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Diploma in Agriculture Engineering
SET - II

1 The type of bond formed between the two hydrogen atoms in H_2 is (b)
   a   Ionic bond   b   Covalent bond
   c   Hydrogen bond   d   Coordinate covalent bond

2 With same depth and width wetted perimeter can be found more in (c)
   a   Notch type channels   b   Parabolic channel
   c   Rectangular channel   d   Triangular channels

3 Type of knives used in a hand operated chaff cutters are (c)
   a   Swinging   b   Discs
   c   Curved   d   Straight

4. Implement recommended for stones and stumps filled soil is (c)
   a   Rigid tyne cultivator   b   Ridger
   c   Spring tyne cultivator   d   Wheel hoe

5 Example of a physical scalar quantity is (c)
   a   Gravitational force   b   Velocity
   c   Temperature   d   Displacement

6 Most popular pulse milling process in commercial mills is (a)
   a   Dry milling   b   Ponding
   c   Wet milling   d   Shearing

7 The type of green house placed against an existing building is (b)
   a   Even span   b   Lean to
   c   Un even   d   Ridge and furrow

8 The structural member that is running throughout the length of green house is (a)
   a   Purlin   b   Column
   c   Hoop   d   Side post

9 The density of rain gauges recommended by IMD for plain area is (a)
   a   1 station per 520 km^2 b   1 station per 130 km^2
   c   1 station per 260 km^2 d   1 station per 390 km^2

10. The seepage pressure in soil is responsible for condition called (a)
   a   Quick condition   b   Frictional loss
   c   Cavitation   d   Hydraulic head

11. A beam having more than two supports is known as (b)
   a   Fixed beam   b   Continuous beam
   c   Overhanging beam   d   Cantilever beam

12. The images are made of (b)
   a   DPI   b   Pixels
   c   Drawing   d   Pictures

13. The Photoshop is used for (d)
   a   Typing   b   Animation
   c   Programming   d   Graphics

14 Small molecules / units which combine to give a polymer is called (b)
   a   Atoms   b   Monomers
   c   Ions   d   Macro molecules

15 Loss of electrons is called (a)
   a   Oxidation   b   Reduction
   c   Hydration   d   Electronation

16 The midpoint of the points A(-3,11) and B(1,-15) is   (a)
    a   (-1,-2)   b   (-2,-4)
    c   (2,-13)   d   (4,-26)

17 If m_1 and m_2 are slopes of two parallel lines then   (a)
    a $m_1=m_2$ b $m_1=-m_2$
    c $m_1,m_2=-1$ d $m_1,m_2=1$

18 The distance between the points A(1,-4) and B(6,8) is   (b)
    a   5   b   13
    c   12   d   16

19. Curve number method estimates the   (b)
    a   Runoff rate   b   Direct runoff
    c   Sub surface runoff   d   Discharge

20 In a centrifugal pump liquid enters through   (b)
    a   Impeller vane   b   Eye of impeller
    c   Stuffing box   d   Diffuser

21 A cavity well is a tube well which has   (b)
    a   A strainer   b   No strainer
    c   Slotted pipe and gravel pack   d   Brass screen

22 In a drip irrigation system, velocity of water in main lines should not be (b)
    greater than
    a   1.1 m/s   b   1.5 m/s
    c   0.75 m/s   d   2.1 m/s

23 Sprinkler irrigation method is not suited for soil having infiltration rate less (a)
    than
    a   4 mm/h   b   2 cm/h
    c   4 cm/h   d   3 mm/h

24 The heart of micro irrigation system is   (b)
    a   Laterals   b   Filters
    c   Emitters   d   Nozzles

25 The pressure measured with the help of piezometer tube is   (b)
    a   Atmospheric pressure   b   Gauge Pressure
    c   Absolute pressure   d   Vacuum pressure

26 The mass per unit volume at a standard temperature and pressure of a liquid (b)
    is known as
    a   Specific weight of liquid   b   Density of Liquid
    c   Specific gravity of liquid   d   Surface tension of liquid

27 Vegetative propagules of turmeric are   (d)
    a   Tubers   b   Stem cuttings
    c   Rooted slips   d   Rhizomes

28 Weeds complete their life cycle within one year or one season are called as (c)
    a   Perennials   b   Biennials
    c   Annuals   d   Decennials

29 In India 10-20% of rainfall is received due to   (b)
    a   North west monsoons   b   North east monsoons
    c   East west monsoons   d   Southwest monsoons

30 The innermost layer of atmosphere is   (c)
    a   Stratosphere   b   Mesosphere
    c   Troposphere   d   Thermosphere

31 World environment day is celebrated on   (b)
    a   11th June   b   5th June
    c   22nd April   d   22nd March

32. The diversity within the community is (a)
   a Alpha diversity   b Beta diversity
   c Gamma diversity   d Delta diversity

33 Length of time period required to get back investment on project (a)
   a Payback period   b Payment period
   c Repayment period   d Investment return

34 The vehicles of messages from top to operating units in an organization are (a)
   a Orders   b Directions
   c Suggestions   d Rules

35 The chemical weathering of rocks is termed as (b)
   a Disintegration   b Decomposition
   c Deposition   d Dissolution

36 The parent material deposited by wind is (c)
   a Marine   b Morine
   c Aeolian   d Courvial

37 The metamorphic form of sandstone is (b)
   a Marble   b Quartzite
   c Genesis   d Slate

38 The maximum horizontal displacement of body projected obliquely is called (d)
   a Ascent time   b Descent time
   c Time of flight   d Horizontal range

39 Resistance of superconductors is (b)
   a 400Ω b 0Ω
   c 2Ω d $1M\Omega$

40 Engleberg huller is commonly used for which grain (b)
   a Sunflower   b Paddy
   c Castor   d Maize

41. Disc separator lifts (b)
   a Long particles   b Short particles
   c Long and short particles   d Dust

42 The three dimensional space occupied by a substance or closed by a (a)
   surface (solids, liquid, gases) is called
   a Volume   b Size
   c Shape   d Density

43 Ratio of stress to strain is a function of stress and time is true in the case of (d)
   a Hookean bodies   b Viscous materials
   c Linear visco elastic materials   d Non-linear visco elastic materials

44 The tension developed at the drive pulley in transmitting the required power (c)
   to move the loaded belt is known as
   a Horizontal tension   b Vertical tension
   c Effective tension   d Critical tension

45 The law applicable in size reduction of fine powder is (a)
   a Rittinger's law   b Kick's law
   c Bond's law   d Johnson's – law

46 Whirling air lifts dust particles and delivers out through top opening in a (d)
   a Wire mesh screen   b Rotating screen
   c Specific gravity separator   d Cyclone separator

47 Which type of mould board bottom is used in sticky soils (d)
   a Stubble type   b Sod type
   c General purpose   d Slat type

48 The metering mechanism which has cut off device is   (c)
    a   Vertical plate   b   Inclined plate
    c   Horizontal plate   d   Picker wheel

49 The point at which the resultant of all the horizontal and vertical forces act is   (a)
    a   Center of resistance   b   Pull
    c   Draft   d   Side draft

50 Foundry sand containing moisture is known as   (b)
    a   White sand   b   Green Sand
    c   Yellow sand   d   Red sand

51 Power hacksaw blades are made of one of the following material   (d)
    a   Mild steel   b   Grey cast iron
    c   Wrought iron   d   High carbon steel

52 The part of lathe machine which serves as the housing for drawing pulley,   (c)
    gears and spindle is
    a   Tail stock   b   Base
    c   Head stock   d   Carriage

53 Gauge used to cut two parallel lines in single stroke is   (d)
    a   Marking gauge   b   Panel gauge
    c   Cutting gauge   d   Mortise gauge

54 Process of cutting across a sheet or strip is   (a)
    a   Shearing   b   Bending
    c   Drawing   d   Squeezing

55 Joint used in photo frame is   (b)
    a   Dowel joint   b   Mitre joint
    c   Butt joint   d   Screw and slot joint

56 Petrol engine works on the principle of   (b)
    a   Diesel cycle   b   Otto cycle
    c   Carnot cycle   d   Rankine cycle

57 Capacity of the battery is measured as   (a)
    a   Ampere - hours   b   Volts
    c   Watts   d   Joules

58 The turning moment diagram is the graphical representation of the turning   (c)
    moment for various positions of a
    a   Piston   b   Connecting rod
    c   Crank   d   Camshaft

59 Which of the following is a transmission dynamometer   (d)
    a   Friction dynamometer   b   Rope brake dynamometer
    c   Pony brake dynamometer   d   Torsion dynamometer

60 In constant mesh transmission system, the gear used is   (c)
    a   Spur gear   b   Bevel gear
    c   Helical gear   d   Spiral gear

61 Vertical distance between lower hitch point to top hitch point is called   (c)
    a   Throat clearance   b   Top link size
    c   Mast height   d   Suction

62 Traction and transmission co-efficient is high in   (b)
    a   Power tiller   b   Track type tractor
    c   Four wheel drive tractor   d   Two wheel drive tractor

63 One job is completed on several milling machines located together is known   (d)
    as
    a   Shoulder milling   b   Groove milling
    c   Face milling   d   Gang milling

64 The direction in which a cutter moves in a milling machine is   (a)
    a   Perpendicular to its axis   b   Parallel to its axis
    c   Inclined to its axis   d   Radial to its axis

65 A machine used to cut herbage crops and leave them in swath is   (c)
    a   Reaper   b   Combine
    c   Mower   d   Baler

66 The type of spray in which spray volume is less than 5 l / ha is known as   (d)
    a   Low volume spray   b   Medium volume spray
    c   High volume spray   d   Ultra low volume spray

67 Concave clearance for paddy crop is   (b)
    a   2-5 mm   b   5-10 mm
    c   13-15 mm   d   15-22 mm

68 The rate at which solar energy arrives the earth surface is called   (a)
    a   Solar constant   b   Solar radiation
    c   Solar waves   d   Solar flux

69 In a photo voltaic system the component which permits the flow of power (a)
    only towards the battery or grid is called
    a   Blocking diode   b   Blocking resistance
    c   Blocking capacitor   d   Blocking transistor

70 Electric motors are selected according to the   (c)
    a   Coulomb   b   Calorie
    c   Horse power   d   Volts

71 Heating effects of electric current is represented by   (c)
    a   Newton's law   b   Coulomb's law
    c   Joule's law   d   Kirchoff's law

72 The ratio of actual air supplied to the theoretical air required in a gasifier is   (c)
    called
    a   Compression ratio   b   Air fuel ratio
    c   Equivalence ratio   d   Gasifier air ratio

73 Which of the following is not used as a binder in densification process (d)
    a   Tar   b   Molasses
    c   Sodium bentonite   d   Sodium chloride

74 In internet terminology IP means   (b)
    a   Internet provider   b   Internet protocol
    c   Internet procedure   d   Internet processor

75 Help window can be opened by   (c)
    a   F2   b   F9
    c   F1   d   F11

76 $(A+B)^T$ =   (a)
    a A^T+B^T b $A+B^T$
    c A^T+B d $A+B$

77 If k is a constant, then d/dx (k^n) =   (d)
    a $n.k^{n-1}$ b   k
    c   1   d   0

78 $AA^{-1} = A^{-1}A$ =   (b)
    a   O   b   I
    c   A   d A^{-1}

79 In drip irrigation system sub main and laterals are connected with the help of   (b)
    a   Endcap   b   Grommet
    c   L- joint   d   Nozzle

80 The removal of soluble salts from soil by the passage of water through it is   (d)
    known as
    a   Infiltration   b   Seepage
    c   Sub-surface drainage   d   Leaching

81 Allowable velocity (m/sec) in open ditches for sand clay loam soils is   (c)
    a   0.90   b   0.75
    c   1.0   d   0.1

82 The datum adopted for India is   (a)
    a   MSL at Mumbai   b   MSL at Bangalore
    c   MSL at Kolkata   d   MSL at Hyderabad

83   (c)
    The operation of establishing intermediate points on a straight line between
    two terminal points is known as

    a   Chaining   b   Taping
    c   Ranging   d   Focusing

84 The survey used for unearthing relics of antiquity   (c)
    a   Geological survey   b   Military survey
    c   Archaeological survey   d   Mine survey

85 Slump test for concrete is carried out to determine   (b)
    a   Strength   b   Workability
    c   Durability   d   Water content

86   (c)
    The timber which is obtained after felling a tree is known as

    a   Standing timber   b   Converted timber
    c   Rough timber   d   Tim brain

87 The curve which is having single arc of a circle connecting the two straights   (b)
    is called
    a   Complex curve   b   Simple curve
    c   Mass curve   d   Multiple curve

88 Number of verniers on the horizontal scale of transit are   (b)
    a   One   b   Two
    c   Three   d   Four

89 In theodolite the orientation of the axis of the plate level to the vertical axis is   (d)
    a   Opposite   b   Parallel
    c   Inclined   d   Perpendicular

90 Units for deflection are   (d)
    a   kNm   b   kN/m
    c   kN   d   mm

91 Slope in the beam at any point is measured in   (c)
    a   Degrees   b   Minutes
    c   Radian   d   Metric tonnes

92 An instrument used to calculate velocity of a flowing stream at any liquid   (c)
    depth is
    a   Pilot tube   b   Manometer
    c   Current meter   d   Orifice

93. Shell moulding is also known as   (a)
    a   Coning process   b   Ceramic process
    c   Compression process   d   Extrusion process

94 The formula for passive earth pressure Kp is   (b)

a $\dfrac{1 - Sin\phi}{1 + Sin\phi}$ b $\dfrac{1 + Sin\phi}{1 - Sin\phi}$

c $\dfrac{1 - Cos\phi}{1 + Cos\phi}$ d $\dfrac{1 + Cos\phi}{1 - Cos\phi}$

95. Antonym of dismal is   (a)
a   Intelligent   b   Agitate
c   Egress   d   shrivel

96 Indian council of Agricultural Research (ICAR)has signed MoU with one of   (b)
the following digital platforms to guide farmers on scientific cultivation

a   Kisan sarathi   b   Amazon kisan
c   Digital green   d   Flipkart

97 Government of India promotes millets with one of the following brand   (a)
names
a   Shree anna   b   Millets give away
c   Nutricereals   d   Poorman's food

98 The fund launched by Government of India to increase the number of   (b)
agricultural startups in rural areas is
a   Startup India Seed Fund Scheme   b   Agriculture accelerator Fund
c   Atal Innovation Mission   d   Startup India

99 The developmental programme in which Government of India has given high   (a)
priority to water conservation and management is
a   Prime Minister Krishi Sinchayee   b   Paramparagat Krishi Vikas Yojana
    Yojana
c   Prime Minister Fasal Bheema   d   National Mission on Oil Seeds & Oil
    Yojana   Palm

100. The example for an interjection is   (c)
a   of   b   an
c   oh   d   but