm
   c. 8-9 cm
   d. 10-12 cm
12. Legume plants fix atmospheric _____
   a. Nitrogen
   b. Phosphorus
   c. Potash
   d. Sulphur
13. Meteorology is the science of _____
   a. Atmosphere
   b. Crop production
   c. Soil management
   d. Water management
14. Humid areas receive rainfall more than:
   a. 1000 mm
   b. 500 mm
   c. 300 mm
   d. 200 mm
15. The underground water table is declining @ _____
   a. 20 cm per year
   b. 30 cm per year
   c. 40 cm per year

d. 50 cm per year

16. The movement of water from roots to leaves of plants takes place through _____
    a. Phloem
    b. Xylem
    c. Stomata
    d. None of above
17. Soil irrigated by well water only faces the deficiency of _____
    a. Phosphorus
    b. Nitrogen
    c. Potash
    d. Sodium
18. In rice growing tract the common crop rotation is _____
    a. Rice-sugarcane
    b. Rice-cotton
    c. Rice-wheat
    d. Rice-maize
19. Tillering is a critical stage in _____
    a. Cotton
    b. Berseem
    c. Wheat
    d. Maize
20. Mulching is done to control _____
    a. weeds
    b. evaporation of water
    c. soil erosion
    d. all of above
21. Bio-herbicides are used to control _____
    a. Pests
    b. Insects
    c. Rodents
    d. Weeds
22. The most available soil water to crops is _____
    a. Hygroscopic water
    b. Gravitational water
    c. Capillary water
    d. All of above
23. The underground water table is declining @ _____
    a. 20 cm per year
    b. 30 cm per year
    c. 40 cm per year

d. 50 cm per year

24. The movement of water from roots to leaves of plants takes place through _____
    a. Phloem
    b. Xylem
    c. Stomata
    d. None of above
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    d. Maize
28. Mulching is done to control _____
    a. weeds
    b. evaporation of water
    c. soil erosion
    d. all of above
29. Bio-herbicides are used to control _____
    a. Pests
    b. Insects
    c. Rodents
    d. Weeds
30. The most available soil water to crops is _____
    a. Hygroscopic water
    b. Gravitational water
    c. Capillary water
    d. All of above

31. The end product of organic matter is

    a. Amino acid
    b. Humus and CO_2

c. H^+ , OH^-
d. Soil

32. The average temperature for maximum plant growth is

a. 20-30 Centigrade
b. 25-35 Centigrade
c. 28-30 Centigrade
d. 25-30 Centigrade

33. In indus river main source of water is

a. Precipitation
b. Ice melt
c. Rainfall
d. All of these

34. GMOs Stand for

a. Genetically modified Organisms
b. Genetically modified Organs
c. Generally modified Organisms
d. None of Above

35. In Pakistan the contribution of barani area in total wheat production is

a. 5%
b. 8%
c. 12%
d. 20%

36. Tillage operations such as _____ can be done on contours

a. Ploughing
b. Discing
c. Harrowing
d. All of above

37. Wheat is ____ in nature.

a. Xerophytic
b. Hydrophytic
c. Mesophytic
d. None of above

38. WUE can be improved by

a. Adapted cultivars
b. Appropriate fertility level
c. Effective weed control
d. All of above

39. In Pakistan water availability per person per annum is

a. 5300 m^3
b. 1000 m^3
c. 600 m^3
d. 1700 m^3

40. Less than _____ % of the water absorbed by plant is used in plant growth

a. 5%
b. 7%
c. 1%
d. 10%

41. Problem soil means

a. Salt affected
b. Waterlogged
c. Eroded
d. a + b + c

42. A normal soil is that which can provide to plant

a. Nutrients
b. Moisture
c. Air
d. Essential requirements

43. Basic reason for soil accumulation are

a. Solutions
b. Hydrations
c. Carbonation
d. a + b + c

44. Salt affected soils are present in

a. Sub humid areas
b. Semi arid areas
c. Arid areas
d. a + b + c

45. Salt affected soils are those in which salts are present in

    a. Soluble form
    b. Insoluble form
    c. Crystal form
    d. a + b

46. Saline soils are those soils which have

    a. Ece>4
    b. Ece<4
    c. Ece$\geq$4
    d. Ece$\leq$4

47. Sodic soil are those which have

    a. Ece < 4, Esp > 15, SAR > 13, pH 8.5-10
    b. Ece < 4, Esp < 15, SAR< 13, pH> 10
    c. Ece $\geq$ Esp $\leq$ 15, SAR $\leq$ 13, pH$\geq$ 10
    d. Ece$\leq$ 4 Esp $\leq$ 15 SAR $\geq$ 13 pH > 10

48. In beans and correct high concentration of Ca in soil solution restrict uptake of

    a. Essential nutrients
    b. Essential Phosphorus
    c. Essential K
    d. Essential Zn

49. In sodic soils crop growth is adversely affected due to

    a. Poor rooting
    b. Poor aeration
    c. Malnutrition
    d. a + b + c

50. In arid region the dominant cation in normal soils are

    a. Ca^{++}
    b. Mg^{++}
    c. a + b
    d. SO_4

51. Soluble salts in the soil move from

    a. High elevation to low elevation
    b. Wet to dry areas
    c. Irrigated field to un irrigated fields

d. a + b + c

52. The causes of salinity are

a. Dry conditions
b. Inherent parent material
c. Canal water and wind
d. a + b + c

53. The tolerance of barley against salinity at germination stage is

a. Good
b. Very good
c. Poor
d. Very poor

54. The plants can develop tolerance against salinity by

a. Osmatic adjustment
b. Growth development
c. Transpiration
d. Irrigation application

ANSWER KEY (SERIAL NO 4)

1	a	21	d	41	a
2	a	22	c	42	d
3	c	23	a	43	d
4	c	24	b	44	d
5	b	25	c	45	d
6	b	26	c	46	b
7	a	27	c	47	a
8	c	28	d	48	c
9	d	29	d	49	d
10	c	30	c	50	c
11	d	31	b	51	d
12	a	32	c	52	d
13	a	33	b	53	b
14	a	34	a	54	a
15	a	35	c		
16	b	36	d		
17	c	37	c		
18	c	38	d		
19	c	39	b		
20	d	40	b		

ADNAN YOUSAF

SERIAL # 5

Page # 33-40

1.The pH of acid phosphate soils around 50cm depth ranges between.

e) 4.5-5.5
f) 3.5-4.0
g) 2.5-3.5
h) 5.5-6.0

2.The colour of compact layer of subsoil in degraded soil.

e) White
f) Brown
g) Dark
h) Dark brown

3.saline soil may contain sufficient quantity soluble.

e) $CaSO_4$
f) NaCl
g) MgCl
h) $FeSO_4$

4.Sodic soils are generally high in.

e) $NaCO_3$
f) $NaHCO_3$
g) a+b
h) $CaCl_2$

5.plants growth in sodic soil is adversely affected due to.

a) Depressive affect of Na
b) High soil pH
c) Toxicity of some specific ions
d) a+b+c

6. Extensive leaf injury occur due to Na accumulation at concentration.

e) Less than 0.05%
f) More than 0.05%
g) At 0.03%
h) At 0.06%

7. Marginal burn developed in leaves due to accumulation of

a) Na^{-1}
b) HCO_3^{-1}
c) Cl^{-1}
d) $NaHCO_3^{-1}$

8. In west sowing the roots of seedling cause

b) Loosening of soil
c) Increased aeration
d) Increased activity of soil micro flora
e) a+b+c

9. Crop grown in saline soil must be

e) Frequently irrigated
f) Delayed irrigated
g) Normal irrigated
h) Flood irrigated

10. Ryzohv concluded that saline soil in case of cotton should be irrigated at field capacity of

e) 70%
f) 50%
g) 60%
h) 65%

11. In salt affected soils the irrigation should be applied by

e) Flood irrigation
f) Sprinkler irrigation
g) Drip irrigation
h) b+c

12. In water logged soils crop should be sown

e) on levelled soil
f) on ridges
g) on flat top ridges
h) on round top ridges

13. In water logged soils pore spaces filled up to

e) 70%
f) 80%
g) 100%

h) 90%

14. in water logged soil anaerobic conditions results in buildup of

e) CO_2, Ethylene, H_2S, SO_2, etc.
f) O_2, NO_2, Ammonium nitrate, Hydrogen.
g) Ammonium, NO_3, Helium, H_2O_2.
h) H_2SO_4, Ammonium sulphate, Fe_2SO_4.

15. Under water logged soils accumulation of

e) Inorganic acid
f) Organic acid
g) Harmons
h) Growth regulators

16. In water logged soil day temperature tends to be

e) Higher
f) Lower
g) Optimum
h) Medium

17. In water logged soil night temperature tends to be

e) Higher
f) Lower
g) Optimum
h) Medium

18. In submerged soil O2 may also enter

e) In gas form
f) In vapour form
g) a+b
h) combined form as water

19. Redox potential is measure of its tendency to

e) Accept electrons
f) Donate electrons
g) Accept or Donate electrons
h) To use O_2

20. Under water logged condition the enzymatic activities in plants

e) Increased
f) Decreased
g) Stopped
h) a+b

21. In water logged soil aerenchyma formation takes place in

e) leaves
f) stem
g) root
h) shoot

22. Under water logged conditions the hormonal metabolism becomes

e) Up set
f) Stopped
g) Regulated
h) Motivated

23. The mineral and water uptake under flooded conditions affected due to

e) Low transpiration
f) Increased osmotic pressure
g) a+b
h) High transpiration

24. The name signal hormone produced in plants under water logged condition is

e) Cytokinin
f) 1-aminocyclo-propane-1-carboxylic acid
g) Gibberellins
h) ABA

25. The nodule mass or weight decreased under water logged condition due to

e) CO_2
f) Hydrogen
g) O_2
h) Ammonia

26. In acidic soil in rice crop the alternate wetting and drying in early growth season

e) Improve the aeration
f) Reduce the severity of reducing condition
g) a+b
h) saving water

27. Erosion is detachment and removal of soil particles by

e) wind
f) water
g) a+b
h) tillage

28. The types of water erosion are

e) sheet erosion
f) rill erosion
g) gully erosion
h) a+b+c

29. Mulching is a process of reducing water losses from soil by

e) Natural
f) Artificial
g) a+b
h) Harvesting

30. In barani areas moisture can be saved by

e) Chemicals
f) Adding organic matter
g) Growing crops
h) a+b+c

31. Wind erosion can be reduced by

d) growing crops
e) wind breakers
f) adding organic matter
g) a+b+c

32. In barani areas water can be conserved by

e) reducing runoff
f) construction of minidams
g) Adding humus and organic matter
h) a+b+c

33. Measure their specified the range of values within which any %age 0f this sample means is located

e) Conditional variable
f) Confidence interval

g) Confidentiality
h) None

34. variable that do not have a minimal size unit

e) Discontinuous variable
f) Continuous variable
g) Continuous invariable
h) Variable

35.a characteristics of sample statistic that determines the appropriate sampling distribution called

e) Degree of freedom
f) Probability
g) Experimental error
h) None

36. the variable hypothesized to explain variation in the dependent variable is called

e) Dependent variable
f) Independent variable
g) Control variable
h) None

37. the variable that the research wished to explain is called

e) Dependent variable
f) Independent variable
g) Control variable
h) None

38. variables with a minimal size unit called

e) Dependent variables
f) Independent variables
g) Control variables
h) Discrete variables

39. sum total of all observations divided by their number is called

e) Mean
f) Arithmetic mean

g) Median
h) Mode

40. A measure of central tendency define as the point above and below 50% of the observation fall

e) Median
f) Mean
g) Mode
h) None

41. A measure of central tendency defined as the most frequently occurring observation category in the data called

e) Mode
f) Median
g) Mean
h) Arithmetic mean

42. The simultaneous effect of several independent variables on the dependent variable is called

e) Negative relation
f) Positive relation
g) Multiple relation
h) None

43. A direction which indicates that as value of one variable increases, the value of another decreased called

e) Negative relation
f) Positive relation
g) Multiple relation
h) None

44. A relation between two variables X & Y of the form Y=ax+b is called

e) Multiple relation
f) Linear relation
g) Positive relation
h) Negative relation

45. A graph linear relation is

e) Ascending
f) Straight

g) Curve
h) None

46. A direction which indicates that as value of one variable increases, the value of another also increases is called

e) Negative relation
f) Positive relation
g) Linear relation
h) Multiple relation

47. The aggregate of all cases that confirm to some designated set of specification

e) Sample
f) Population
g) Probability sample
h) none

48. The standard deviation of a sampling distribution is

e) standard deviation
f) standard error
g) standard score
h) none

49. A commonly use d measure variability whose size indicates dispersion of distribution is

e) standard deviation
f) standard error
g) standard score
h) none

50. The repetition of an investigation is an identical way as safeguard against unintentional error is

e) randomization
f) replication
g) blocking
h) none

51. Program that guides the investigator in the process of collecting, analyzing, an interpreting observations is

e) statistics
f) research design
g) none

52. Consistency of a measuring is

e) relation
f) reliability
g) resistance
h) none

53. any sub set of a sampling unit from a population is

e) population
f) sample
g) sampling distribution
h) none

ANSWER KEY (Serial # 5)

1	2	3	4	5	6	7	8	9	10
b	c	a	c	d	a	c	d	a	a
11	12	13	14	15	16	17	18	19	20
d	b	c	a	b	b	a	d	c	d
21	22	23	24	25	26	27	28	29	30
a	a	c	b	c	c	c	d	c	d
31	32	33	34	35	36	37	38	39	40
b	d	b	b	b	a	b	a	d	b
41	42	43	44	45	46	47	48	49	50
a	a	c	a	b	b	b	b	b	a
51	52	53							
b	b	b							

AQSA ALTAF

Serial # 6

Page # 41-48

1: The aggregate of all cases that conform to some designated set of specification is.

a) Sample
b) Population
c) Probability sample
d) None

2: The standard deviation of sample distribution is.

a) Standard deviation
b) Standard error
c) Standard score
d) None

3: A commonly used measure variability whose size indicates the dispersion of distribution is.

a) Standard deviation
b) Standard error
c) Standard score
d) None

4: The repetition of an investigation in an identical way as safeguard against unintentional error is.

a) Randomization
b) Replication
c) Blocking
d) None

5: Program that guides the investigator in the process of collecting analyzing an interpreting observation is

a) Statistics
b) Statistic
c) Research design
d) None

6: Consistency of a measuring instrument is

a) Relation

b) Reliability
c) Resistance
d) None

7: Any sub sampling unit from a population is

a) Population
b) Sample
c) Sampling distribution
d) None

8: A single member of a sampling population is

a) Population
b) Sample
c) Sample unit
d) None

9: An intellectual problem calling for an answer in the form of scientific inquiry is

a) Research design
b) Research problem
c) Research process
d) None

10: The rejection of a true null hypothesis is

a) Type 1 error
b) Type 2 error
c) Type 3 error
d) None

11: The acceptance of a false null hypothesis is

a) Type 1 error
b) Type 2 error
c) Type 3 error
d) None

12: A measure that specifies the range of a value within which %age of the sample mean is located is called

a) Conditional variable
b) Confidence interval

c) Confidentiality
d) None

13: A research design that allows one to examine simultaneously the effects of two or more independent variables on the dependent variables is called

a) Factorial design
b) RCBD
c) CRD
d) LSD

14: A tentative answer to a research problem expressed in the form of a relation between independent and dependent variables is

a) Theory
b) Hypothesis
c) Experiments
d) None

15: A specified value of a population is

a) Panel
b) Parameter
c) Parametric test
d) None

16: Any quantity or quality which differs from individual to individual in the same population is

a) Continuous variable
b) Statistical variable
c) Discrete variable
d) None

17: There are basic principles ------- of experimental design

a) 2
b) 3
c) 4
d) 5

18: Three basic principles of experimental design are randomization replication and

a) Local control
b) Sampling

c) Blocking
d) None

19: The -------- is probably the most widely used of all experimental design

a) CRD
b) RCBD
c) LSD
d) None

20: Latin square design usually will minimize ------- effectively the influence of soil heterogeneity

a) Less
b) More
c) Not at all
d) None

21: Latin square design is ------- flexible then the randomization complete block design

a) More
b) Less
c) Equal
d) None

22: Systematic inquiry into a subject to discover new facts or principles is called

a) Scientific method
b) Research
c) Experiment
d) None

23: The procedure for research is generally known as

a) Research approach
b) Scientific method
c) Experiment
d) None

24: The assignment of treatments to experimental units so that all units considered have any equal chance of receiving is called

a) Replication
b) Randomization

c) Local control
d) Treatments

25: The unit of experimental material to which a treatment is applied is called

a) Experiment
b) Experimental unit
c) Sample
d) Sampling unit

26: Specific measurement of a variable is

a) Variation
b) Variate
c) Variety
d) None

27: A characteristics of a population is called

a) Statistic
b) Statistics
c) Parameter
d) Variable

28: A characteristics of sample is

a) Statistic
b) Statistics
c) Parameter
d) Variable

29: In the tendency of the two variables to be related in a definite manner

a) Regression
b) Correlation
c) Coefficient of correlation
d) None

30: Measure the closeness of the relationship

a) Regression
b) Correlation
c) Coefficient of correlation
d) None

31: --------- Is the amount of change in the dependent variables associated with the unit change in independent variables

a) Correlation
b) Regression
c) Linear correlation
d) None

32: In the linear regression equation Y=a+bx is regression coefficient

a) Y
b) a
c) b
d) x

33: ---------- Represents the variability among the experimental unit that remain after the other source of variation have been removed

a) MSB
b) MSE
c) MST
d) None

34: ---------- Uses the relationship of a variance of means to the variance per experimental unit

a) MSB
b) MSE
c) MST
d) None

35: A --------- is a dosage of a material or a method that is to be tested in the experiment

a) Randomization
b) Replication
c) Treatment
d) Experimental material

36: ---------is one which any individual measurement is as likely to be included as any other

a) Sample
b) Population
c) Random sample
d) None

37: In analysis of variance ------- is used to test equality of means

a) LSD
b) F TEST
c) DMRT
d) T distribution

38: Experimental error determines the ------- in the experiment

a) Similarity
b) Variability
c) Invariability
d) None

39: --------design is applied under homogeneous conditions

a) CRD
b) RCBD
c) LSD
d) None

40: If there is one way variation -------- design is applied

a) CRD
b) RCBD
c) LSD
d) None

41: By the use of good quality seed yield can be increased.

a) 5-10%
b) 15-25%
c) 35-40%
d) 40-50%

42: How much quantity of seed should be taken from each container during sampling -------

a) Equal
b) Less than ½ of previous
c) 1/3 than the precious
d) ¼ than the previous

43: Bold or large seed in cob are present in the --------

a) Top portion

b) Middle portion
c) Bottom portion
d) Top and middle portion

44: The universal requirements for seed germination are

a) Water
b) Oxygen
c) Temperature
d) a+b+c

45: The quantity of seeds up to maximum of --------- kg for the seed size less than *Triticum* species is called seed lot

a) 5000 kg
b) 10000 kg
c) 15000 kg
d) 20000 kg

46: Samples from bins are taken by --------

a) Nobbe Trier
b) Hand
c) Sleeve type Trier
d) Any Trier

47: Dumping off disease of seed or any young seedling is caused by--------

a) Bacteria
b) Algae
c) Fungi
d) None

48: Defoliant is a chemical or method of treatment that cause the fall off --------.

a) Fruits
b) Flowers
c) Fruit and flowers
d) Leaves

49: Tasseling growth stage is present in --------- plants.

a) Rice
b) Wheat

c) Maize
d) Oat

50: Sacks are sample at random and will be sampled----

a) top portion
b) middle portion
c) bottom portion
d) Top, middle and bottom portion

51: The certified seed of wheat must have purity-------.

a) 80%
b) 85%
c) 90%
d) 98%

52: The moisture seed of wheat must have purity --------

a) 0-5%
b) 10-12%
c) 6-9%
d) 13-15%

53: The test performed for judging the qualities of seeds are

a) Purity and germination
b) Seed length and weed seed
c) Moisture content
d) a+b+c

54: The quantity of agricultural and horticultural seed up to a maximum of -------- kg of seed size of *Triticum* species or larger is called seed lot

a) 10000 kg
b) 15000 kg
c) 20000 kg
d) 25000 kg

55: The sample on which the quality test is made is called ------- sample.

a) Primary
b) Composite
c) Submitted

d) Working

56: Seed is stored in dry conditions primarily to check the growth of ------.

a) Insects
b) Rodents
c) Moulds
d) None

Answer Key (Serial # 6)

1 (b)	**17 (b)**	**33 (b)**	**49 (c)**
2 (b)	**18 (a)**	**34 (a)**	**50 (d)**
3 (a)	**19 (b)**	**35 (c)**	**51 (d)**
4 (b)	**20 (b)**	**36 (c)**	**52 (b)**
5 (c)	**21 (b)**	**37 (b)**	**53 (d)**
6 (b)	**22 (b)**	**38 (b)**	**54 (d)**
7 (b)	**23 (b)**	**39 (a)**	**55 (d)**
8 (c)	**24 (b)**	**40 (b)**	**56 (c)**
9 (b)	**25 (b)**	**41 (b)**	
10 (a)	**26 (b)**	**42 (a)**	
11 (b)	**27 (c)**	**43 (c)**	
12 (b)	**28 (a)**	**44 (d)**	
13 (a)	**29 (b)**	**45 (b)**	
14 (b)	**30 (b)**	**46 (c)**	
15 (b)	**31 (b)**	**47 (c)**	
16 (b)	**32 (c)**	**48 (d)**	

Muneeb ullah

Serial # 7

Page # 49-56

1. Hard seed are those which have seed coat impervious to

a. water
b. oxygen
c. water and oxygen
d. light

2. The scar left on the seed on the place of detachment from the seed stalk is called

a. epicotyle
b. hypocotyle
c. coleoptile
d hilum

3. Inoculum is a material used for infecting plant with.

a. disease
b. propogating microorganisim
c. both
d. none of them

4. Inflorescence in panicle is called

a. maize
b. wheat
c. rice
d. barley

5. The process of mechainically scarring seed coat is

a. stratification
b. scarification
c. after ripening
d. none

6. The stratification treatment is given to a seed at

a. High tempture
b. Low temprature
c. High temp high humidity
d. None

7. The portion of shoot of plant which grafted upon plant having root system called

a. Root stalk
b. scion
c. grafting
d. None

8. Separating seeds from ears of wheat

a. threshing
b. winnowing
c. harvesting
d. none

9. Duunage stacking and pest control are important aspests of .

a. storage
b. winnowing
c. threshing
d. none

10. Separation of seed from straw is called.

a. Threshing
b. Winnowing
c. Harvesting
d. None of them

11. _____ method is used for obtaining working sample

a. Nnobe trier
b. Steeve type trier
c. By hand
d. Random cup method

12. The losses due to different pests during storage are estimated to about

a. 6.5%
b. 10.5%
c. 20.6%
d. 30.5%

13. The most important factor in deciding the storability of the produce is

a. Moisture content of grain
b. Seed size
c. Seed shape
d. Seed viability

14. Seeds which are_____included in pure seeds

a. n
b. Wheat
c. Maize
d. Oat

15. **Hard seeds are throne which have seed coat impervious to**

a. Water
b. Oxygen
c. Water and Oxygen
d. Light

16. The sear left on the seed at the place of detachment from seed stalk is called

a. Epicotyle
b. hypocotyle
c. Colepotile
d. Hilum

17. Inoculum is a material used for infecting a plant with

a. Disease
b. Propogating and micro-organisms
c. Both a and b
d. None of the above

18. Inflorescence is called panicle in

a. Maize
b. Wheat
c. Rice
d. Barely

19. The process of mechanically searing seed coat is called

a. Stratification
b. Sacarification
c. After ripening
d. None of them

20. The stratification treatment is given to seed at

a. High temperature
b. Low temperature
c. High humidity
d. High temperature humidity

21. The portion of the shoot of the plant which is grafted upon a planthaving a root system is called

a. Root stalk
b. Scion
c. Grafting
d. Seed stalk

22. Ripened ovule

a. rain
b. fruit
c. seed
d. None of the above

23. **The technique deals with seed quality and testing**

a. Seed proceesing
b. Seed certification
c. Seed technology
d. none

24. study which deals with laws and regulation of seed quality

a. Seed production
b. Seed certifiction
c. Seed ditribution
d. None of the above

25. The seed which is stored under very cooled conditions for a long period of time is called as

a. Basic seed
b. Pre basic seed
c. Foundation seed
d. Germ plasm seed

26. The main axises of an inflorescence is called

a. rachis
b. mid rib
c. floret
d. padicle

27. some seeds may not germinate in convention requirments or with special treatment

a. dormant
b. hard seed
c. viable
d. dead

28. ability of seed to germinate and produce seedlings is called

a. Growth
b. development
c. viabilty
d. None of the above

29. Study of functions of seeds and its part

a. Seed testing
b. Seed identification
c. Seed physiology
d. None of above

30. Seprating grain or seed from chef is known as

a. Winnowing
b. Threshing
c. Harvesting
d. None of the above

31. The world arid implies a deficiency of_____ .

a. Rain fall
b. Temperature
c. Heat

d. Solar energy

32. In cold deserts the mean temperature in the warmest month's are less than_____ degree centigrade.

a. 5
b. 7
c. 10
d. 20

33. In sandy deserts of Pakistan annual rainfall is between _____ mm.

a. 50-100
b. 100-175
c. 250-500
d. 125-250

34. Discipline that studied the relationship between agriculture production and climate factors is called agricultural_____ .

a. Ecology
b. Meteorology
c. Geology
d. Physiology

35. Dregne (1982)describes_____ patterns of rainfall in dry regions.

a. Three
b. Four
c. Five
d. Six

36. Evaporation causes a rapid loss of water from a moist soil surface to a depth of_____ cm after rain

a. 40-52
b. 30-42
c. 10-12
d. 20-32

37. Heavy soils when dry and cracked,have a very high initial_____ rate

a. Evaporation
b. Infiltration
c. Transpiration
d. Volatalization

38. Very light rain are called when they are less than_____ mm.

a. 30
b. 20
c. 10
d. 40

39. When warm,saturated air mass replace cool dry air mass over a cool surface_____ results

a. Rain
b. Fog
c. Snow
d. Hail

40. More than_____ % of the total energy input of the world comes from solar radiation.

a. 77
b. 88
c. 99
d. 66

41. _____ is the electromagnetic part of radiation energy

a. Light
b. Rain
c. Fog
d. Temperature

42. Death of any plant part is called _____ .

a. Senescence
b. Necrosis
c. Injury
d. Hypo-nasty

43. **The point at which assimilation gains equal respiration losses is known as _____ point.**

a. Zero
b. Compensation
c. Requirement
d. Exchange

44. Maize is a _____ plant.

a. C3
b. C4
c. CAM
d. None

45. The relative length of daily light and dark periods is called _____ .

a. Photosynthesis
b. Phtoperiodism
c. Photo-respiration
d. Phototropism

46. **Sorghum is a _____ plant.**

a. Long day

b. Day neutral
c. Short day
d. None

47. Solubility of CO_2 is high in _____ water.

a. Cold
b. Hot
c. Warm
d. Frozen

48. _____ is damaged frequently by chilling stress.

a. Cellular membrane
b. Mitochondria
c. Nucleus
d. Cytoplasm

49. The response of plant in change of day and night temperature is called _____ .

a. Photoperiodism
b. photorespiration
c. Thermoperiodism
d. Chemoperiodism

51. Rapid breakdown of enzymes can occur due to high _____.

a. Temperature
b. Moisture
c. Rain
d. Fog

52. _____ soils absorb more radiant energy.

a. Wet
b. Dry
c. Both a and b
d. None of them

53.The upper limit of the evaporation rate from a given soil vegetation unit under a given set of meteorological conditions is called _____.

a. Potential evapotranspiration
b. Transpiration
c. Evapotranspirataion
d. Potential transpiration

50. Amount of water that that is stored in the soil depends on the water _____.

a. Density
b. Holding capacity
c. Purity
d. Quality

55. In mediterian regions crop of _____ can be grown without recieving a drop of rainfall from sowing to harvesrt

a. Wheat
b. Sorghum
c. Lentil
d. Red pea

56. the amount of precipitation taken in by the soil depends on runoff and_____.

a. Evaporation
b. Infiltration
c. Transpiration
d. Temperature

57. which one is not a practice for controlling run off water?

a. Strip cropping
b. Contour ploughing
c. Water harvesting
d. Terracing

58. which one is C3 plant?

a. Sugarcane
b. Maize
c. Sorghum
d. Cotton

ANSWER KEY

1	a	21	a	41	c
2	b	22	a	42	a
3	d	23	b	43	a
4	a	24	a	44	b
5	a	25	b	45	b
6	a	26	d	46	b
7	a	27	a	47	a
8	a	28	b	48	a
9	a	29	a	49	a
10	b	30	b	50	c
11	a	31	a	51	a
12	a	32	a	52	
13	a	33	c	53	a
14	b	34	d	54	b
15	a	35	b	55	b
16	b	36	b	56	b
17	a	37	c	57	c
18	a	38	b	58	d
19	a	39	c	-	-
20	a	40	b	-	-

BABAR ALI

Serial # 8

Page # 57-64

Q.1: In cereals contribution of flag leaf is:

a) More than 20%
b) Less than 80%
c) More than 60%
d) None of them

Q.2: At early stages of cereal growth LAI depends upon:

a) High light intensities
b) Low light intensities
c) High temperature
d) Both photoperiod and temperature

Q.3: IN C4 plants activity of Ribulose Bisphosphate carboxylase is under the influence of:

a) Nitrogen assimilation
b) CO2 intake
c) Oxygen deficiency
d) None of above

Q.4: Radiation use efficiency can be enhanced by:

a) Changing canopy development
b) Enhancing photoperiod
c) Addition of more inputs
d) Slowing plant growth

Q.5: Under water stress plant:

a) Decreasing absorbing radiation
b) Cut activities of CO2 intake
c) Stomatal closure
d) Respiration rate decreases

Q.6: Partitioning of dry matter accumulation after anthesis may be attributed by:

a) Decreasing duration
b) Increasing its rate
c) Decreasing duration and increasing its rate
d) Increasing duration and decreasing rate

Q.7: Crop growth depend upon:

a) More CO2 intake
b) Less respiration
c) More radiation interception and its utilization efficiency
d) Less respiration and more CO2 intake

Q.8: In plant growth analysis great significance is of:

a) Relative growth rate
b) Crop growth rate
c) Net assimilation rate
d) Leaf area index

Q.9: Economical yield is the product of:

a) H.I
b) TDM
c) H.I and TDM
d) TDM and grain yield

Q.10: Size of seed directly related to:

a) More temperature
b) Source-sink relationship
c) More photosynthetic activity
d) Photoperiod

Q.11: In grain legume nodulation is least affected by:

a) PH
b) N and fertilizers
c) Temperature
d) Potash fertilizers

Q.12: Protein content in oilseed crops:

a) Increase with increase in nitrogenous fertilizer
b) Decrease N fertilizer
c) Increase N fertilizer and decrease P fertilizer
d) All of the above

Q.13: Calculating ET depends upon:

a) Low temperature
b) High temperature
c) High light intensity
d) Dry air and high temperature

Q.14: In Penman equation calculation of potential ET is done by:

a) Combination approach
b) Aerodynamic approach
c) Energy balance approach
d) All of above

Q.15: Response of individual leaf photosynthesis to light is:

a) Curvilinear
b) Linear
c) Hyperbolic
d) None of above at light saturation point

Q.16: In light interception calculation method:

a) Fraction of intercepted light
b) LAI
c) Leaf senescence
d) Intercepted light is more important

Q.17: The pioneer worker in light concept approach is:

a) Ritchie
b) Monteith
c) Gallagher
d) Gallagher and Biscoe

Q.18: Bundle sheath cells are present in:

a) Wheat
b) Grasses
c) Cactus plants
d) C3 plants

Q.19: RuBP carboxylase is:

a) 4 carbon
b) 5 carbon
c) 3 carbon
d) 6 carbon enzyme

Q.20: First stable compound in C4 plant is:

a) Phosphoglyceric acid
b) Oxalic acid
c) PEP carboxylase
d) None of above

Q.21: Photorespiration is high in:

a) CAM plants
b) C4 plants
c) C3 plants
d) All of above

Q.22: Light saturation is not a problem in:

a) Cactus
b) Desert
c) Field
d) Legumes

Q.23: Sa is abbreviation of:

a) Incident light
b) Fraction of intercepted PAR
c) Intercepted light
d) None of above

Q.24: In succulent plants stomata opens at:

a) Night
b) Day
c) Day and night
d) All of above

Q.25: Transfer of thermal heat involves processes:

a) Conduction
b) Convention
c) Radiation
d) All of above

Q.26: Cooler temperature at early stages of plant gives:

a) Faster growth
b) More duration
c) Less leaf expansion
d) Slow growth rate

Q.27: Subtropical zones of Pakistan are:

a) Gilgit and Chitral
b) Faisalabad and Jhang
c) Mianwali and Bhakkar
d) Sialkot and Lahore

Q.28: Development rate is measured in term of:

a) Rate
b) Duration
c) Rate and duration
d) All of above

Q.29: Leaf area duration explain:

a) Developing rate
b) Leaf persistence to stay green
c) Its conversion efficiency

Q.30: Crop growth rate requires:

a) More than two dry matters
b) Two dry matters
c) Photosynthetic activities
d) All of above

Q.31: Base temperature for spring wheat is:

a) 5 degree
b) 2 degree
c) 4 degree
d) 0 degree

Q.32: For spring crops optimum temperature is:

a) > 35 degree
b) < 35 degree
c) 35-40 degree
d) 25-30 degree

Q.33: For C4 plants maximum temperature is:

a) > 45 degree
b) < 45 degree
c) 35-40 degree
d) 30-35 degree

Q.34: In cereals life saving irrigation is:

a) At anthesis
b) Booting
c) At tillering
d) All of above

Q.35: For C4 plant the soil temperature at germination should be:

a) < 5 degree
b) >5 degree
c) 20 degree
d) 10 degree

Q.36: NAR is measured in:

a) Mg/week
b) g/m^2
c) $g/m^2_{/day}$
d) $kg/m^2_{/day}$

Q.37: Satisfactory growth rate for spring crop in kg/ha/day:

a) 50
b) 100
c) 200
d) 300

Q.38: Units of light measurement are:

a) J/m^2
b) Mj/m^2
c) $Watts/m^2$
d) All of above

Q.39: CGR for wheat is recommended between:

a) 20-25
b) 10-15
c) 5-10
d) 30-40 $g/m^2_{/day}$

Q.40: Wind is also medium of pollination of:

a) Wheat and barley
b) Gram and lentil
c) Berseem and maize
d) Groundnut and sesamum

Q.41: Yield component of wheat are:

a) Total plants/m^2
b) Number of spike/m^2
c) Productive tillers * spike
d) Tillers*spikes*test weight

Q.42: Number of silk in maize are:

a) Equal to cobs
b) Equal to leaves
c) Equal to plant
d) Equal to grains

Q.43: Modeling in crop growth started:

a) In late 90s
b) In 60
c) In 70
d) In late 80s

Q.44: Critical stages in groundnut are:

a) Branching
b) Flowering
c) Pegging
d) Flowering and pegging

Q.45: Climatic effect on crop growth is:

a) >70%
b) <70%
c) <50%
d) >30%

Q.46: Rubisco plays important role in CO2 fixation in:

a) Pearl millet
b) Sugarcane and maize
c) Cotton
d) Wheat and oat

Q.47: In C4 plants following enzyme plays important role:

a) Rubisco
b) Amylase
c) Pectase
d) PEP carboxylase

Q.48: Photosynthetic rate is measured in:

a) $g/m^2/day$
b) $mg/m^2/day$
c) $mg/m^2/month$
d) $mg/m^2/sec$

Q.49: Bundle sheath is present in:

a) CAM
b) C4
c) C3
d) All of above

Q.50: First stable compound in CAM plant is:

a) 3PGA
b) Malic acid
c) Oxaloacetic acid
d) All of above

Q.51: Photorespiration is slow in:

a) Cactus
b) Wheat
c) Maize
d) Cotton

Q.52: In case of cereals yield gap is:

a) >90%
b) <90%
c) <20%
d) >50%

Q.53: No mingle work has been done in major crops on:

a) Physiology
b) Climate
c) Agronomic treatments
d) Breeding

ANSWER KEY (Serial # 8)

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
C	D	B	A	C	D	C	A	C	B
11	12	13	14	15	16	17	18	19	20
D	B	D	D	B	B	B	B	B	C
21	22	23	24	25	26	27	28	29	30
C	B	C	A	D	D	B	B	D	B

31	32	33	34	35	36	37	38	39	40
A	D	C	C	D	C	D	D	A	C
41	42	43	44	45	46	47	48	49	50
D	D	D	D	A	D	D	D	B	C

51	**52**	**53**
A	D	B

Azhar Hassan

Serial # 9

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1) The majority of herbicides are
a) Organic and inorganic chemicals
b) Organic chemicals
c) Inorganic chemicals
d) None of above
2) Herbicides may be grouped on the basis
a) Chemistry
b) Application time
c) Their use
d) All of above
3) Inorganic chemicals are used as herbicide
a) Ammonium sulphate (AMS)
b) Sodium chlorate
c) Sodium metaborate tetrahydrate
d) a, b and c
4) The translocation of herbicides ions and molecules in plants may be described in general, as
a) Intracellular
b) Intercellular
c) Extracellular
d) A, b and c
5) Deactivation of herbicides in plant within plant is the result of
a) Biochemicals reactions
b) Chemical reactions
c) Conjugation
d) A, b and c
6) No of degradation reactions in plant is
a) 5
b) 7
c) 9
d) None of the above
7) Of the total number of plants in the world,
……. Are thought to behave as weeds
a) 1%
b) 3%
c) 5%
d) 7%
8) The ability of weeds to effect crop growth adversely is called
a) Allelopathy
b) Inhibition
c) Interference

d) Direct competition

9) The effect of weed competition is greatest when the crop is

a) Young
b) Old
c) Not sown
d) Not emerged

10) CH_4 is the formula of

a) Phenoxy
b) Benzoic acid
c) Methane
d) Toluene

11) COOH is the formula of

a) Phenoxy
b) Benzoic acid
c) Phenol
d) None of the above

12) NaOH is the formula of

a) Phenoxy
b) Benzoic acid
c) Phenol
d) None of the above

13) NH_2 is the formula of

a) Phenoxy
b) Benzoic acid
c) Phenol
d) None of the above

14) The esters of 2,4-d are

a) Polar
b) Non polar
c) Di polar
d) None of the above

15) 2,4-d can be formulated in

a) Water soluble amine
b) Oil soluble amine
c) Fat soluble amine
d) None of the above

16) The salts of phenoxy herbicides are

a) Volatile
b) Non volatile
c) Solid
d) None of the above

17) The esters have good stability in

a) Water
b) Oil
c) Acid
d) None of the above

18) EPA stands for

a) Environmental protection association
b) Environmental protection agency
c) Environmental and plant protection agency
d) None of the above

19) 2,4-d belongs to group of
a) Phenoxy
b) Phenol
c) Aniline
d) Toluene

20) 2, 4-d is effective as a
a) Broad leaves killer
b) Narrow leaves killer
c) Annual weed killer
d) Perennial weed killer

21) Primarily foliar applied herbicide

Groups are divided into ….. categories.

a) One
b) Two
c) Three
d) Four

22) Any substance in a herbicides formulation in enhances the effectiveness of herbicides is called as
a) Acid equivalent
b) Adjuvant
c) Antagonism
d) None of the above

23) Less of green color in foliage followed by yellowing or whitening of the tissue is called as
a) Dormancy
b) Discoloration
c) Carcinogen
d) Chlorosis

24) Any gas, liquid or solid material used to reduce the concentration of an active ingredients in a formulation is called as
a) Desiccant
b) Adjuvant
c) Dilute
d) None of the above

25) A dry formulation of herbicide and other components in discrete particles generally less than 10 cubic millimeters is called as
a) Granule
b) Granular
c) Powder
d) A and b

26) A surface-active substance that promotes the suspension of one liquid in another is called as
a) Diluent
b) Suspensor

c) Emulsifier
d) Adjuvant

27) A gas, liquid or solid substance used to dilute, propel, or suspend a herbicide is called as
a) Propeller
b) Carrier
c) Diluent
d) Adjuvant

28) The suspension of minute water droplets in a continuous oil phase is called as
a) Emulsion
b) Invert emulsion
c) Surfactants
d) Suspension

29) Localized death of living tissue is called as
a) Necrosis
b) Chlorosis
c) Mutagen
d) None of the above

30) Movements of airbome spray droplets from the intended area of applicator is called as
a) Spray persistence
b) Vapor drift
c) Spray drift
d) None of the above

31) The material that favors or improves the emulsifying, dispersing, spreading, wetting, or other surface modifying properties of liquid is called as
a) Adjuvant
b) Diluent
c) Emulsifier
d) Surfactant

32) Finally, dividend solid particles dispersed in a solid, liquid or gas is called as
a) Suspension
b) Emulsion
c) Chlorosis
d) None of above

33) TCA and dalapon belongs to family
a) Aliphatic-carboxylic
b) Aromatic carboxylic
c) Phenyl acetic
d) None of above

34) The residual life of phenol herbicides in soil is
a) 2-4 days
b) 2-4 weeks
c) 2-4 years
d) None of above

35) Fenac belongs to family
a) Phenoxy
b) Aromatic carboxylic
c) Phenyl acetic acid

d) None of above

36) Foxtail is …. weed

a) Annual
b) Perennial
c) Sedges
d) None of the above

37) Field bind weed is …... weed

a) Annual
b) Perennial
c) Sedges
d) None of the above

38) Goose foot belongs to family

a) Amaranthacae
b) Asclepidaceae
c) Chenopodiaceae
d) Gramineae

39) Field bind weed belongs to family

a) Euphorbiaceae
b) Cruciferae
c) Compositae
d) Convolvulaceae

40) Foxtail belongs to same family as

a) Mustards
b) Bermuda grass
c) Crabgrass
d) B and c

41) Bromoxynil belongs to …. herbicide

a) Phthalic acid
b) Benzoic acid
c) Benzonitrile
d) None of the above

42) COOH is the formula of

a) Urea
b) Metribuzin
c) Atrazine
d) None of the above

43) Common character of urea herbicide is

a) Low water solubility
b) Readily adsorption to soil collides
c) Most effective against broad leaves weeds
d) A, b and c

44) …. Is subgroup of carbamate herbicide

a) Phenyl carbamates
b) Tri carbamates
c) Thiocarbamates
d) A and c

45) Urethane is ethyl ester of

a) Uric acid
b) Carbamic acid
c) Bentanex acid
d) None of the above

46) Propanil is member of the …… herbicide family
a) As-triazine
b) Phthalic acid
c) Acid amide
d) None of the above

Answer key (Serial # 9)

1	b	13	d	25	d	37	b
2	d	14	b	26	c	38	a
3	b	15	b	27	b	39	d
4	d	16	b	28	b	40	d
5	d	17	a	29	a	41	c
6	b	18	b	30	c	42	d
7	b	19	a	31	d	43	d
8	c	20	a	32	a	44	d
9	a	21	d	33	a	45	b
10	c	22	b	34	b	46	c
11	d	23	d	35	b		
12	d	24	c	36	a		

Abid hussain

Serial # 10

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1. Trade name of glyphosate is

a. Divron

b. Avenge

c. Round up.

d. None of the above

2. The ability of weeds to affect crop growth adversely is called

a. Allelopathy

b. Inhibition

c. Interference

d. Direct competition

3. Avenge is common name of

a. Dichlorprop

b. DCPA

c. DICAMBA

d. Difenzoquat

4. Avena fatua is botanical name of

a. Phalaris

b. Wildoat

c. Barley

d. Foxtail

5. Umbelliferae is the family of

a. jimson weed

b. Field bind weed

c. Wild carrot

d. Flat sedges

6. Shepherds purse belongs to family

a. Umbelliferae

b. Solanaceae

c. Cruciferae

d. Crueiferac

7. Spurges belong to family

a. Leguminosae

b. Compositae

c. Rosaceae

d. Euphorbiaceae

8. Of the total number of plants in the world, only are thought to behave as weeds

a. 1%

b. 3%

c. 5%

d. 7%

9. Growing of more than two crops together in a mixture is called

a. Intercropping

b. Multiple cropping

c. Mixed cropping

d. Mono cropping

10. In arid climates the major constraint to productivity is

a. Poor availability of solar radiation

b. Insufficient precipitation

c. Poorly developed soils

d. Low organic matter

11. Arid lands are characterized by

a. Abundance of organic matter

b. Scare vegetation

c. Occurrence of frequent precipitation

d. Non of above

12. Shelf life of a bioherbicide is

a. Six weeks

b. nine weeks

c. Twelve weeks

d. Fifteen weeks

13. Bioherbicide has --------- to kill weeds

a. Microbial plant pathogens

b. Fungal spores

c. Both a & b

d. None of above

14. Bioherbicide can be applied as a

a. Water spray

b. Sand mix application

c. Both a & b

d. None of above

15. BT cotton produces protein that makes cotton resistant against

a. Glyphosate

b. Round up

c. Both a&b

d. Paraquot

16. Inhibition of rhizobium spp. Will result in ------- of green cropping

a. Failure

b. Decrease

c. Increase

d. None of these

17. Biofertilizers include

a. Rhizobium

b. Blue green algae

c. Mycorhiza

d. A,B & C

18. Integrated weed control includes only

a. Ecological approach

b. Biological approach

c. Cultural approach

d. All of above

19. N-fixing Biofertilizers are--------

a. Azotobactor

b. Bacillus

c. Penicillium

d. None of these

20. Organic farming depends on-------

a. Crop rotation

b. Organic manure

c. Biological pest control

d. All of above

21. In conventional agriculture emphasis is given on recycling of

a. Crop residues

b. Animal waste

c. Municipal waste

d. None of these

22. There is potential for utilization of crop residues.

a. 25%

b. 40%

c. 50%

d. 75%

23. Organic farming deals with

a. Only crops

b. Agro forestry

c. Animal husbandry

d. a, b % c

24. In organic agriculture rate of extraction from do not exceed the rate of regeneration.

a. Forests

b. Underground water resources

c. None of these

d. Both a & b

25. Use of seed is not allowed in organic farming.

a. Chemically treated

b. Genetically engineered

c. Transgenic

d. None of these

26. Mycorhiza increase nutrient absorbing capacity of plant roots for--------

a. P

b. K

c. Fe

d. a,b & c

27. Root fungus like Mycorhiza can immobilize heavy metals like

a. Zn

b. Mn

c.. Cd

d. a,b & c

28. Dependence of cotton on mycorrhizae fungus is

a. Very high

b. High

c. Low

d. Very low

29. Non persistant pollutants is

a. Plastic

b. Pesticide

c. Agricultural waste

d. None of these

30. Primary air pollutants is--------

a. N2O

b. NH3

c. Ozone

d. none of above

31. Methane is released from -------

a. Paddy field

b. Livestock farm

c. Action of termites

d. All of above

32. Air pollution can

a. Raise earth temperature

b. Cause ozone depletion

c. Cause acid rains

d, All of above

33. Example of non-point source pollutants is

a. Infrared

b. Ultraviolet

c. Gamma

d. None of these

34. Contribution of CH4 towards global warming is

a. 10%

b. 20%

c. 25%

d. 30%

35. Concentration of CFCs in atmosphere is times less then CO2

a. 1000

b. 5000

c. 10000

d. 20000

36. Contribution of CFCs towards global warming is times more than CO2

a. 2000

b. 3000

c. 4000

d. None of these

37. Increase in atmospheric CO2 can increase

a. Photosynthesis

b. WUE

c. Respiration

d. All of these

38. Ultraviolet radiation can change

a. Plant composition

b. Biodiversity

c. Ecology

d. All of those

39. Biofertilizers produce

a. Hormones

b. Antibiotics

c. Vitamins

d. All a,b,c

40. Nutrients are removed from the ecosystem in the form of

a. Oil spill

b. Eroded soil

c. Fertilizer run-off

d. Both b& c

41. Kinds of soil pollution are

a. Fertilizers

b. Industrial effluents

c. Pesticides

d. All of these

42. N fertilizers pollution can be avoided by

a. Balanced application

b. Split application

c. Nitrification inhibitor

d. All of these

43. In soils polluted with heavy metals timing can

a. Increase pH

b. Reduce metal solubility

c. Reduce metal availability

d. All of these

44. To minimize health hazards due to heavy metals following crops could be grown

a. Fruits

b. Cereals

c. Leaf vegetables

d. both a&b

45. Herbicides residues in the soil can be minimized by application of

a. FYM

b. Irrigation

c. Activated C

d. all a,b & c

46. Green house effect is mainly due to

a. CH_4

b. CO_2

c. CFCs

d. None of these

47. Radiation responsible for global warming is

a. Crop harvest

b. Leaching

c. Volatilization

d. All a,b,c

48. In sustainable agriculture dependence on synthetic fertilizer and pesticides is--------

a. Maximum

b. Minimum

c. Optimum

d. Total

49. Soil degradation may be------

a. Physical

b. Chemical

c. Biological

d. All a,b,c

50. Inclusion of a------- crop in crop rotation in salt affected areas leads to sustainable production

a. Green manure

b. Rice

c. Barley

d. Pearl millet

51. Conveyance losses account for-------of water delivered into a canal

a. 40-50%

b. 20-25%

c. 20-50%

d. 15-40%

52. Oil seed crops requiring less water can tolerate level of salinity

a. Lower

b. Higher

c. Medium

d. Both a&c

Answer Key (Serial # 10)

1	c	2	a	3	c	4	b	5	c
6	c	7	d	8	b	9	c	10	c
11	c	12	a	13	c	14	c	15	c
16	a	17	d	18	d	19	a	20	d
21	d	22	c	23	d	24	d	25	d
26	d	27	d	28	a	29	c	30	a
31	d	32	d	33	a	34	b	35	c
36	c	37	d	38	d	39	d	40	d
41	d	42	d	43	d	44	d	45	d
46	b	47	d	48	b	49	d	50	a
51	a	52	b						

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Serial # 11

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51. Sprouting of seed within the spikelet in wheat field is called as

e. Precocious germination
f. Epigeal germination
g. Hypogeal germination
h. None of above

52. Under storage conditions oxygen concentration is kept low to avoid

d. Transpiration
e. Respiration
f. Pseudorespiration
g. None of above

53. Moisture content of cearls must be below _____ for safe storage.

e. 4%
f. 20%
g. 25%
h. 12%

54. Under storage conditions_____ concentration is kept high

e. Carbon-dioxide
f. Oxygen
g. hydrogen
h. None of above

55. Removal of entire plants or economic parts after maturity from the field is called

e. Harvesting
f. Hand pulling
g. Rouging
h. none

56. If the crop is harvested before physiological maturity the produce contains

e. High moisture
f. Low moisture
g. Mature grains
h. None

57. When the translocation of photosynthates are stopped to economic parts is called as

e. Physiological maturity
f. After ripening
g. scenecence
h. None

58. Harvest maturity generally occres _____ of physiological maturity.

e. After 7 days
f. After 14 days
g. After 21 days
h. After 28 days

59. When toxins are present in crop,they are generally high in_____ .

e. Early stages
f. Lateral stages
g. Middle stages
h. May be any time

60. The nutritive value of fodder crop, especially protein content,decreases and fiber content increases in the_____ .

e. Early stages
f. Lateral stages
g. Middle stages
h. May be any time

61. Around 75% nitrogen requirement is used by grasses during

e. Vegetative stage
f. Reproductive stage
g. Both a and b
h. None of the above

62. Protein content is high in fodder grasses during_____ .

e. Early stages
f. Lateral stages
g. Middle stages
h. None of the above

63. Harvesting is delayed by a few more days to get more dry matter if thge purposes is

e. Hay making
f. For stall feeding
g. For green manuring
h. None of the above

64. Crop with rationing ability is harvested at

a. At once
b. At periodic intervals
c. At germination
d. None of the above

65. _____ Is allowing the livestock on the pastures throughout the growing season is called as

e. Continues grazing
f. Rotational grazing
g. Rational grazing

h. All of the above

66. **Seprating fruits or seed from the plants or ears is called as**

e. winnowing
f. threshing
g. Harvesting
h. All of them

67. _____ Is a process by which moisture content from grain is reduced to safe limit

e. Drying
f. winnowing
g. Storage
h. Threshing

68. The losses due to different pests during storage are estimated to about

e. 65%
f. 6.5%
g. 45%
h. None of the above

69. _____ Of grains results in severe attack of insects and microorganisms

e. Higher moisture content
f. Low moisture content
g. Very low temperature
h. None of the above

70. Early harvested crop contains

e. Ill filled grains
f. Well filled grains
g. Mature grains
h. None of the above

71. Dunnage stacking and pest control are the are important aspects of

e. Storage
f. Harvesting
g. Threshing
h. Marketing

72. Any material which are placed over the ground and blow the bags so as avoid direct contact of grains with the floor is called

e. Dunnage
f. Stacking
g. Fumigation
h. Spraying

73. _____ As the product formed by the formulation of green fodder stored during anaerobic conditions

e. Hay

f. Silage
g. Green manure
h. None of the above

74. **The major component of_____ are effective network of sale outlets, economical distribution cost, and the involvement of sale agencies in the business**

e. Marketing
f. Storage
g. Certification
h. Isolation

75. Wheat is an example of

e. Short day plant
f. Long day plant
g. Day neutral plant
h. None of the above

76. The seed which is stored under very cooled conditions for a long period of time is called as

e. Basic seed
f. Pre basic seed
g. Foundation seed
h. Germ plasm seed

77. A gum known as galactomanin is obtained from the seed of

e. Cluster bean
f. Pearl millet
g. Canola
h. Cowpea

78. Irreversible increase in quantitative and qualitative changes is called

e. Growth
f. Development
g. Phenology
h. None of the above

79. Irrepressible increase in quantitative changes is called

e. Growth
f. development
g. Phenology
h. None of the above

80. Rice plant respire via

e. Parenchyma cells
f. Aerenchyma cells
g. Chlorenchyma cells
h. None of above

81. Seprating grain or seed from chef is known as

e. Winnowing
f. Threshing
g. Harvesting
h. None of the above

82. The world arid implies a deficiency of_____ .

e. Rain fall
f. Temperature
g. Heat
h. Solar energy

83. In cold deserts the mean temperature in the warmest month's are less than_____ degree centigrade.

e. 5
f. 7
g. 10
h. 20

84. In sandy deserts of Pakistan annual rainfall is between _____ mm.

e. 50-100
f. 100-175
g. 250-500
h. 125-250

85. Discipline that studied the relationship between agriculture production and climate factors is called agricultural_____ .

e. Ecology
f. Meteorology
g. Geology
h. Physiology

86. Dregne (1982)describes_____ patterns of rainfall in dry regions.

e. Three
f. Four
g. Five
h. Six

87. Evaporation causes a rapid loss of water from a moist soil surface to a depth of_____ cm after rain

e. 40-52
f. 30-42
g. 10-12
h. 20-32

88. Heavy soils when dry and cracked,have a very high initial_____ rate

e. Evaporation

f. Infiltration
g. Transpiration
h. Volatalization

89. Very light rain are called when they are less than_____ mm.

e. 30
f. 20
g. 10
h. 40

90. When warm,saturated air mass replace cool dry air mass over a cool surface_____ results

e. Rain
f. Fog
g. Snow
h. Hail

91. More than_____ % of the total energy input of the world comes from solar radiation.

e. 77
f. 88
g. 99
h. 66

92. _____ is the electromagnetic part of radiation energy

e. Light
f. Rain
g. Fog
h. Temperature

93. Death of any plant part is called _____ .

e. Senescence
f. Necrosis
g. Injury
h. Hypo-nasty

94. **The point at which assimilation gains equal respiration losses is known as _____ point.**

e. Zero
f. Compensation
g. Requirement
h. Exchange

95. Maize is a _____ plant.

e. C3
f. C4
g. CAM

h. None

96. The relative length of daily light and dark periods is called _____ .

e. Photosynthesis
f. Phtoperiodism
g. Photo-respiration
h. Phototropism

97. **Sorghum is a _____ plant.**

e. Long day
f. Day neutral
g. Short day
h. None

98. Solubility of CO_2 is high in _____ water.

e. Cold
f. Hot
g. Warm
h. Frozen

99. _____ is damaged frequently by chilling stress.

e. Cellular membrane
f. Mitochondria
g. Nucleus
h. Cytoplasm

100. The response of plant in change of day and night temperature is called _____ .

e. Photoperiodism
f. photorespiration
g. Thermoperiodism
h. Chemoperiodism

51. Rapid breakdown of enzymes can occur due to high _____.

e. Temperature
f. Moisture
g. Rain
h. Fog

52. _____ soils absorb more radiant energy.

e. Wet
f. Dry
g. Both a and b
h. None of them

53.The upper limit of the evaporation rate from a given soil vegetation unit under a given set of meteorological conditions is called _____.

e. Potential evapotranspiration
f. Transpiration
g. Evapotranspirataion

h. Potential transpiration

101. Amount of water that that is stored in the soil depends on the water _____.

a. Density
b. Holding capacity
c. Purity
d. Quality

55. In mediterian regions crop of _____ can be grown without recieving a drop of rainfall from sowing to harvesrt

a. Wheat
b. Sorghum
c. Lentil
d. Red pea

56. the amount of precipitation taken in by the soil depends on runoff and_____.

a. Evaporation
b. Infiltration
c. Transpiration
d. Temperature

57. which one is not a practice for controlling run off water?

a. Strip cropping
b. Contour ploughing
c. Water harvesting
d. Terracing

58. which one is C3 plant?

a. Sugarcane
b. Maize
c. Sorghum
d. Cotton

ANSWER KEY

1	a	21	a	41	c
2	b	22	a	42	a
3	d	23	b	43	a
4	a	24	a	44	b
5	a	25	b	45	b
6	a	26	d	46	b
7	a	27	a	47	a
8	a	28	b	48	a
9	a	29	a	49	a
10	b	30	b	50	c
11	a	31	a	51	a
12	a	32	a	52	a
13	a	33	c	53	a
14	b	34	d	54	b
15	a	35	b	55	b
16	b	36	b	56	b
17	a	37	c	57	c
18	a	38	b	58	d
19	a	39	c	-	-
20	a	40	b	-	-

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Serial # 12

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1. _____ soil absorb more Radiant energy .

i) wet
j) dry
k) wet and dry
l) none of these

2. The upper limit of the evaporation rate from a given soil vegetation unit under a given set Meteorological condition is called_____ .

i) Potential evapotranspiration
j) Transpiration
k) Evapotranspiration
l) Transpiration

3. Amount of water that is stored in the soil depends on water_____

i) Density
j) Holding capacity
k) Purity
l) Quality

4. In mediterranean region crop of _____ can be grown without receiving a drop of rainfall from sowing to harvest

i) Wheat
j) sorghum
k) lentil
l) Red pea

5. The amount of precipitation taken in by the soil depends on run off and _____.

i) evaporation
j) infiltration
k) transpiration
l) temperature

6. Which one is not a practice for controlling run of water?

i) strip cropping
j) control flowing
k) water harvesting
l) Terracing

7. Which one is C3 plant?

i) Sugarcane
j) Maize
k) Sorgham
l) Cotton

8. Chemical named_____ mixed with surface soil to reduce evaporation by 43%.

i) Hexadeconal
j) methanol
k) HCL
l) Benlate

9. The reservoir which is fad by diversions from the stream is called_____.

i) On stream
j) Off stream
k) Up stream
l) Downstream

10. _____can be used to reduce evaporation losses from reservoir.

i) NaCl
j) H2 S o4
k) wax
l) HCL

11. Water accumulated in porous zone at moderate depth below soil is called_____.

i) Ground water
j) Surfaces water
k) capillary water
l) Hygroscopic water

12. _____refers to the soil surface configuration and roughness that remain after tillage.

i) Geography
j) Microtopography
k) Tilth
l) Land scaping

13. _____ is important to obtain an even distribution of water in the field.

i) Water energy
j) Land levelling
k) Soil fertility
l) Time of application

14. Moisture conservation varies_____ as the depth of oil at the surface when rainfall occurs.

i) Directly
j) Inversely
k) Equally
l) Rapidly

15. The large seeded serial should be sown at maximum depth of _____cm.

i) 2-3
j) 5-6
k) 15 -16
l) 20-21

15. A tillage and planting system in which at least 30% of soil remains covered by crop Residue after sowing is called.

i) Zero tillage
j) Conservation tillage
k) Maximum tillage
l) Minimum tillage

16. which one is not the function of mulch?

i) Dissipates raindrop energy
j) Minimize crusting of the soil
k) Retard run-off
l) Decreases infiltration

17. Improve water conservation is the net result of reduced turn off and reduced_____ due to mulching.

i) Evaporation
j) Transpiration
k) Infiltration
l) Fertility

18. In cold weather_____ soil is used only warmer.

i) Low thicked mulch
j) Bare
k) High thicked mulch
l) All

19. Pakistan lies approximately between Latitudes_____ °N.

e) 10-17
f) 34-50
g) 24-37
h) 60-75

20. Pakistan lies approximately between longitudes_____ °E.

i) 41-56
j) 51-66
k) 61-76
l) 71- 86

21. Agro-ecological zone described by PARC are_____ in number.

h) 15
i) 10
j) 20
k) 25

22. Which one is not a secondary tillage implement?

i) Chisel plough
j) Land leveler
k) Disc Harrow
l) Cultivator

23. Which one is in organic mulch?

i) Plastic
j) Straw mulch

k) Stubble mulch
l) Hay mulch

24. Which one is not artificial mulch?

i) Soil mulch
j) Leaves
k) Plastic mulch

25. Mechanical soil strength soils drink Nation carried on provide favourable condition to crop growth is called

f) Mulch
g) Drainage
h) Tillage
i) Soil conservation

26. Pakistan has an area of_____ million hectare

i) 76.9
j) 79.6
k) 69.7
l) 97.6

27. The actual amount of water vapour is in air is called_____

i) Specific humidity
j) Relative humidity
k) Absolute humidity
l) Dew point

28In cereals fertilizer efficiency is measured by_____.

i) Productivity index
j) LAD .
k) LAI
l) C:N ratio

29. Fertilizer use efficiency can be expressed in term of_____.

i) Grain size
j) Recovery of applied nutrients
k) Plant height
l) Analysis of plant

30. Mass or moles of carbon dioxide fixed per unit of water loss from leaf is_____

i) Photosynthetic efficiency
j) Fertilizer efficiency
k) Transpiration efficiency
l) Light efficiency

31. The C4 and CAM pathway are mechanism of_____ adaptation.

i) Technological
j) Mechanical
k) Geological
l) Ecological

32. Which one is not a measure to combat drought?

i) Weed control
j) Dust mulching
k) Grow drought tolerant crop
l) Apinosty

33. In wheat at which stage developing head within the sheath of the flag leaf become visibly enlarged.

i) Jointing
j) Booting
k) Milk
l) Dough development

34. Water that is executed by plant usually on overcast nights, when soil is warm and moist is called.

i) Humidity
j) Dew
k) Guttation
l) Fog

35. Which one is not the characteristics of light which affect plant growth and development.

i) Duration
j) Quality
k) Intensity
l) Darkness

36. The study of grasses is called_____.

i) Forestry
j) Physiology
k) Ecology
l) Agrostology

37. Aggregate of atmospheric conditions over a long period of time is called_____.

i) Weather
j) Metrology
k) Climate
l) Temperature

38. Stress injury and disease are collectively called_____.

i) Disease
j) Disorder
k) Mortality
l) Retting

39. Study of relationship between living organism and their environment is called_____.

i) Ecology
j) Physiology
k) Histology
l) Taxonomy

40. Specific measurement of a visible is

i) Variation
j) Variate
k) Variety
l) None

41. The scientific procedure method of overcasting aur making out prediction about the changes development likely to take place in environment example rainfall or temperature is called as

i) Remote analysis
j) Metrological sensing
k) Remote Sensing
l) Remote sequence

42. The sequence of growing crop by an individual farmer in a specific area is called as

i) Cropping scheme
j) Cropping pattern
k) Farmer's pattern
l) Cropping intensity

43. In salt affected soil process of imbibition in seed is limited due to

i) Osmosis
j) Diffusion
k) Ex-osmosis
l) None of the above

44. In seeds the process of ex-osmosis normally take place in

h) Waterlogged soil
i) Salt affected soil
j) Eroded soil
k) Reclaimed soil

45. Blind hoeing is normally carried out in

i) Maize
j) Wheat
k) Sugarcane
l) Soybean

46. Earthing up is not practiced in

i) Sugarcane
j) Maize
k) Sunflower
l) Barseem

47. Plant population of a plot is calculated from

i) Length of the plot
j) Width of the plant
k) Area of the plot
l) None of the above

48. Toria is the crop of

i) Rabi season

j) Kharif season
k) Zaid Rabi season
l) Zaid kharif season

49. Ozone Layer is present in

i) Stratosphere
j) Mesosphere
k) Thermosphere
l) Exosphere

50. Growing of only one crop on a piece of land here after year is called as

i) Intensive farming
j) Monoculture
k) Intercropping
l) Extensive farming

51. In intercropping system the relationship between two crops in which output of one crop would be increased through a decline in the production of the Other crop is called as

i) Competive
j) Complementary
k) Supplementary
l) Mutual inhabitation

52. The relative area of a sole crop or soul crop required to produce the yield yield achieved in intercropping is called as

e) Land equivalent method
f) Land equivalent ratio
g) Marginal returns ratio
h) None of the above

53. Solarimetre is used to measure the intensity of

e) Light
f) Temperature
g) Humidity
h) Pressure

54. Fertilizer should be applied

e) Below the seed

f) Above the seed
g) a & b
h) None of the above
i) National Institute of agriculture and Bio-technology
j) Nuclear Institute of agriculture and Bio-technology

Answer key

1	**A**	**11**	**A**	**21**	**B**	**31**	**C**	**41**	**B**	**51**	**A**		
2	**A**	**12**	**B**	**22**	**A**	**32**	**D**	**42**	**A**	**52**	**B**		
3	**B**	**13**	**B**	**23**	**A**	**33**	**D**	**43**	**C**	**53**	**A**		
4	**B**	**14**	**B**	**24**	**B**	**34**	**B**	**44**	**B**	**54**	**A**		
5	**B**	**15**	**B**	**25**	**A**	**35**	**C**	**45**	**C**				
6	**C**	**16**	**D**	**26**	**C**	**36**	**D**	**46**	**D**				
7	**D**	**17**	**A**	**27**	**B**	**37**	**D**	**47**	**C**				
8	**A**	**18**	**C**	**28**	**C**	**38**	**C**	**48**	**D**				
9	**B**	**19**	**C**	**29**	**A**	**39**	**B**	**49**	**A**				
10	**C**	**20**	**C**	**30**	**B**	**40**	**A**	**50**	**B**				

Name: MUHAMMAD SHAHID

SERIAL # 13

Page: 97-104

102. The majority of herbicides are:

i. Organic and inorganic chemicals
j. Organic chemicals
k. Inorganic chemicals
l. None of above

103. The ability of weeds to effect crop growth adversely is called:

h. Allelopathy
i. Inhibition
j. Interference
k. Direct competition

104. Any substance in herbicide formulation that enhances the effectiveness of the herbicide is called:

i. Acid equivalent
j. Adjuvant
k. Antagonism
l. None of above

105. Less of green color in foliage followed by yellowing or whitening of the tissue is called:

a. Dormancy
b. Discoloration
c. Carcinogens
d. Chlorosis

106. Localized death of living tissue is called:

a. Necrosis
b. Chlorosis
c. Mutagen
d. None of above

107. Movement of all bome spray droplets from the intended area of applicator is called:

i. Spray persistence
j. Vapor drift
k. Spray drift
l. None of above

108. The simultaneous effect of several independent variable on the dependent variable is called:

i. Negative relation
j. Positive relation

k. Multiple relation
l. none

109. The repetition of an investigation in an identical way as safeguard against unintentional error is:

i. Randomization
j. Replication
k. Blocking
l. None

110. Program that guides the investigator in the process of collecting, analyzing and interpreting observations is called:

i. Statistics
j. Statistic
k. Research design
l. None

111. A research design that allows one to examine simultaneously the effects of two or more variables on the dependent variable is called:

i. Factorial design
j. RCBD
k. CRD
l. LSD

112. Systematic inquiry into a subject to discover new facts or principles is called:

i. Scientific method
j. Research
k. experiment
l. none

113. The assignments of treatments to experimental units so that all units considered have any equal chance of receiving is called:

i. Replication
j. Randomization
k. Local control
l. Treatments

114. Basic reasons for salt accumulations are:

i. Solutions
j. Hydrations
k. carbonation
l. a+b+c

115. Plant growth in sodic soils is adversely affected due to:

i. Depression effect of Na
j. High soil pH
k. Toxicity of some specific ions

l. a+b+c

116. The plants can develop tolerance against salinity by:

i. Osmotic adjustment
j. Growth development
k. Transpiration
l. Irrigation application

117. Salt tolerance can be induced in crop varieties through:

e. Breeding program
f. Selection of tolerant plants
g. a+b
h. Radiation
i. 65%

118. In water logged soils crop should be sowing:

i. On leveled soil
j. On ridges
k. On flat top ridges
l. On round top ridges

119. Radox potential is measure of its tendency to:

i. Accept electron
j. Donate electron
k. a+b
l. To use O_2

120. The types of water erosion are:

i. Sheet erosion
j. Gully erosion
k. Rill erosion
l. a+b+c

121. Mulching is a process of reducing water losses from soil by:

i. Natural mulch
j. Artificial mulch
k. a+b
l. Harvesting crops

122. Wind erosion can be reduced by:

i. Growing crops
j. Wind breakers
k. Adding organic matter
l. a+b+c

123. In barani areas water can be conserved by:

i. Reducing runoff
j. Construction of mini dams

k. Adding humus and organic matter
l. a+b+c

124. Crop production covers:

i. Crop improvement
j. Crop management
k. a+b
l. Crop and soil management

125. Generally it is said that quality seed increases yield by:

i. 25%
j. 50%
k. 75%
l. 100%

126. The inflorescence of wheat is called:

i. Panicle
j. Spike
k. Caryopsis
l. None of above

127. In the field the main agronomic factor influencing leaf production is:

i. Irrigation schedule
j. Nitrogen availability
k. Sowing date
l. None of above

128. Rice nursery of fine varieties should not be sown before:

i. June 1
j. May 20
k. June 7
l. June 20

129. Seed rate for sugarcane in about:

i. 8 mounds/acre
j. 8 mounds/ha
k. 8 tons/acre
l. 8 tons/ha

130. Total land area of Pakistan is:

i. 79.61 m. ha
j. 7.961 m. ha
k. 796.1 m. ha
l. 796.96 m. ha

131. In agronomic context stress may be a consequence of:

i. A biotic constraints
j. Environmental constraints

k. Grower and related constraints
l. All a+b+c

132. Crop yield is an expressions of:

i. The interaction of genetic potential and environmental factors prevailing during crop growth period
j. Genetic makeup of plant
k. Management factors
l. None of above

133. Plant species differ in term of their:

i. Optimal environments
j. Their susceptibility to particular stress
k. Both a and b
l. None of above

134. Transpiration is linked to:

i. Photosynthesis
j. Co_2 diffusion in stomata
k. Water vapor diffusion out of stomata
l. All of above

135. Heat dissipation in crop plants is achieved by:

i. Thermal radiation of leaves
j. Removal of heat by convection currents
k. Transpiration
l. All of above

136. Transpiration rate is determined by:

i. Evaporative demand
j. Hours for which stomata remains open
k. Area intercepting radiation energy and water supply
l. All of above

137. Water uptake of roots occurs only when root water potential is:

i. Equal to that of soil water potential
j. Lower than that of soil water potential
k. Higher than that of soil water potential
l. Is not influence by any of above

138. Water use after closure of stomata contributes:

i. A lot towards photosynthesis
j. Does not contribute towards photosynthesis
k. Only partially contributes towards photosynthesis
l. Is the only component of water that contribute towards photosynthesis

139. Radiation stress due to high light intensity results in:

i. High injury

j. High temperature induced drought
k. Photo-oxidation
l. All of above

140. The combined loss of water from a given area and during a specified period of time by evaporation from soil surface and transpiration from plant is called:

i. Potential evapotranspiration
j. Transpiration
k. Evaporation
l. Evapotranspiration

141. Halophytes can tolerate:

i. Low levels of salinity
j. High levels of salinity
k. Low level of water deficit
l. High level of radiation

142. Elements used relatively in large amount by plants are:

i. Essential nutrients
j. Micronutrients
k. Non essential nutrients
l. Macronutrients

143. C_4 plants have physiological advantages over C_3 plants at:

a. Lower temperature
b. Low light intensity
c. At higher temperature and high light intensity
d. Both a and b

144. The highest water use efficiency is recorded for:

i. C_4 plants
j. C_3 plants
k. CAM plants
l. C_4 and CAM plants

145. The point at which assimilatory gains equals respiratory losses is called:

i. Saturation point
j. Compensation point
k. Minimum light requirement
l. Simply light intensity

146. The water content of soil is measured in several ways, the reference and classical method is:

a. Thermometer method
b. Gravimetric
c. Electrical conductivity
d. Neutron probe

147. Drying is done at _____ to constant weight:

i. 100-104 C^{o}
j. 105-110 C^{o}
k. 111-115 C^{o}
l. 116-120 C^{o}

148. CLCV is stand for:

i. Cotton leaf cover virus
j. Cotton leaf curl virus
k. Curl leaf cotton virus
l. Cover leaf virus

149. The delta of water of cotton crop is:

i. 30 acre inch
j. 25 acre inch
k. 18 acre inch
l. 14 acre inch

150. No. of irrigation required by the cotton crop are:

i. 5 irrigations + rauni irrigation
j. 6 irrigation + rauni irrigation
k. 7 irrigation + rauni irrigation
l. 4 irrigation + rauni irrigation

151. Raising of only one crop in a year, when there is seasonal supply of water is called:

i. Cover cropping
j. Mono culture
k. Specialized farming
l. Inter cropping

152. Irrigation required for wheat crop is:

i. 4-6
j. 8-10
k. 12-18
l. 20-22

153. If two-third of the required water available one could obtain _____ % of the maximum yield:

i. 50-60 %
j. 70-80 %
k. 90-95 %
l. 85-90 %

154. If the available water is only 50 % of that required the yield could be _____ % under optimal management:

i. 70-75 %
j. 80-85 %

k. 90-95 %
l. 85-90 %

155. In wheat, crown root initiation is a moisture sensitive stage:

i. 12-16 DAS
j. 18-20 DAS
k. 21-24 DAS
l. 10-12 DAS

156. In rice _____ % yield is lost due to stress at reduction division stage:

a. 50 %
b. 62 %
c. 70 %
d. 80 %

ANSWER KEY

1	b	21	d	41	a
2	c	22	d	42	d
3	b	23	c	43	a
4	d	24	a	44	b
5	a	25	b	45	a
6	c	26	c	46	b
7	c	27	a	47	b
8	b	28	d	48	b
9	c	29	a	49	b
10	a	30	d	50	c
11	b	31	a	51	a
12	b	32	c	52	c
13	d	33	d	53	c
14	d	34	d	54	b
15	a	35	d	55	b
16	c	36	a	-	-
17	b	37	c	-	-
18	c	38	d	-	-
19	d	39	d	-	-
20	c	40	b	-	-

Sohaib Safdar

Serial # 15

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1- Organic farming will be _____ sustainable agriculture.
(a) Always
(b) Linked with
(c) Sometimes
(d) None of the above

2- **The scientific procedure / method of forecasting or making out prediction about the changes / developments likely to take place in the environment e.g. rainfall or temperature is called as _____.**

(a) Remote analysis
(b) Metrological sensing
(c) Remote sensing
(d) Remote sequence

3- **The sequence of growing crops of an individual's farmer in a specific area is called as_____.**

(a) Cropping scheme
(b) Cropping pattern
(c) Farmers patterns
(d) Cropping intensity

4- **In salt affected soils process of imbibition in seeds is limited due to_____.**

(a) Osmosis
(b) Diffusion
(c) Ex-osmosis

(d) None of the above

5- **in most of the dicot seeds the mode of the germination is _____.**

(a) Hypogeal
(b) Epigeal
(c) Both hypogeal and epigeal
(d) None of the above

6- **In salt affected soils normally in bed sowing seeds are planted in_____.**

(a) Center of the bed
(b) Center of the furrow
(c) Bed furrow
(d) Near the center of the bed

7- **In seeds the process of ex-osmosis normally take place in_____.**

(a) water logged soils
(b) salt affected soils
(c) eroded soils
(d) reclaimed soils

8- **blind hoeing is normally carried out in_____.**

(a) Maize
(b) Wheat
(c) Sugarcane
(d) Soybean

9- **Earthing up is not practiced in _____.**

(a) sugarcane
(b) maize
(c) sunflower
(d) berseem

10- **plant population of a plot is calculated from_____.**

(a) Length of the plot
(b) Width of the plant
(c) Area of the plot
(d) None of the above

11- **Toria is the crop of_____.**

(a) Rabi season
(b) Kharif season
(c) Zaid rabi season
(d) Zaid kharif season

12- **Ozone layer is present in _____.**

(a) Stratosphere
(b) Mesosphere
(c) Exosphere
(d) Thermosphere

13- **The word of agronomy is derived from _____word.**

(a) Latin
(b) Greek
(c) Arabic
(d) French

14- **Growing of only one crop on a piece of land year after year is called as_____.**

(a) Intensive cropping
(b) Monoculture
(c) Intercropping
(d) Extensive farming

15- **In intercropping system the relationship between two crops in which output of one crop would be increased thought a decline in the production of the other crop is called as _____.**

(a) Competitive
(b) Complimentary
(c) Supplementary
(d) Mutual inhibition

16- **In intercropping the relationship between two crops in manner that the output of one crop help to bring about an increase in output of the other crop is called relationship as _____.**

(a) Compensation
(b) Complementary
(c) Mutual inhibition
(d) Supplementary

17- **In intercropping the relationship between two crops in manner that the actual yield of each crop is less than the accepted yield is called relationship as _____.**

(a) Compensation
(b) Mutual cooperation
(c) Complementary
(d) Mutual inhibition

18- **In intercropping the relationship between two crops in manner that the output of one crop may be increased having any influence on the output of the other crop is called relationship as _____.**

(a) Compensation
(b) Supplementary
(c) Mutual cooperation
(d) Mutual inhibition

19- **The relative of the sole crop or sole crop required to produce the yield or yields achieved in inter cropping is called as _____.**

(a) Land equivalent method
(b) Land equivalent ratio
(c) Marginal return ratio
(d) None of the above

20- **The cropping sequence of different farmer in any area is called as the _____ of that area.**

(a) Cropping pattern
(b) Cropping scheme
(c) Cropping analysis
(d) None of the above

21- **The growth regulator which associated with abscission and dormancy Is called as _____**

(a) Auxins
(b) Gibberellins
(c) Cytokinin's
(d) Abscisic acid

22- **Leaf area index is always _____ to land area.**

(a) Equal
(b) Inversely proportional
(c) Directly proportional
(d) None of the above

23- **According to the _____ approach the yield of the crop per unit area should be increased.**

(a) Horizontal
(b) Vertical
(c) Extensive
(d) None of the above

24- **According to the _____approach the yield of a crop can be increased by increasing the area under that crop.**

(a) Horizontal
(b) Vertical
(c) Extensive
(d) None of the above

25- **Growing of the crop simultaneously on the same field which have the same sowing and harvesting time is called as _____.**

(a) Relay cropping
(b) Succession cropping
(c) Mixed cropping
(d) Sequential cropping

26- **Raising of two or more crop in the same field in a year which are grown one after the other is called as _____.**

(a) Succession cropping
(b) Relay cropping
(c) Sequential cropping
(d) A & c

27- **Solarimeter is used to measure the intensity of _____.**

(a) Light
(b) Temperature
(c) Humidity
(d) Pressure

28- **The increased level of P in the soils causes _____on the uptake of Zn.**

(a) Reduction
(b) Increase
(c) Np effect
(d) None of the above

29- **In light soils, there is _____loss of nutrients.**

(a) No
(b) More
(c) Less
(d) None of the above

30- **If we apply four irrigation to a crop then its delta of water will be_____.**

(a) 13 acre inches
(b) 9 acre inches
(c) 17 acre inches
(d) None of the above

31- **Economical yield is always_____ to harvest index.**

(a) Inversely proportional
(b) Directly proportional
(c) Equal
(d) None of the above

32- **NIAB is the abbreviation of _____.**

(a) National institute of agriculture and biology
(b) Nuclear institute of agriculture and biology
(c) National institute of agriculture and bio- technology
(d) Nuclear institute of agriculture and bio-technology

33- **CEMB is the abbreviation of _____.**

(a) Center of excellence of molecular and biology
(b) Center of excellence of micro biology
(c) Center of excellence of molecular biology
(d) None of the above

34- **NIBGE is the abbreviation _____.**

(a) National institute of biotechnology genetic engineering
(b) National institute of biology and genetic engineering
(c) Nuclear institute of biotechnology and genetic engineering
(d) None of the above

35- **PARC is the abbreviation of _____.**

(a) Pakistan agricultural research council
(b) Pakistan agricultural research center
(c) Pakistan agronomic research council
(d) Pakistan agronomic research center

36- **NARC is the abbreviation of _____.**

(a) National agricultural research center
(b) National agricultural research council
(c) Nuclear agricultural research council
(d) Nuclear agricultural research center

37- **AARI is the abbreviation of_____.**

(a) Ayub agricultural research institute
(b) Ayub agronomic rice institute
(c) Abbottabad agricultural research institute
(d) None of the above

38- **When a soil is fertile, it will be productive _____.**

(a) Always true
(b) Sometimes true
(c) False
(d) No link

39- **Doug stage is the sub-stage of grain formation is which photosynthesis are in _____form.**

(a) Solid
(b) Liquid
(c) Semi solid
(d) None of the above

40- **The natural death of leaves in which leaves die and do not detach by twigs/ petiole is called as_____.**

(a) Senescence
(b) Abscission
(c) A&b
(d) None of the above

41- **The process in which leaves face death especially in trees and they loose and contact with plant and shed out is called as_____.**

(a) Senescence
(b) Abscission

(c) A & b
(d) None of the above

42- **The environment of soil is called_____.**

(a) Lithosphere
(b) Biosphere
(c) Atmosphere
(d) Hydrosphere

43- **Methyl bromide is used as _____.**

(a) Fire extinguishers
(b) Pesticides
(c) Solvent in industrial processes
(d) None of the above

44- **_____generally promotes elongation of roots.**

(a) Auxins
(b) Gibberellins
(c) Cytokinin's
(d) Ethylene

45- **_____is known as contribute in stem elongation.**

(a) Auxins
(b) Gibberellins
(c) Cytokinin's
(d) Ethylene

46- **The growth regulator which have the ability to induce cell division in the presence of auxin is called as the _____.**

(a) Gibberellins

(b) Cytokinin's
(c) Ethylene
(d) None of the above

47- **Stress can be induced by many factors including diseases, cold or pesticides and _____.**

(a) Rain
(b) Wind
(c) Drought
(d) None of the above

48- **The MIRS technique is currently used for identifying ideal combination of natural products to combat disease and _____.**

(a) Pest
(b) Stress
(c) Drought
(d) None of the above

49- **By applying _____ at the right time, grain formation can be stimulated.**

(a) Irrigation
(b) Fertilizer
(c) Pesticides
(d) None of the above

50- **Fertilizer application at the right time in rice reduced the emissions _____.**

(a) nitrogen
(b) ozone
(c) methane
(d) none of the above

51- **rice cultivation is responsible for _____of global methane emissions .**

(a) 5-10%
(b) 10-16%
(c) 20-30%
(d) More than 25%

52- **Zero tillage increased production _____ by reducing the cost of fuel and labour.**

(a) 10-15%
(b) 4-10%
(c) 15-20%
(d) None of the above

53- **Crop yield difference between conventional tillage and no tillage depend on climate and region, soil type and _____ .**

(a) Labour
(b) Crop rotation
(c) Crop
(d) None of the above

Answer key (SERIAL # 15)

1	B	11	D	21	D	31	B	41	B	51	B
2	C	12	A	22	B	32	B	42	A	52	B
3	A	13	B	23	B	33	A	43	B	53	B
4	C	14	B	24	A	34	A	44	A		
5	B	15	A	25	C	35	A	45	B		
6	C	16	B	26	D	36	A	46	B		
7	B	17	D	27	A	37	A	47	C		
8	C	18	B	28	A	38	B	48	B		
9	D	19	B	29	B	39	C	49	B		
10	c	20	A	30	A	40	A	50	C		

Hafiz Muhammad Hassan Farooq

SERIAL # 16

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1) By parachute transplanting rice, saving of labour is

   a) 40%
   b) 30%
   c) 60-70%
   d) 50%

2) Parachute transplanting of rice saved irrigation water
   a)30%
   b)20%
   c)60%
   d)10%

3) A tractor drawn ZDTD has been developed for sowing of
   a)Rice
   b)Maize
   c)sugarcane
   d)Wheat

4) By adoption of zero-till technology farmer can save ----- irrigation water
   a)20%
   b)25%
   c)40%
   d)60%

5) Raya L-18 successfully grown on

a)Waterlogged soil
b)Saline soil
c)Alkaline soil
d)none of above

6) Vermi compost has -------- effect on sugarcane yield and quality
a)Negative
b)Positive
c)Less
d)None of above

7) The new technology for maize growing is through
a)Transplanting
b)Drilling
c)Dibbling
d)None of above

8) Green manuring is essential for improving ------- in the rice wheat cropping
a)Soil health
b)Soil salinity
c)Alkalinity
d)None of above

9) Difficult methods to reduce endotovins in cotton fibres are ,mechanical cleaning , water washing ,streaming and
a)Flash heating
b)Sun drying
c)Air blowing
d)None of above

10) B.T stands for in B.T cotton

a)Bacillus thurengensis

b)Bemisia tabaci

c)Bemisia trachypterus

d)None of above

11)Allellochemicals are used for control of

a) Disease

b)Insect

c)Weeds

d)None of above

12)One of following insects acts as a vector (Carrier) for CLCV

a)White fly

b)Aphids

c)Jassid

d)None of above

13)Sex pheromones traps are used for pest of

a)Pink bollworm

b)American bollworm

c)Both a &b

d)None of above

14)Remote sensing is simply obtaining information about an object touching the object as

a)Without

b)with

c)Both a&b

d)None of above

15)Remote sensing is a-------technique for research in agriculture

a)Old

b)New

c)Primary

d)None of above

16)Crop yield models may be (1)Climatological model (2)Water stress model (3)

a) Environmetal model

b)Soil model

c)Crop growth model

d)None of above

17)Crop growth model takes into account the -------demand and its various stages of growth of growth add 50% factor

a)Respiration

b)Transpiration

c)evapotranspiration

d)evaporation

18)Seed from flowering sugarcane plantis called

a)Achene

b)Fuzz

c)Ear

d)None of above

19) Rice plant respires via

a)Parnchyma cells

b)Aerechyma cells

c)Cholenchyma cells

d)None of above

20) An economical alternative of rice transplanting to a traditional practices is

a)Parachute rice transplanting

b) Direct seeding

c)Transplanting

d)None of above

21) Black layer appears at physiological maturity in

a)Rice

b)Maize

c)Cotton

d)Wheat

22) Weeds are mostly

a)C_3 plant

b)C_4 plant

c)CAM plant

d)None of above

23) Post harvest technology and value ------ emphasizes supply of quality products for ever changing demand

a)Addition

b)Marketing

c)Demand

d)None of above

24)--------- is an aromatic crop

a)Wheat

b)Maize

c)Rice

d)Cotton

25) Sugarcane crop is a ----- crop

a)Aromatic

b)Non aromatic

c)Fibre

d)None of above

26)Organic farming is essential for the control of

a)Society demand

b)Pollution

c)Weeds

d)None of above

27)Allelochemical present in sorghum is used for control of

a)Deela

b)Itsit

c)Bansigrasss

d)Khabalgrass

28)Intensive agriculture play a vital role in

a)Chemical pollution

b)Noise pollution

c)Gas pollution

d)None of above

29)Salinity tolerant enotypes are performing well in -------regions

a)Semi arid

b)Arid

c)Temperate

d)Humid

30)Salinity reduces -------absorption by plants and indirectly induces drought inside the plant system

a)Water

b)Nutrient

c)Both a&b

d)None of above

31)Water use efficiency is ------ higher in drip irrigation

a)20-60%

b)30-70%

c)60-70%

d)70-80%

32)Organic matter influences almost all physical ,chemical and ------ attributes of soil

a)Biological

b)Productivity

c)Salinity

d)Alkalinity

33)Rosette type of flower is formed due to attack of

a)White fly

b)Pink bollworm

c)Spotted bollworm

d)Aphid

34)There are ---- broad agro-ecological zones of Pakistan

a)2

b)3

c)4

d)5

35)Comonly -------farming system are followed in three broad agro-ecological zones of Pakistan

a)4

b)8

c)12

d)None of above

36)Three broad zones of Pakistan are irrigated low-lands,the rainfed low-lands and----------

a)Rice-wheat zones

b)Cotton-wheat zones

c)Mountain area

d)None of them

37)Cropping Pattern deals with cropping system followed by -------

a)An individual

b)Regioin

c)Reseach center

d)University

38)Crropping system followed by an individual farmer is called------

a)Copping pattern

b)Copping scheme

c)Cropping technology

d)None of above

39)In Pakistan almost everywhere wheat is major rabi crop, often constituting over---------- of cropped area

a)40%

b)60%

c)80%

d)90%

40)Most extensive cropping system in irrigated plain is ----------

a)Rice-wheat system

b)Cotton-wheat system

c)Wheat-wheat system

d)None of above

41)Organic agriculture is defined worldwide as “farming w/o addition of-------chemicals”

a)Natural

b)Artificial

c)Pure

d)impure

42)Cotton as cash crop,counts for --------of kharif in cotton-wheat system

a)40%

b)60%

c)78%

d)90%

43)Cotton- wheat system is most important cropping system of-------- & Sindh

a)Northern Punjab

b)Sothern Punjab

c)NWFP

d)Balochistan

44)Fodder is only other crop of siginificance and occupies ------% of cropped area in both season

a)6-7%

b)13-15%

c)17-20%

d)27-30%

45)MNH-93 was released in----------

a)1993

b)1970

c)1980

d)1990

46)Major draw back of rice-wheat system is

a)Low yield of rice

b)Late sowing of wheat

c)Availablity of water

d)None of above

47)Late sowing of wheat in cotton-wheat system can be avoided by growing-------- in standing cotton

a)Oilseed

b)Wheat

c)Maize

d)Sugarcane

48)Seeds of 2 or more crops is mixed before sowing in--------

a)Intercropping

b)Relay cropping

c)Mixed cropping

d)None

49)Growing of wheat in standing cotton s an example of

a)Intercropping

b)Mixed cropping

c)Relay cropping

d)Row cropping

50)---------- was dominant rice variety in Punjab rice track at least up to 1987

a)Basmati super

b)Basmati-370

c)IRRI-6

d)IRRI-9

51)An established way of operating a piece of land for raising crops, livestock or both is called

a)Cropping system

b)Farming system

c)Cropping pattern

d)Cropping scheme

52)Raising only one crop in a year when there is seasonal supply of water is called--------

a)Mono-cropping

b)Monoculture

c)Specialized farming

d)None of above

53)Crops grown commercially for food, feed and fiber are called as ----------

a)Tuber crops

b)Field crops

c)Fibre crops

d)None of above

54)Wheat demands ---------- rain per annual

a)40-80cm

b)80-90cm

c)60-80cm

d)100cm

ANSWER KEY (SERIAL # 16)

1.C	2.C	3.D	4.C	5.B	6.B	7.A	8.A	9.A	10.A
11.C	12.A	13.C	14.A	15.C	16.A	17.B	18.C	19.C	20.B
21.C	22.C	23.B	24.A	25.B	26.B	27.A	28.C	29.B	30.B
31.A	32.A	33.B	34.A	35.A	36.A	37.B	38.B	39.B	40.C
41.B	42.B	43.C	44.B	45.B	46.C	47.B	48.C	49.C	50.B
51.B	52.A	53.B	54.A						

Muhammad Ashar Munir

Serial # 17

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1. A definite succession of crop following one another in specific order is called:
   a. Cropping pattern
   b. Cropping system
   c. Crop rotation
   d. Multiple cropping
2. Physical condition of soil is called:
   a. Tilth
   b. Tillage
   c. Tiller
   d. None of these
3. Mechanical manipulation of soil aimed at improving its physical condition is called:
   a. Tillage
   b. Tiller
   c. Tilth
   d. None of these
4. Crop growth without any tillage to prepare seed bed is known as:
   a. Zero tillage crop
   b. Primary tillage
   c. Tillage crop
   d. None if these
5. Erosion of soil under natural condition is called:
   a. Sheet erosion
   b. Natural erosion
   c. Rill erosion
6. Growing grasses for consumption by livestock is called as:
   a. Upland farming
   b. Low land farming
   c. Grass land farming
   d. None of these
7. Farming on large areas with minimum expenditure is known as:
   a. Exhaustive farming
   b. Expensive farming
   c. Extensive farming
   d. None
8. The ratio of actual cultivated area to total farm area over a year is called:
   a. Cropping system

b. Cropping intensity
c. Cropping technology
d. None

9. General Cropping system followed by the farmers in an ecological zone is:
   a. Cropping scheme
   b. Cropping technology
   c. Cropping pattern
   d. None
10. Farming in which varieties of crops are produced and many animals are reared Is called:
   a. Animal farming
   b. Rural farming
   c. Diversified farming
   d. Multiple farming
11. A crop grown on residual moisture after the harvest of rice crop is called:
   a. No tillage crop
   b. Dobari crop
   c. Residual crop
   d. None
12. Crop grown for its edible seed is:
   a. Tuber crop
   b. Cereal crop
   c. Pulses
   d. Sugar crop
13. Region where total rainfall is less then natural evapotranspiration rate is called:
   a. Arid region
   b. Irrigated region
   c. Humid region
   d. None
14. In cotton recommended row to row distance is:
   A. 100cm
   B. 45cm
   C. 75cm
   D. 50cm
15. Cotton is a crop having the type of root system:
   a. Shallow root system
   b. Fibrous root system
   c. Deep root system
   d. None
16. IPM stands for:
   a. International pest management
   b. Integrated pest management
   c. Interior pest management

d. Internal plant management

17. Rice crop requires:
    a. Sandy loam soil
    b. Heavy loam soil
    c. Silt loam soil
    d. Medium loam soil
18. Process of killing organisms in a product commonly milk by heating to a controlled temperature is called:
    a. Heating effect
    b. Pasteurization
    c. Natural control
    d. None
19. Raising of two or more crops in same field or in one year is called:
    a. Double cropping
    b. Multiple cropping
    c. Inter cropping
    d. None
20. In agronomic contacts stress may be a consequence of:
    A. Abiotic constrains
    B. Environmental constrains
    c. Grower and related constrains
    d. All of above
21. Stress agronomy enable us:
    a. To undertake some management stress for achieving high yield targets
    b. To decide whether a particular stress is harmful or useful
    c. Does not help increase yield
    d. Both A and B
22. Crop yield is an expression of:
    a. The interaction of genetic potential and environmental factors prevailing during crop growth period
    b. Genetic makeup of the plant
    c. Management factors
    d. None of above
23. Plant species differs in terms of their:
    a. Optimal environments
    b. Their susceptibility to particular stress
    c. Both A&B
    d. None of above
24. Any external constraints that limit the productivity below genetic potential of the plant is called:
    a. Stains
    b. Avoidance
    c. Adaptation

d. Stress

25. Terminal draught refers to moistures stress:
    a. Throughout the crop growth period
    b. Towards the end of growing season
    c. Early in crop growth period
    d. None of above
26. Season draught refers to:
    a. Sufficient precipitation for economic crop production
    b. In efficient precipitation for economic crop production
    c. Partial moisture shortage for efficient crop production
    d. None of above
27. Transpiration is linked to:
    a. Photosynthesis
    b. Co2 diffusion into stomata
    c. Transpiration
    d. All of above
28. Heat dissipation in crop plants is achieved by:
    a. Thermal radiation of leaves
    b. Removal of leaves by convection currents
    c. Transpiration
    d. All of above
29. Transpiration rate is determined by:
    a. Evaporative demand
    b. Hours for which stomata's remain open
    c. Area intercepting radiation energy and water supply
    d. All of above
30. Increasing salt concentration in rooting medium:
    a. Increases water potential of the rooting medium
    b. Depresses its osmotic pressure
    c. Decreases its osmotic potential
    d. Does not influence any of above
31. Resistance may be conferred by processes as:
    a. Anatomical
    b. Molecular
    c. Morphological
    d. All of above
32. Mechanisms whereby plants may in some way perform better in a stressful environments are referred to as:
    a. Resistance
    b. Tolerance
    c. Avoidance
    d. All of above
33. Water uptake by roots occurs only when root water potential is:

a. Equal to that of soil water potential
b. Lower than that of soil water potential
c. Higher than that of soil water potential
d. Is not influence by any of above?

34. Water use after closure of stomata contributes:
    a. A lot towards photosynthesis
    b. Does not contribute towards photosynthesis
    c. Only partially contributes towards photosynthesis
    d. Is the only component of water that contribute toward photosynthesis
35. Under drought conditions photosynthetic inhibition is:
    a. Stomatal
    b. Non stomatal
    c. both A&B
    d. None of a&b
36. After water stress is imposed, concentration of abscisic acid:
    a. Rapidly falls
    b. Rapidly rises
    c. Is not influence
    d. Rises slowly
37. Freeze induced water stress leading to an ex-osmosis of water from the cells to ice centers within a plant is called:
    a. Freeze smothering
    b. Freeze desiccation
    c. Freeze dehydration
    d. Freeze sensitivity
38. Main sources of salts in our agricultural lands are:;
    a. Oceans
    b. Parent rocks
    c. Ancient drainage basins
    d. All of above
39. Salinity influences plant productivity through:
    a. Osmotic effect
    b. Specific ion effect
    c. Ion toxicity
    d. All of above
40. Accumulation of different inorganic and organic solutes to combat salinity is called:
    a. Compartmentation
    b. Osmotic adjustment
    c. Salt exclusion
    d. None of above
41. A saline agriculture crop choice, crop rotation, afforestation and mulching approaches are basically:

a. Biological
b. Hydraulic
c. Physical
d. Chemical

42. Accelerated CO2 concentrations are associated with higher temperature and entail the effect on soils that are:
    a. Positive
    b. Negative
    c. Do not bear any influence
    d. Maintain the soil temperature
43. Primary effect of low light stress include:
    a. Chlorosis
    b. Etiolation
    c. Starvation
    d. Necrosis
44. Radiation stress due to high light intensity results in:
    a. Heat injury
    b. High temperature induced drought
    c. Photo-oxidation
    d. All of above
45. Reduction in photosynthesis due to high light intensity is called:
    a. Photo-oxidation
    b. Photo inhibition
    c. Necrosis
    d. Photorespiration
46. The causes of low irradiance are:
    a. Cloudiness
    b. Foggy weather
    c. Shades of trees
    d. All of above
47. The water content in the soils after saturated soils have freely drained for two to three days is called:
    a. Permanent wilting point
    b. Field capacity
    c. Wilting front
    d. Wiling range
48. The duration and severity of stress are determined by:
    A. Type of plant species
    b. Stage of development
    c. Both a&b
    d. None of a&b
49. The ability to complete the life cycle before serious water stress damages plant tissue is called:

a. Draught escape
b. Drought resistance
c. Drought tolerance
d. Dehydration tolerance

50. Coagulation of protein is observable upon acute exposure to:
    a. Very low temperature
    b. High temperature
    c. Moisture stress
    d. Salt stress
51. Chemical changes in submerged soils include:
    a. Depletion of molecular O2
    b. Decrease in redox potential
    c. Increase in pH of acidic soil
    d. All of above
52. Deficiency or toxicity of essential plant nutrient is called:
    a. Nutrient stress
    b. In toxicity
    c. Both a&b
    d. None of a&b
53. The combined loss of water from a given area and during specified period of time by evaporation from soil surface and transpiration by plant is called:
    a. Potential evapotranspiration
    b. Transpiration
    c. Evaporation
    d. Evapotranspiration
54. The process whereby soluble salts accumulate in the soil is called:
    a. Salinization
    b. Salt balancing
    c. Sodication
    d. Civilization and sodication
55. Halophytes can tolerate:
    a. Low level of salinity
    b. High level of salinity
    c. High level of water deficit
    d. High level of radiation
56. Elements used in relatively large amounts by plants are called:
    a. Essential nutrients
    b. Micro nutrients
    c. Macronutrients
    d. Non-essential

Answer key (Serial # 17)

1	C	11	B	21	D	31	D	41	A	51	D		
2	A	12	B	22	A	32	B	42	B	52	B		
3	A	13	A	23	C	33	B	43	C	53	D		
4	A	14	C	24	D	34	B	44	D	54	A		
5	B	15	C	25	B	35	C	45	B	55	B		
6	C	16	B	26	B	36	B	46	D	56	C		
7	C	17	D	27	D	37	C	47	B				
8	B	18	B	28	D	38	D	48	C				
9	C	19	B	29	D	39	D	49	A				
10	C	20	D	30	C	40	B	50	B				

RIZWAN ULLAH

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1: Elements used in relatively large amount by the plants are called

A: essential nutrients

B: micronutrients

C: non essential

D: macronutrients

2: Micronutrient include

A:N, P, Mn

B: Mn, K &B

C: C, H, & Fe

D: Fe, Zn, & Cu

3: Nitrogen deficiency results in

A: intensification of colors

B: yellowing between veins

C: chlorosis

D: yellowing of affected leaves

4: A fertilizer is set to complete when it contains

A: N & K

B: N & P

C: P & K

D: N, P, & K

5: Increased permeability of chloroplasts results in

A: disturbance of photosynthesis

B: roots starvation

C: both A & B

D: none of A & B

6: Severe chilling stress promotes

A: senescence

B: localized lesions

C: both A & B

D: none of A & B

7: In plants the ability to survive a heat shock within issue is called

A: avoidance

B: tolerance

C: resistance

D: all of above

8: An approximate measure of heat energy available from solar radiation is called

A: heat content

B: energy content

C: temperature

D: none of above

9: C_4 plants have physiological advantage over C_3 plants at

A: low temperature

B: at low light intensity

C: at high temperature and high light intensity

D: both A & B

10: The highest water use efficiency is recorded for

A: C_4 plants

B: C_3 plants

C: CAM plants

D: C4 and CAM plant

11: The point at which assimilatory gains equal respiratory loses is called

A: saturation point

B: compensation point

C: minimum light requirement

D: simply light intensity

12: Stress agronomy offers solutions for successful crop production especially where.

A: environments are much conducive for plant growth

B: environmental conditions do not favor plant growth

C: Resource management is the major obstacle

D: inputs are not easily available

13: Growing of more than two crops together in a mixture is called

A: intercropping

B: multiple cropping

C: mixed cropping

D: Mono cropping

14: In arid climates the major constraints to productivity is

A: poor availability of solar radiation

B: insufficient precipitation

C: poorly developed soils

D: low organic matter

15: Arid lands are characterized by

A: abundance organic matter

B: scarce vegetation

C: occurrence of frequent precipitation

D: none of above

16: Ecology relates to the study of

A: environment

B: structure & functions

C: surrounding

D: all of above

17: Synecology relates to the knowledge of

A: single plant

B: two plants

C: groups of plants

D: none of all to its environments

18: Biotic factor includes

A: soils

B: environment

C: Plants and animals

D: all of above

19: In the vicinity of higher plants

A: virus

B: bacteria

C: mycorhizae

D: all of above grow to make

20: Soil air, parent material and soil profile are placed under

A: biotic

B: living

C: non living

D: edaphic factors

21: Epiphyte plants normally grow in

A: sub tropical

B: tropical

C: humid & sub tropical

D: all of above

22: Bundle sheath cells are found

A: CAM

B: C4

C: C3

D: all of above plants

23: Crop production is mainly affected by

A: edaphic

B: biotic

C: Environmental

D: none of above factors

24: Dry winds increase

A: increase in temperature

B: evaporation losses

C: transpiration losses

D: water requirement of the crop

25: Violent winds in herbaceous plants normally cause

A: fruit dropping

B: root exposure

C: lodging

D: all of above in herbaceous plants

26: Crop growth rate is directly related to

A: ET loses

B: nutrient absorption

C: High organic matter

D: none of all

27: Water holding capacity of soil is more in

A: sandy soil

B: silt soil

C: silt loam

D: clayey soil

28: Optimum temperature for wheat is

A: >30°C

B: <30°C

C: 15-20°C

D: 20-25°C

29: the characteristics of a community may be classified into

A: analytic

B: synthetic

C: physiognomic

D: all of above

30: Periodicity is phenomenon related to seasonal changes such as

A: Growth

B: flowering

C: pollination and ripening of fruit

D: all of above

31: Phosphorus is essential constituent for all living organism in form of

A: Glucose

B: ADP

C: ATP

D: None of above

32: In finer soils main constituent are

A: Micas and illite

B: Illite and feldspar

C: quartz and feldspar

D: None of above

33: Organic matter in our soils is

A: > 5%

B: <5%

C: >1%

D: <1%

34: Nitrogen application to sorghum and maize show

A: Linear

B: Curvilinear

C: quadratic relationship

D: Negative

35: Phosphorus present in soil is in the form of

A: H_3PO_4

B: H_2PO_4

C: P_2O_5

D: None of them

36: nitrite reductase enzyme is involved in

A: NO_3-NO_2

B: NO_3-NH_4

C: NO_2-NH_4

D: None of them

37: Ammonium reduction takes place in

A: Chlorophyll

B: Leaves

C: Roots

D: Chloroplast

38: In legume nodulation is inhibited by

A: Imbalance of NPK

B: Less application of N fertilizer

C: More addition of N

D: all of above

39: Arachis hypogaea can fix N

A: <50

B: <80

C: <100

D: <100kg/ha

40: IN soil having high TSS activity of nodule formation

A: Decreases

B: Increases

C: Slowdown

D: All of above

41: Direct contact with super phosphate activity increases

A: Nodulation

B: Inoculants

C: Rhizobium

D: all of above

42: soil amendment can change soil structure of saline soil

A: Gypsum

B: Sulphuric Acid

C: Green manuring

D: all of above

43:azonobacter and azonomas belong to

A: Aerobic

B:Facultative

C:anaerobic bacteria

D:auto trophic

44:Activities of biological N fixation relates to

A: Breeding

B: soil chemistry

C: soil biochemistry

D: soil microbiology

45:Heterotroph bacteria are also called

A: consumer

B: Facultative

C : Producer

D: all of above

ANSWER KEY (Serial # 18)																									
01:	D	02:	D	03:	C	04:	D	05:	C	06:	B	07:	C	08:	C	09:	C	10:	B	11:	B	12:	C	13:	B
		14:	B	15:	D	16:	C	17:	C	18:	C	19:	B	20:	C	21:	C	22:	C	23:	D	24:	D	25:	C
		26:	D	27:	C	28:	D	29:	D	30:	C	31:	A	32:	D	33:	A	34:	D	35:	C	36:	D	37:	C
		38:	D	39:	A	40:	D	41:	A	42:	D	43:	A	44:	D	45:	A								

Samar Hayat

Serial # 19

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1)In maize the critical stages are..
a) Silking
b) knee height.
C) tesseling.
d)All of above.
2)Sorghum as a fodder should be watered.
a) at two stage.
b)up to 1m height.
c) up to 2m height.
d) None of these.
3) in barani area schedule for fertilizer application is.
a) with 1&t irrigation.
b) with 2 nd irrigation.
c) Split doses.

d) None of these.

4) In low land rice fertilizer application to fine varieties should be delayed to avoid.

a) disease.

b) Lodging.

c) insect attack.

d) All of above.

5).Rice develops special mechanism for respiration in flooded soil is called ..

a) Sclenchyma.

b) Aerenchyma.

c) palisade.

d)None of above.

6). Crop production covers.

a) crop improvement.

b) crop management.

c) crop improvement and management.

d) crop and soil management.

7). Generally it is said that quality seed increase yield by.

a) 25%.

b) 50%.

c) 75%.
d) 100%.
8). The determinant of crop growth may be.
a) increase in size.
b) increase in dry weight.
c) increase in length.
d) All of above.
9.Ammonical fertilizer are directly lost by.
a) Leaching.
b) volatilization.
c) Leaching and volatilization.
d) Ammonification.
10). The inflorescence of wheat is called.
a) Panicle.
b) Spike.
c) caryopsis.
d) None of the above.
11). The growing method is which highest amount of water saved is.
a) Flat sowing.
b) Ridge sowing.
c) Bed sowing.

d) pit plantation.

12).In the field the main agronomic factor influencing leaf production is.

a) irrigation schedule.

b) Nitrogen availability.

c) sowing date.

d) None of above.

13). Maximum biomass production per unit area to the full inherent capacity of the biological unit is known as.

a) Biological yield. .

b) Economic yield.

c) Biological potential.

d) None of above.

14) The difference between potential and actual yield is called.

a)Yield deficit.

b)Yield gap.

C)Achieved yield.

d)Yield constraint.

15) In rainfed area primary is emphized for efficient use of rain water.

a)Deep cultivation.

b) Shallow cultivation.

c) No cultivation.

d) None of above.

16)In wheat tillering occure in.

a) 7_8 days after sowing.

b) 8-12 days after sowing.

c) 12-18 days after sowing.

d) 18-25 days after sowing.

17) ____ is recommended for reclamation of saline soil.

a) Calcium sulphate.

b) Magnesium sulphate.

c) TSP.

d) CAN.

18)Dry method of sowing rice nursery requires _____then wet method.

a) 10-20% more seed.

b) 10-20% less seed.

c) 20-30% more seed.

d) 20-30% less seed.

19) Rice nursery of fine varieties should not

be sown before.

a) June 1&t

b) May 20.

c) June 7.

d) June 20.

20) The recommended distance between plant and rows in rice is.

a) 22x22cm.

b) 30x30cm.

c) 22x30cm.

d) 17x22cm.

21) Sunflower contribute about _____ to the country's total edible oil production.

a) Less than 1%.

b) Less than 5%.

c) above 10%.

d) above 20%.

22) In rice water depth higher than___ after tillering.

a) 10cm.

b) 15cm.

c) 18cm.

d) 22 cm.

23) The optimum moisture content in rice grown at harvesting should be about.

a) 8%.

b) 20%.

c) 28%.

d) 35%.

24) optimum plant population in case of maize grain crops.

a)55000_66000ha-1.

b)66000_88000ha-1.

C)45000_50000ha-1.

d)70,000-80,000ha-1.

25)Captan is used as.

a) insecticide.

b) fungicide.

C) weedicide.

d) None of above.

26) The dose of fungicide for seed treatment is.

a) 3kg/kg of seed.

b) 3g/g of seed.

C) 3g/kg of seed.
d) 10g/kg of seed.
27) Cereal grain should be dried to a moisture level of _____%for safe storage.
a) 10_12%.
b) 12_15%.
C) 15_18%.
d) 18_22%.
28)Sand dunes vegetation normally found in .
a) central Punjab.
b) hilly area of Balochistan.
c) KPK.
d) coastal area of Karachi.
29) For better understanding of soil management fallowing factor is more significant.
a) Crop.
b) Soil.
C) Climate.
d) All of above.
30) Automobile release gases.

a)SO2.
b) Ozone.
c) Ethylene.
d) None of these.
31) For the last one century global temperature has risen to.
a)>than3.5•c.
b)4.5•c.
c)1.5•c.
d)2.5•c.
32)In Pakistan CO2 concentration has jumped to.
a)100ppm.
b)200ppm.
c) 300ppm.
d) 400ppm.
33) The optimum soil PH for cotton crop is.
a) 6.8_7.7.
b)7.7_8.6.
c) above 8.
d) below 6.
34)A good recommended stand for cotton

varieties from.
a)40,000_50,000ha-1.
b)50,000_60,000ha-1.
c)60,000_70,000ha-1.
d)70,000_80,000ha-1.
35)In saline soil cotton seed as dibbled on.
a)one side of ridges.
b)Both side of ridges.
C)At the top of ridges.
d) None of these.
36) Cotton crop requires.
a)4irrigation.
b)5-6irrigation.
c)6-7irrigation.
d)7-8irrigation.
37) In cotton (on clayey soils)first irrigation is recommended after___days of sowing.
a)40-50.
b)20-30.
C)30-35.
d)25-30.
38)Sugarcane crop requires soil.

a) Medium to heavy textured.
b)Light to medium textured.
C) Light to heavy textured.
d)All of above.
39)Two budded setts of Sugarcane are placed in furrows.
a)8-10cm apart.
b)30cm apart.
C)End to end.
d)60cm apart.
40) The top portion of Sugarcane show rapid germination because in this part.
a) Sugarcane is in sucrose form.
b) Sugarcane is in glucose form.
c) Apical cell are dividing rapidly.
d)Auxins are in higher concentration.
41) Seed rate for Sugarcane is about.
a)8mound/acre.
b)8mound/ha.
c)8tonnes/acre.

d)8tonnes/ha.

42)Delta of water for spring planted Sugarcane is.

a)52-55acre inches.

b)58-61 acre inches.

c)64-70 acre inches.

d) 80 acre inches.

43) Average Sugarcane yield of the country is about .

a)48 t/ha.

b)48 mounds/ha.

c)70 t/ha.

d)70mounds/ha.

44) The relationship between gross domestic product(GDP) and gross national product (GNP)is.

a) Always equal.

b)GDP is more than GNP.

C)GNP is more than GDP.

d)GNP may be more or less than GDP.

45)Crop sector of Pakistan account for____% of agriculture GDP.(Economic survey of Pakistan 2018_2019).

a)69%.

b)34%.

c)80%.

d)90%.

46) Livestock sector of Pakistan account for____ %of agriculture GDP.(Economic survey of Pakistan 2018-2019).

a)10%.

b)20%.

c)30%.

d)60%.

47) Total land area of Pakistan is.

a)76.61m.ha.

b)7.961mha.

c)796.1mha.

48)Out of total cropped area of country about_____ %rainfed.

a)75%.

b)55%.

c)35%.

d)25%.

49) The major incidence of salinity and sodicity is an.

a) Punjab.

b)Sindh.

c)Kpk.

d) Balochistan.

50) The import bill of Pakistan for edible oil is.

a)786million US $.

b)78 million US $.

c)7.8 million US $.

d)1786 million US $.

“Answer key”

1). d	**2). b**	**3). d**
4). b	**5). b**	**6). c**
7). a	**8). d**	**9). b**
10).b	**11).c**	**12).c**
13).c	**14).b**	**15).a**
16).c	**17).a**	**18).a**
19).a	**20).a**	**21).d**
22).a	**23).b**	**24).a**
25).b	**26).c**	**27).a**
28).d	**29).d**	**30).c**
31).d	**32).d**	**33).a**

34).a	**35).a**	**36).b**
37).a	**38).a**	**39).c**
40).b	**41).d**	**42).c**
43).a	**44).c**	**45).b**
46).d	**47).a**	**48).d**
49).b	**50).a**	

ZEESHAN ASLAM

Serial # 21

Page# 161-165

1.The word competition comes from ……word " competere".

A . LATIN *B. Greek*
C. French *d. English*

2. Weed-crop competition is severe……..

A. At early growth stages

B. Throughout the growth period

C. at lateral growth stages

d. None of these

3. Mixing of two or more crops of different species result in

A. No competition for weeds

B. Increased competition for weed

C. Decreased competition for weed

D .None of these

4. …… can be driven away if gram is included in rotations.

A. Phalaris minor *B. Avena fatua*

C. Chenopodium Album *D. Chenopodium Murale*

5. …….weather condition favour weed growth.

A. Favourable *B. Adverse*

C. Normal *D. None of these*

6. ……is the first nutrient to become limiting in weed- crop

Competition.

A. *Phosphorus* C. *Potash*
B. *Nitrogen* D. *zinc*

7. ***The shortest time span in life cycle of a crop when weeding result in highest economical returns is called***

A. *Economic thresh hold level*
B. *Critical thresh hold level*
C. *Economic weed crop competition period*
D. *Critical weed crop competition period*

8. ***In ……. Poisonous compound prussic acid contents increases at tillering stage.***

A. *Sorghum halpense*
B. *Echinoclou crustgali*
C. *Avena fatua*
D. *Phalaris minor*

9. ***If seed of …….. mixed with mustard oil it can cause death and Blindness in human being***

A. *Cenchrus ciliaris*
B. *Argemone Mexicana*
C. *Lolium Temolentum*
D. *Avena Fatua*

10. ***……. Is alternate host of stalk borer of miaz.***

A. *Chenopodium Album*

B. Chenopodium murale

C. Echinocloa Crusgali

d. Cyprus Rotunds

11. Which weed is used as pollution indicator?

A. Fathen *B. wild mustard*

C. wild spinach *D. both A & B*

12. Chick weed indicate ……

A. Acidic soil *B. Basic soil*

C. Calcareous soil *D. Neutral soil*

13. Faten hen is English name of ……..

A. Chenopodium Album

B. Chenopodium murale

C. Echinocloa crusgali

d. Cyprus Rotund

14. Weed ecology is divided into ……

A. weed autecology & cytology

B. weed autecology & synecology

C. weed autecology & anatomy

d. None of these

15. In weed autecology we study.

A. interspecific competition *B. intra specific competition*

C. both a & b *D. none of these*

16. The community character is dynamic and change in course of Time due to external and internal factors is called……

A. Ecological optima *C. Ecological alteration*

B. Ecological succession *D. none of these*

17. Which one is a category of weed depending upon light Requirement?

A. Sciophytes *C. photophytes*

B. Heliphytes *D. both A & B*

18. Weeds with triangular stem are called …….

A. Herbs *B. sedges*

C. shrubs *D. Creepers*

19. Cressa cretica is a common weed found in soils of Sindh.

A. Waterlogged *B. Salt affected*

C. Acidic *D. both A & B*

20. Typha species grow in ……. soil.

A. Waterlogged *B. salt affected*

C. Acidic *D. Both A & B*

21. Basophiles are weed which grow well in…….soils.

A. Alkali *B. Acidic*

C. Neutral *D. both A & B*

22. …… grow in acidic soils.

A. Basophiles *B. Acedophiles*

C. Neutrophiles *D. None of these*

23 . …….is associated weed of rice and grow well in frequently Flooding.

A. Avena Fatua *B. Echinocloa crusgali*

C. Phalaris Minor *D. Echinocloa Arvensis*

24. Striga Spp . is a parasitic weed of ……..

A. Rice *B. wheat*

C. sugarcane *D. cotton*

25. Asphadelus tenuifolius is associated weed of

A. Gram *B. Wheat*

C. Lentil *D. Soybean*

26. Which one in not an associated weed of wheat.

A. Wild oat *B. Dumbi sitti*

C. Krund *D. Itsit*

27. Which one is major weed of Wheat.

A. Wild onion *B. Wild pea*

C. Wild oat *D. Itsit*

28. The botanical name of wild oat is.

A. Avena Fatua *B. Avena Sativa*

C. Phalaris minor *D. Chenopodium album*

29. Cyperus rotundus is locally called…….

A. Itsit *B. Deela*

C. Didden *D. Jangli jai*

30. Wild oat is differentiated from weed due to …….

A. presence of well developed ligules

B. presence of well developed auricles

C. Absence of both ligules & auricle

D. presence of both ligules and auricles

31. The process of limiting weed infestation so that crop can be grown profitably is called ……..

A. Weed control *C. weed eradication*

B. Weed management *D. integrated weeds*

32. The principle of weed management is ……

A. The eradicate weeds

B. To reduce weed density to economic thresh hold level

C. The shift competition in favour of weeds

D. To make conditions suitable for weed control

33. The seeds of chenopodium album can remain viable for ……years after burial in the soil.

A. 5 - 10 *B. 10 – 15*

C. 15 – 20 *D. 20 – 25*

34. Phalaris minor can produce ……. Seeds per plant.

A. 1000 - 3000 *B. 3000 – 5000*

C. 5000 – 7000 *D. 7000 – 9000*

35 The seed of Chichorium Intybus are morphologically similar to.

A. Lucern *B. Berseem*

Shaftal *D. Jantar*

36. The roots of lehli can go up to depth of …….feet

A. 5 *B. 10*

C. 15 *D. 20*

Answer key Serial # 21

1. a	2 . A	17.D	25.A	33.A
3. B	4. B	18.B	26.D	34.B
5. B	6.B	19.B	27.C	34.B
7. D	8. A	20.A	28.A	35.B
9. B	10. A	21.A	29.B	36.D
11. D	12.D	22.B	30.A	
13.B	14.B	23.B	31.A	
15.C	16.B	24.C	32.B	

Usama ali

Serial # 23

Page 171-175

1 ------- is the important disease of rice: -

a) Smut
b) Ear cockle disease
c) blast
d) none of above

2 Ozone layer present in

a) Stratosphere
b) Bacterial blight
c) foot rot
d) blast

3 The word agronomy is derived from: -

a) Latin
b) Arabic
c) Greek
d) French

4 The relative area of a sole crop required to produce the yield achieved in intercropping is called

a) Land equivalent method
b) Marginal return ratio
c) land equivalent ratio
d) none of above

5 The growth regulator associated with abscission and dormancy is

a) Auxin
b) Cytokinin's
c) gibberellins
d) ABA

6 EPA stands for

a) Environmental protection association
b) Environmental protection agency
c) Environment and plant protection agency
d) None of above

7 The ester 2, 4-D are

a) Polar
b) Di- polar
c) non-polar
d) none of above

8 Any substance in a herbicide formulation, which enhance the effectiveness of herbicides is called as

a) Active equivalent
b) Active ingredient
c) adjuvant
d) none of these

9 EC is measured in

a) mmhos m^{-2}
b) mmhos cm^{-2}
c) Ds m^{-2}
d) meq L^{-1}

10 the duration and severity of stress are determined by

a) type of plant species
b) both a AND B
c) stage of development
d) none of above

11 any gas liquid or solid material used to reduce the concentration of an active ingredient in a formulation is called

a) desiccant
b) diluent
c) adjuvant
d) none of these

12 high concentration of Na^+

a) enhance growth
b) doesn't influence
c) inhibit growth
d) none of the above

13 water use efficiency is

a) yield/ ET
b) ET/yield
c) yield/EF
d) none of these

14 Acceptance of false hypothesis is

a) Type I error
b) Type III error
c) type II error
d) none of these

15 Hard seeds are those, which have seed coat impervious to

a) Water
b) Oxygen
c) water and oxygen
d) light

16 If crop is harvested at physiological maturity, the produce contains

a) High moisture
b) Mature grains
c) low moisture
d) none of these

17 Fertilizer pollution may be avoided

a) Balanced application
b) Nitrification inhibitors
c) split application
d) all of these

18 Mechanical manipulation of soil aimed at improving its physical condition is called

a) Tilth
b) Tiller
b) tillage
d) all of these

19 Specific measurement of a variable is

a) Variation
b) Varity
c) Variate
d) None

20 The scientific method of forecasting or making out prediction about the changes and development likely to take place in the environment e.g rain fall

a) Remote analysis
b) Metrological analysis
c) Remote sensing
d) Remote sequence

21 In salt affected soils processes of imbibition in seed is limited due to

a) Osmosis
b) Diffusion
c) Ex-osmosis
d) None of above

22 In seed processes of ex-osmosis normally takes place in

a) Water logged soil
b) Salt effected soil
c) Eroded soil
d) Reclaimed soil

23 Blind hoeing is normally carried out in

a) Maize
b) Wheat
c) Sugar cane
d) Soybean

24 Earthing up is not carried out in

a) Sugar cane
b) Maize
c) Sunflower
d) Berseem

25 Plant population of a plot is calculated from

a) Length of plot
b) Width of plot
c) Are of the plot
d) None of above

26 Toria is a crop of

a) Rabi season
b) Kharif season
c) Zaid rabi season
d) Zaid kharif season

27 Ozone layer is present in

a) Stratosphere
b) Mesosphere
c) Exosphere
d) Thermosphere

28 Growing of only one crop year after year is called as

a) Intensive culture
b) Monoculture
c) Intercropping
d) Extensive farming

29 Solarimeter is used to measure the intensity of

a) Light
b) Temperature
c) Humidity
d) Pressure

Answer Key (Serial No 23)

1	2	3	4	5
C	A	C	C	D
6	7	8	9	10
C	C	C	C	B
11	12	13	14	15
B	C	A	C	C
16	17	18	19	20
A	D	C	A	B
21	22	23	24	25
C	A	A	C	D
26	27	28	29	
C	B	A	A	

AMIR SOHAIL

SERIAL NO 24

PAGE 176-182

1.Fertilizer should be applied

a. Below the seed

b. Above the seed

c. a & b

d. None of the above

2.The majority of herbicides are

a. organic and inorganic chemical

b. organic chemical

c. inorganic chemical

d. None of above

3.The ability of weed to affect the crop growth adversely is called

a. Allelopathy

b. Inhibition

c. Interference

d. Direct competition

4.Any substance in a herbicide formulation that enhance the effectiveness of the herbicide is called as

a. Acid equivalent

b. Adjuvant

c. Antagonism

d. None of above

5.Less of green colour in foliage followed by yellowing or whitening of the tissue is called as

a. Dormancy

b. Discoloration

c. Carcinogen

d. chlorosis

6.Localized death of living tissue is called as

a. Necrosis

b. Chlorosis

c. mutagen

d. None of above

7.Movements of airborne pray droplets from the intended a Ren of applicator is called as

a. Spray persistence

b. Vapor drift

c. Spray drift

d. None of above

8.The simultaneous effect of several independent variables on the dependent variable is called

a. Negative relation

b. Positive relation

c. Multiple relation

d. None

9.The replication of an investigation in an identical way as safeguard agent unintentional error is

a. Randomization

b. Replication

c. Blocking

d. None

10.Programe that guides the investigation in the process of collection, analysis, an interpreting observation is

a. Statistics

b. Statistic

c. Research design

d. None

11.A research design that allow one to examine simultaneously the effects of two or more independent variables on the dependent variable is called

a. Factorial design

b. RCBD

c. CRD

d. LSD

12.Systimatic inquiry into a subject to discover new facts or principles is called

a. scientific method

b. research

c. experiment

d. none

13.The assignment of treatments to experimental units so that all units considered have any equal chance of receiving is called

a. Replication

b. Randomization

c. Local control

d. Treatments

14.Basic reasons for salt accumulation are

a. Solutions

b. Hydrations

c. Carbonation

d. a+b+c

15.Plant growth in sodic soils is adversely affected due to

a. Depressive effect of Na

b. High soil Ph

c. Toxicity of some specific ions

d. a+b+c

16.The plant can develop tolerance against salinity by

a. Osmotic adjustment

b. Growth development

c. Transpiration

d. Irrigation application

17.Salt tolerance can be induced in crop varities through

a. Breading programe

b. Selection of tolerance plant

c. Radiation

d. a + b

18.In water logged soil crops should be sowing

a. On leveled soil

b. On ridge

c. On flat top ridge

d. On round top ridge

19. Rodox potential is measure of its tendency to

a. Accept electron

b. Donate electron

c. Accept or donate electron

d. To use O_2

20.Mulching is a process of reducing water losses from soil by

a. Natural mulch

b. Artificial mulch

c. a + b

d. Harvesting crops

21.Wind erosion can be reduced by

a. Growing crops

b. Wind barkers

c. Adding organic matter

d. a + b + c

22.In barani areas water can be conserved by

a. Reducing run off

b. Construction of mini dams

c. Adding humus and organic matter

d. a + b + c

23.Crops production covers

a. Crop improvement

b. Crop management

c. a + b

d. Crop and soil management

24.Generally it is said that quality seed increased yield by

a. 25%

b. 50%

c. 75%

d. 100%

25.The inflorescence of wheat is called

a. Panicle

b. Spike

c. Caryopsis

d. None of above

26.In the field the main agronomic factor influencing leaf production is

a. Irrigation schedule

b. Nitrogen availability

c. Sowing date

d. None of above

27. Rice nursery of fine varieties should not be sown before

a. June 1

b. May 20

c. June 7

d. June 20

28.Seed rate for sugarcane is about

a. 8 maunds/acre

b. 8 maunds/ha

c. 8 tonnes/acre

d. 8 tonnes/ha

29.Total land area of Pakistan is

a. 79.61 m. ha

b. 7.961 m. ha

c. 796.1 m. ha

30.Crop yield is an expression of

a. The interaction of genetic potential and environmental factors prevailing during crop growth period

b. Genetic makeup of the plant

c. Management factors

d. None of above

31. Plant species differ in terms of their

a. Optimal environment

b. Their susceptibility to particular stress

c. Both a & b

d. none of above

32.Transpiration is linked to

a. Photosynthesis

b. CO_2 diffusion into stomata

c. Water vapour diffuse out of stomata

d. All of above

33. Heat dissipation in crop plants is achieved by

a. thermal reduction of leave

b. removal of heat by convection

c. transpiration

d. All of above

34.Transpiration rate is determine by

a. evaporation

b. hours for which the stomata remain open

c. Area intercepting radiation energy and water supply

d. all of above

35.Water uptake by roots occour only when root water potential is

a. equal to that of soil water potential

b. lower than that of soil water potential

c. higher than that of soil water potential

d. is not influence by any of above

36.Water use after closure of stomata contributes

a. a lot towards photosynthesis

b. does not contribute towards photosynthesis

c. only partially contributes towards photosynthesis

d. is the only component of water that contribute toward photosynthesis

37.Radiation stress due to high light intensity results in

a. high injury

b. high temperature induced drought

c. photo-oxidation

d. all of above

38.The combined loss of water from a given area and during a specified period of time by evaporation from soil surface and transpiration from plant is called

a. potential evapo-transpiration

b. transpiration

c. evaporation

d. evapo-transpiration

39.Halophytes can tolerate

a. low level of salinity

b. high level of salinity

c. high level of water deficit

d. high level of radiation

40.Elements used in relatively large amounts by the plants are called

a. essential nutrients

b. micronutrients

c. non-essential

d. macronutrients

41.C_4 plant have physiological advantage over C_3 plants at

a. lower temperature

b. at low light intensity

c. at higher temperature and high light intensity

d. both A & B

42.The highest water use efficiency is recorded for

a. C_4 plants

b. C_3 plants

c. CAM plants

d. C_4 and CAM plants

43.The points at which assimilatory gains equal respiratory losses is called

a. saturation point

b. compensation point

c. minimum light requirement

d. simply light intensity

44.Growing of more than two crops together in a mixture is called

a. intercropping

b. multiple cropping

c. mixed cropping

Answer key (Serial #24)

1	d	10	a	19	c	28	a	37	d
2	c	11	a	20	c	29	d	38	d
3	a	12	b	21	d	30	a	39	b
4	a	13	a	22	d	31	c	40	d
5	d	14	d	23	d	32	d	41	c
6	a	15	a	24	a	33	d	42	c
7	b	16	a	25	b	34	d	43	b
8	a	17	c	26	c	35	b	44	c
9	b	18	b	27	b	36	b		