PREVIEW QUESTION BANK

Module Name : AGRICULTURAL ENGG AND TECHNOLOGY-ENG
Exam Date : 14-Jul-2023 Batch : 10:00-12:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	1801	Consider the following statements (A). In symmetrical distribution mean, median and mode coincide (B). The normal distribution has a Pearson's Coefficient (β_2) value equal to zero (C). If Pearson's Coefficient (β_2) is less than 3, the distribution is said to be leptokurtic (D). For a positive skewed distribution mean > median (E). Skewness and kurtosis are measures of dispersion Choose the ***correct*** answer from the options given below: 1. (A) only. 2. (A) and (D) only. 3. (B), (C) and (E) only. 4. (A), (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	1802	Expectation of a random variable denotes 1. Mean 2. Median 3. Variance 4. Standard deviation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	1803		4.0	1.00

		Consider the following distributions (A). Normal distribution (B). Binomial distribution (C). Poisson distribution (D). F-distribution (E) Chi-square distribution The distribution which are of continuous nature are: 1. (A), (B) and (C) only. 2. (B), (D) and (E) only. 3. (A), (B), (C) and (E) only. 4. (A), (D) and (E) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
4	1804	Consider the following statements (A). If AB= 0, it implies either A or B is a null matrix (B). If determinant of a square matrix is non-zero, then it is non-singular (C). Adjoint of symmetric matrix is symmetric (D). Adjoint of a diagonal matrix is diagonal Which of the above statements are true: 1. (A), (B) and (D) only. 2. (B), (C) and (D) only. 3. (A), (B) and (C) only. 4. (A), (B), (C) and (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
5	1805		4.0	1.00

		Which of the following languages does computer understand? 1. Machine language 2. C language 3. Assembly language 4. BASIC language A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
6	1806	Voltage of three phase motor is generally kept at 1. 110 V 2. 220 V 3. 415 V 4. 660 V A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
7	1807	Given below are two statements: Statement (I): Power factor is Not a measure of efficiency Statement (II): If a load draws Reactive Power, the power factor is said to be 'lagging' In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
8	1808	The vector sum of 1. Real Power and Reactive Power is Apparent Power 2. Real Power and Apparent Power is Reactive Power 3. Apparent Power and Reactive Power is Real Power 4. Real Power , Reactive Power and Apparent Power is always zero. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
9	1809	The tendency of alternating current to concentrate near the surface of conductor is known as 1. Skin effect 2. Peltier Effect 3. Fleming Effect 4. Gauss Effect A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
10	1810	Given below are two statements: Statement (I): Direct current flowing the conductor gets uniformly distributed Statement (II):An alternating current flowing through the conductor does not distribute uniformly. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

11	1811	In India the system adopted for transmission of electric power is 1. 3-phase, 3 wire 2. 1-phase, 3 wire 3. 1-phase, 1 wire 4. 3-phase, 1 wire A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

12	1812	If the air is contained in a tyre at 2.0 atm gauge pressure, then absolute pressure of air will be 1. 1.013×10^5 Pa 2. 2.026×10^5 Pa 3. 3.04×10^5 Pa 4. 4.052×10^5 Pa A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

13	1813	What will be the rate of heat loss from a red brick wall of length 5 m , height 4 m and thickness 0.25 m with temperature on inner surface as 40 ^{0}C and outer surface as 110 ^{0}C. The thermal conductivity of red brick is k=0.70 W/mK. 1. 2.19 kW 2. 3.92 kW 3. 4.52 kW 4. 2. 88 kW A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

14	1814	Given below are two statements: Statement (I): The critical radius of insulation is the thickness of insulation at which the rate of heat transfer through the body is minimum. Statement (II): Rate of heat transfer increases with an increase in the thickness of insulation up to the critical radius of insulation. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
15	1815	Bernoulli's equation is applicable in the case of 1. Compressible liquid with streamline flow 2. Compressible liquid with turbulent flow 3. Incompressible liquid with streamline flow 4. Incompressible liquid with turbulent flow A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
16	1816	A couple consists of 1. Two like parallel forces of same magnitude 2. Two like parallel forces of different magnitude. 3. Two unlike parallel forces of same magnitude. 4. Two unlike parallel forces of different magnitudes. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question				
17	1817	Which of the following statements are true for Lami's Theorem (A). It deals with equilibrium of forces. (B). There should be three forces acting at a point. (C). The forces should be coplanar. (D). The angle between forces should be 120^0. Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (B), (C) and (D) only. 3. (C), (D) and (A) only. 4. (A), (B) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
18	1818	The centre of gravity of hemisphere with radius r lies at a distance of .....form its base measured along the vertical radius. 1. 3r/8 2. 3/8r 3. 8/3r 4. 8r/3 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
19	1819	Theorem of perpendicular axis is used in obtaining the moment of inertia of a 1. Triangular lamina 2. Square lamina 3. Circular lamina 4. Semi-circular lamina A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
20	1820	Which of the following are true in case of machine and structure (A). The members of structure do not move relative to one another. (B). In a structure energy is transformed into useful work. (C). The links of a machine may transform both power and motion. (D). The members of a structure transmit forces only Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (B), (C) and (D) only. 3. (A), (C) and (D) only. 4. (A), (B), (C) and (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
21	1821	What will be the minimum number of links required to form a kinematic chain considering all the pairs as lower pairs? 1. 3 2. 4 3. 5 4. 6 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
22	1822		4.0	1.00

A kinematic chain is known as mechanism when

1. None of the links is fixed
2. One of the link is fixed
3. Two of the links are fixed
4. All the links are fixed

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

23	1823	Which of the following method is used for in-situ unit weight determination of a soil deposit? (A). Pycnometer method (B). Oven dry method (C). Core -cutter method (D). Sand replacement method (E). Water replacement method Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (B), (C) and (D) only. 3. (C), (D) and (E) only. 4. (A), (E) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

24	1824	Given below are two statements: Statement (I): Values of void ratio are likely to be smaller in coarse grained soil than for fine grained soil. Statement (II): The void ratio of a soil is 1 when soil is fully saturated. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true.	4.0	1.00

		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
25	1825	Choose the correct answer 1. Height of capillary rise is more in clay soil than in sandy soil. 2. Height of capillary rise is less in clay soil than in sandy soil. 3. Height of capillary rise in clay soil is same as that in sandy soil. 4. Height of capillary rise is zero in both clay soil and sandy soil. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
26	1826	Rise of water table above the ground surface causes 1. Equal increase in pore water pressure and total stress. 2. Equal decrease in pore water pressure and total stress. 3. Increase in pore water pressure but decrease in total stress. 4. Decrease in pore water pressure but increase in total stress. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
27	1827		4.0	1.00

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).
Assertion (A) : Direct shear test is not of much use for fine grained soils where drainage conditions play an important role influencing the shear strength

Reason (R) : In direct shear test drainage conditions can not be controlled and pore water pressure can not be measured.

In light of the above statements, choose the *correct* answer from the options given below.

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

28	1828	Atterberg limits of a soil represent which of the following property at critical stages of soil behaviour? 1. Soil moisture 2. Soil texture 3. Soil structure 4. Soil cohesion A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

29	1829	Coloumb and Rankine theories for calculating simple earth pressures are based on which of the following assumptions: A). Soil is cohesionless (B). Soil is isotropic (C). Soil is homogeneous (D). Soil is semi-infinite Choose the ***correct*** answer from the options given below: 1. (A) and (B) only. 2. (B) and (C) only. 3. (B), (C) and (D) only. 4. (A), (B), (C) and (D). A1 : 1	4.0	1.00

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
30	1830	The linear variable differential transformer (LVDT) is an accurate and reliable transducer for measurement of 1. Voltage 2. Current 3. Displacement 4. Temperature A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
31	1831	The harvesting operation of which of the following crop is least mechanized in India? 1. Oil-seeds 2. Cotton 3. Millets 4. Wheat A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
32	1832	Which of the following is the combination of principles of the regular disc plough and disc harrow and is used for shallow working in the soil? 1. Vertical disc plough 2. Chisel plough 3. Sub-soiler 4. Standard disc plough A1 : 1 A2 : 2	4.0	1.00

A3 : 3

A4 : 4

Objective Question

33 | 1833 | 4.0 | 1.00

Which of the following metering devices can be used for metering of single seeds
(A). Inclinded plate

(B). Edge drop

(C). Vertical rotor

(D). Flutted roller

(E). Internal double run type

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (B), (C) and (D) only.
3. (C), (D) and (E) only.
4. (A), (D) and (E) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

34 | 1834 | 4.0 | 1.00

Match **List-I** with **List-II**

List-I Sowing/Planting method	**List-II Characteristics**
(A). Drilling	(I). Row to row and plant to plant distance is uniform.
(B). Dibbling	(II). Dropping seeds in furrow in a continuous flow
(C). Check row planting	(III). Seeds are paced in holes made in seedbed
(D). Hill dropping	(IV). Spacing between plant to plant in a row is constant
(E). Broadcasting	(V). Scattering of seed on the surface of land

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (V), (C) - (II), (D) - (IV), E-(III)
2. (A) - (IV), (B) - (I), (C) - (V), (D) - (III), E-(II)
3. (A) - (II), (B) - (III), (C) - (I), (D) - (IV), E-(V)
4. (A) - (IV), (B) - (II), (C) - (I), (D) - (V), E (III)

A1 : 1

A2 : 2

		A3 : 3 A4 : 4		
Objective Question				
35	1835	Which of the following nozzle is most suitable for spraying insecticides and fungicides? 1. Hollow cone 2. Solid cone 3. Flat fan 4. Flooding A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
36	1836	Flow rate for a particular nozzle is 1. Directly proportional to pressure 2. Inversely proportional to pressure 3. Directly proportional to square root of the pressure 4. Directly proportional to square of the pressure A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
37	1837	Which of the following represents proper knife registration 1. Mid-point of the stroke is centered between adjacent gaurds. 2. Outer end of cutter bar is ahead of inner end. 3. The knife is in line with pitman. 4. Both the ends of cutter bar are at same level. A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
38	1838	The metering mechanism most commonly used for drilling of wheat is 1. Internal double run type 2. Cup feed 3. Fluted roller 4. Stationary opening A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
39	1839	Which of the following results in increased seed damage during mechanical threshing (A). Reduced concave clearance (B). Increased peripheral speed of cylinder (C). Increased seed moisture content (D). Reduced threshing cylinder diameter (E). Increased feed rate Choose the ***correct*** answer from the options given below: 1. (A), (B), (C) and (D) only. 2. (B), (C), (D) and (E) only. 3. (A), (C), (D) and (E) only. 4. (A), (B), (C) and (E) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
40	1840	If piston displacement is deducted from the total volume of cylinder, the remaining volume is known as 1. Swept volume 2. Clearance volume 3. Displacement volume 4. Compression ratio A1 : 1	4.0	1.00

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
41	1841	Weight transfer in a tractor implement system is caused by 1. Application of pull 2. Tractor force 3. Tractor slip 4. Weight of operator A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
42	1842	Given below are two statements: Statement (I): For the same compression ratio and same heat input, Diesel cycle is more efficient than Otto cycle. Statement (II): The peak pressure in the cylinder of diesel engine are much higher than in a spark ignition engine. In light of the above statements,choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are true. 2. Both Statement (I) and Statement (II) are false. 3. Statement (I) is true but Statement (II) is false. 4. Statement (I) is false but Statement (II) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
43	1843		4.0	1.00

Which of the following are true in case of puddling?
(A). Puddling increases the soil strength of puddled layer.

(B). Main purpose of puddling is to create an impermeable layer in the soil.

(C). Higher clay content facilitates puddling.

(D). Puddling is practiced in transplanted rice and not in direct seeded rice.

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only
2. (C) and (D) only.
3. (B), (C) and (D) only.
4. (A), (B), (C) and (D).

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

44	1844	Given below are two statements: Statement (I): The type of valve most commonly found in internal combustion engines is the poppet valve. Statement (II): The common valve arrangement found on tractor engines is overhead. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

45	1845		4.0	1.00

		In which of the following engines it is possible to remove all of the imbalance by crankshaft counterweights ? (A). Single cylinder (B). Two cylinder (C). Three cylinder (D). Four cylinder (E). Six cylinder Choose the ***correct*** answer from the options given below: 1. (A), and (C) only. 2. (B) and (D) only. 3. (E) only. 4. (A) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
46	1846	Accelerometer is used for measurement of 1. Speed 2. Vibration 3. Acceleration 4. Force A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
47	1847	A tractor can be considered as spring mass damper system with 1. Two degrees of freedom 2. Four degrees of freedom 3. Six degrees of freedom 4. Eight degrees of freedom A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
48	1848	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The cylinder wall temperature of air-cooled engine is generally higher than that of water cooled engine. Reason (R) : The control of cylinder temperature is more difficult in air cooled engines. In light of the above statements, choose the *most appropriate* answer from the options given below . 1. Both (A) and (R) are correct and (R) is the correct explanation of (A). 2. Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). 3. (A) is correct but (R) is not correct. 4. (A) is not correct but (R) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
49	1849	Which of the following sequence best indicates the steps of anaerobic digestion? (A). Hydrolysis (B). Methanogenesis (C). Acetogenesis (D). Acidogenesis Choose the **correct** answer from the options given below: 1. (A), (B), (C), (D). 2. (C), (A), (D), (B). 3. (A), (D), (C), (B). 4. (D), (C), (B), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
50	1850		4.0	1.00

		Which of the following are thermochemical conversion processes for biomass? (A). Gasification (B). Anaerobic digestion (C). Fermentation (D). Liquification Choose the ***correct*** answer from the options given below: 1. (A) and (B) only. 2. (C) and (D) only. 3. (A) and (D) only. 4. (B) and (C) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
51	1851	In order to minimize the bounce of seeds in furrows, the seed tube is inclined rearward from the vertical at an angle of: 1. 15°-20° 2. 25°-30° 3. 30°-45° 4. 45°-60° A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
52	1852	Which types of knife sections are used in a standard cutter bar? (A). Top serrated type (B). Under serrated type (C). Smooth edge type Choose the ***correct*** answer from the options given below: 1. (A) only 2. (A) and (B) only 3. (A) and (C) only 4. (A), (B) and (C)	4.0	1.00

		A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
53	1853	A farmer cultivates his land with a country plough of size 15 cm. How many km the farmer has to walk for ploughing one ha of land? 1. 30.3 2. 45.6 3. 66.7 4. 60.5 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
54	1854	Calculate the total time required to harvest 2.50 ha of forage crop with a mower having 2.0 m long cutter bar. The speed of operation is 5 $km.h^{-1}$ and the machine efficiency is 75 per cent. 1. 1.55 h 2. 3.33 h 3. 2.22 h 4. 4.66 h A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
55	1855	A four cylinder 4-stroke gas engine has cylinder diameter of 20 cm, stroke-bore ratio is 1.5; clearance volume 2500 cm^3, engine speed 300 RPM, mean effcetive pressure 5 $kg.cm^{-2}$ and mechanical efficiency 70 per cent. Calculate IHP of the engine in kW. 1. 23.45 2. 31.43 3. 46.90 4. 62.86	4.0	1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

56 | 1856 | 4.0 | 1.00

Determine the power transmitted by a gear of tractor gear box having size 12 cm, if it is rotating at 1350 RPM and transmitting 17.5 kg-m torque.

1. 11 hp
2. 33 hp
3. 44 hp
4. 66 hp

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

57 | 1857 | 4.0 | 1.00

Match **List-I** with **List-II**

List-I Parameter I	**List-II Parameter II**
(A). Solar energy	(I). Biomass
(B). Gasification	(II). Chemical energy
(C). Fuel cell	(III). Biogas
(D). Fixed dome	(IV). Water pumping

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (IV), (C) - (III), (D) - (II)
2. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
3. (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
4. (A) - (IV), (B) - (I), (C) - (II), (D) - (III)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

58	1858	A diesel engine has following specifications: i) Compression ration (r) = 14:1 ii) Fuel cut off at 0.08 of the stroke iii) Relative efficiency = 52% What is the cut off ratio for the engine? 1. 1.02 2. 2.04 3. 3.06 4. 4.08 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

59	1859	If the working tool can not rest on a surface and normally used with one hand, its weight should be limited to: 1. 4 kg 2. 3 kg 3. 2 kg 4. 1 kg A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

60	1860	The percentage of the incoming solar radiation reflected back to space by the earth is: 1. 10 2. 20 3. 30 4. 40 A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
61	1861	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Loose housing barn system results in high sanitary quality of milk. Reason (R) : In a loose housing barn system cows are loosely housed in the building where they are milked. In light of the above statements, choose the *correct* answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
62	1862	Efficiency of an air screen cleaner can be adjusted by (A) Width of the screen (B) Length of the screen (C) Feed rate (D) Feeding mechanism Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (B), (C) and (D) only. 3. (A), (B), (C) and (D). 4. (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
63	1863		4.0	1.00

Louisiana State University dryer is suitable for drying of

(A) Pulses

(B) Marine products

(C) Paddy

(D) Fruits and vegetables

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (A), (B), (C) and (D).
3. (A) and (C) only.
4. (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

64 1864 4.0 1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A) Fouling	(I) Storage
(B) Raoult's law	(II) Heat exchanger
(C) Plank's law	(III). Ideal solution
(D) Airy's theory	(IV) Freezing

Choose the **correct** answer from the options given below:

1. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
2. (A) - (II), (B) - (III), (C) - (I), (D) - (IV)
3. (A) - (III), (B) - (II), (C) - (IV), (D) - (I)
4. (A) - (I), (B) - (IV), (C) - (III), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

65 1865 4.0 1.00

Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).
Assertion (A) : T.D method of corn milling results in flour of better shelf-life.

Reason (R) : The major objective of T. D method of corn milling is to remove essentially all germ and hull.

In light of the above statements, choose the *correct* answer from the options given below.

1. Both (A) and (R) are true and (R) is the correct explanation of (A).
2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
3. (A) is true but (R) is false.
4. (A) is false but (R) is true.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

66 | 1866 | 4.0 | 1.00

Cleaned-in-place (CIP) is related to -

1. Product
2. Process
3. Plant
4. Equipment

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

67 | 1867 | 4.0 | 1.00

In a vapour compressor refrigeration system, function of compressor include(s)

(A) To circulate refrigerant through the refrigeration system

(B) To raise the pressure of refrigerant

(C) To raise temperature of refrigerant

(D) To reduce temperature of refrigerant

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (D) only.
2. (A) and (B) only.
3. (A), (B), and (C) only.
4. (B) and (C) only.

A1 : 1

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
68	1868	The weight of wheat grain having moisture content 15% (dry basis) stored in a container with internal dimensions of 20x30x10 cm is 6 kg; then the bulk density of the wheat is - 1. 2 g/cm^3 2. 0.5 g/cm^3 3. 10 g/cm^3 4. 1 g/cm^3 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
69	1869	In a thermal process calculation, the time required to achieve a given reduction ratio in the number of microorganisms at a given constant temperature is represented by – 1. D value 2. F value 3. Z value 4. Q_{10} value A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
70	1870		4.0	1.00

Cyclones are used for -

(A) The removal of particles of 10 micron or more in diameter from air stream

(B) Separating particles from liquids

(C) Separating liquid droplets from gases

(D) Reducing the size of particles of 10 micron or more in diameter

Choose the ***correct*** answer from the options given below:

1. (A) and (B) only.
2. (A), (C) and (D) only.
3. (A), (B) and (C) only.
4. (A), (B), (C) and (D).

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

71	1871	Consider the following processes; arrange them in the order as performed in a vapor compression refrigeration cycle (A) Compression (B) Evaporation (C) Condensing (D) Throttling Choose the **correct** answer from the options given below: 1. (A), (D), (C), (B). 2. (A), (C), (D), (B). 3. (C), (A), (D), (B). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

72	1872		4.0	1.00

		Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Moisture content of a fruit or a vegetable expressed on wet basis is always greater than the moisture expressed on dry basis. Reason (R) : Moisture on wet basis is expressed with reference to total weight of the sample instead of its dry matter content. In light of the above statements, choose the *correct* answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
73	1873	The lateral pressure exerted by paddy on the bin wall, as computed by Rankine's formula, was 6000 kgf/m^2 when the pressure coefficient is 0.5. What would be the height of bin if the density of paddy is 600 kg/m^3? 1. 30 m 2. 20 m 3. 10 m 4. 5 m A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
74	1874		4.0	1.00

		According to Janssen theory, the lateral pressure exerted by the grain on the wall is influence by - (A) Pressure coefficient (B) Shape of grain (C) Bulk density of grain (D) Depth of grain Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (C) and (D) only. 3. (A), (C) and (D) only. 4. (A), (B), (C) and (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
75	1875	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The angle of repose is generally higher than angle of the internal friction for the grains of approximately the same moisture content and density. Reason (R) : The angle of internal friction is equal to the tangent of coefficient of friction for the material. In light of the above statements, choose the *correct* answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
76	1876		4.0	1.00

Major functions of blanching process includes -

(A) Destruction of peroxidase enzyme

(B) Softening and shrinking of foods

(C) Reduction of surface microbial load

(D) Destruction of pathogenic microbes

Choose the ***correct*** answer from the options given below:

1. (A), (C) and (D) only.
2. (A), (B) and (C) only.
3. (A) and (B) only.
4. (B) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

77	1877	Curved outline of a psychrometric chart represents 1. 100% relative humidity 2. 0% relative humidity 3. Wet bulb temperature 4. Humid volume A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

78	1878	Process of parboiling reduces breakage during milling due to - 1. Migration of oil into the bran layers 2. Improved opacity of rice kernel 3. Softening and loosening of rice husk 4. Gelatinization of starch A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
79	1879	The process of seed conditioning includes - (A) Application of fungicides and insecticides (B) Increasing moisture content of seed by 2-3% (C) Upgrading – eliminating poor quality seed (D) Separation of contaminants Choose the ***correct*** answer from the options given below: 1. (B), (C) and (D) only. 2. (A) and (B) only. 3. (C) and (D) only. 4. (A), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
80	1880	Which among the following equipment utilizes surface texture of the material in separation process? (A) Inclined draper (B) Velvet roll separator (C) Spiral separator (D) Magnetic separator Choose the ***correct*** answer from the options given below: 1. (A) and (B) only. 2. (A), (B) and (C) only. 3. (A), (B) and (D) only. 4. (B) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
81	1881		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A) Canning	(I) Pulse milling
(B) Cryogenic grinding	(II) Wheat
(C) Roller mill	(III) Spices
(D) CFTRI method	(IV) Sterilization

Choose the **correct** answer from the options given below:

1. (A) - (IV), (B) - (III), (C) - (II), (D) - (I)
2. (A) - (IV), (B) - (III), (C) - (I), (D) - (II)
3. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

82 | 1882 | 4.0 | 1.00

If 500 kcal of heat is removed from 5 tons of potatoes having specific heat of 0.1 kcal/kg.°C; the temperature of the produce reduces by -

1. 5°C
2. 0.1°C
3. 1°C
4. 10°C

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

83 | 1883 | 4.0 | 1.00

Which of the following type of bucket elevator is most commonly used for elevating grains?

1. Continuous bucket centrifugal discharge
2. Spaced bucket positive discharge
3. Spaced bucket centrifugal discharge
4. Continuous bucket positive discharge

A1 : 1

		A2 : 2 A3 : 3 A4 : 4		
Objective Question				
84	1884	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : In attrition mill, overfeeding lowers the grinder performance Reason (R) : The fineness of grinding in attrition mill is controlled by the type of plates and the gap between them. In light of the above statements, choose the *correct* answer from the options given below. 1. Both (A) and (R) are true and (R) is the correct explanation of (A). 2. Both (A) and (R) are true but (R) is NOT the correct explanation of (A). 3. (A) is true but (R) is false. 4. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
85	1885	Method of drying which works on the principle of sublimation - 1. Drum drying 2. Spray drying 3. Thin layer drying 4. Freeze drying A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
86	1886		4.0	1.00

		Extraction of oil from fresh coconut includes - (A) Cooking (B) Expelling (C) Steaming (D) Filtering Choose the ***correct*** answer from the options given below: 1. (B) and (D) only. 2. (A), (B) and (D) only. 3. (A), (B), (C) and (D). 4. (A) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
87	1887	In an evaporation, the steam consumption is 2000 kg/h for the evaporation of 1500 kg/h of water. The economy of the evaporator is: 1. 0.75 2. 1.0 3. 1.3 4. 30 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
88	1888		4.0	1.00

Which among the following methods are used for determination of moisture content of agricultural produce?

(A) Brown-Duvel fractional distillation method

(B) Dielectric method

(C) Chemical method

(D) Infra-red method

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (D) only.
2. (A), (B), (C) and (D)
3. (B), (C) and (D) only.
4. (A), (B) and (C) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

89	1889	Major composition of biogas is: 1. Methane and oxygen 2. Carbon-dioxide and oxygen 3. Methane and carbon-dioxide 4. Methane and carbon monoxide A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

90	1890	Food processing technique that combines multiple unit operations such as mixing, kneading, shearing, heating, cooling, shaping and forming - 1. Extrusion 2. Cold sterilization 3. Irradiation 4. Sous vide technique A1 : 1 A2 : 2	4.0	1.00

		A3 : 3 A4 : 4		
Objective Question				
91	1891	The contour interval depends on (A) time and expanse of field and office work (B) purpose and extent of survey (C) scale of plan and nature of country (D) contour characteristics (E) interpolation of contours Choose the ***correct*** answer from the options given below: 1. (B), (C) and (D) only. 2. (A), (B) and (C) only. 3. (C), (D) and (E) only. 4. (A), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
92	1892	The instruments required for contour survey are (A) dumpy level (B) levelling staff (C) chains and tapes (D) odometer (E) prismatic compass Choose the ***correct*** answer from the options given below: 1. (B), (C) and (D) only. 2. (C), (D) and (E) only. 3. (A), (B) and (C) only. 4. (A), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00

		A4 : 4		
Objective Question				
93	1893	The specified range of soil moisture tension at field capacity is 1. 1/15-1/5 2. 1/10-1/6 3. 1/10-1/3 4. 1/6-1/10 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
94	1894	Which terminology defines the ratio between the irrigated area and the quantity of water used? 1. Delta 2. Duty 3. Base 4. Intensity of irrigation A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
95	1895		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A) confined aquifer	(I) water table well
(B) semiconfined aquifer	(II) piezometric level
(C) perched water table	(III) delayed yield
(D) unconfined aquifer	(IV) above main water table

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
3. (A) - (III), (B) - (II), (C) - (IV), (D) - (I)
4. (A) - (II), (B) - (III), (C) - (I), (D) - (IV)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 | 1896 | 4.0 | 1.00

Given below are two statements:

Statement (I): Flumes are specially shaped and constructed channel sections used to measure the flow of water .

Statement (II): The principle of flumes is based on the concept of kinetic energy and critical flow in open channels.

In light of the above statements, choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are correct.
2. Both Statement (I) and Statement (II) are incorrect.
3. Statement (I) is correct but Statement (II) is incorrect.
4. Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

97 | 1897 | 4.0 | 1.00

Given below are two statements:

Statement (I): The Parshall flume consists of three parts , namely, a converging section on the upstream end ,a constricted section known as throat and a diverging section on the downstream side.

Statement (II): The floor of the converging section is level , the floor of the throat inclines upward and the floor of the diverging section slopes downward.

In light of the above statements, choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are correct.
2. Both Statement (I) and Statement (II) are incorrect.
3. Statement (I) is correct but Statement (II) is incorrect.
4. Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

98	1898		4.0	1.00

According to Doorenbos and Pruitt , the Blaney-Criddle formula is not suitable for use in

(A) Equatorial regions where temperatures remain fairly constant, but other weather parameters change.

(B) Large islands where air temperature is affected by the surrounding sea temperature showing little response to seasonal change in radiation

(C) High altitude where daytime radiation is practically independent of night temperature

(D) Climates with a high variability in sunshine hours during transition months .

(E) Blaney-Criddle method should normally be applied for periods not greater than one month period.

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (B), (C) and (D) only.
3. (C), (D) and (E) only.
4. (A), (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

99	1899		4.0	1.00

		The drawbacks of Thornthwaite formula as enumerated by Chang (1968) are: (A). Air humidity alone is not a good indication for the energy available for ET. (B). Air temperature at a place lags behind radiation. (C). According to formula ET will cease when mean temperature is below 0 degree C which by no means is true. (D).The formula does not take into account the wind effect which might be an important factor in some areas. (E). It considers the effect of warm and cool air on the temperature of a place. Choose the ***correct*** answer from the options given below: 1. (B), (C) and (D) only. 2. (A), (B) and (C) only. 3. (B), (C) and (E) only. 4. (C), (D) , and (E) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
100	1900	Given below are two statements: Statement (I): The rising limb of hydrograph, also known as concentration curve represents the increase in discharge due to the gradual building up of storage in channels and over the catchment surface . Statement (II): The basin and storm characteristics control the shape of the rising limb of a hydrograph. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
101	1901		4.0	1.00

(A). Culverts are commonly used for channel crossings when the road fill is sufficiently high and the channel bed lies on the field surface on either side.

(B). The inverted siphon is more economical when a channel has to cross a wide depression or where road surface lie close to the field surface.

(C). Flumes are used to carry irrigation water across streams, canals, gullies,ravines or other natural depressions .

(D). It is often not necessary to carry irrigation channels across roads, hill side and natural depressions or drainage ways.

(E). When the siphon crosses a ridge, highway or bund it is called a flume.

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (B), (C) and (D) only.
3. (C), (D) and (E) only
4. (A), (D) and (E) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102	1902	The major factors affecting soil erosion are: (A). Climatic factors (B). Degree and length of slope (C). Size and shape of watershed (D). Depth of Soil (E). Ground water level Choose the ***correct*** answer from the options given below: 1. (A), (C) and (D) only. 2. (A), (B) and (C) only. 3. (C) ,(D) and (E) only. 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

103	1903		4.0	1.00

The design of inward terrace cross section consists in deciding

(A). The batter slope

(B). Dimension of shoulder bund

(C). Inward slope of terrace

(D). Alignment of drainage channel

(E). Terrace width

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (B), (C) and (D) only.
3. (C), (D) and (E) only
4. (A), (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

104	1904	Water distribution efficiency has got identical similarity with that of : 1. Friction Coefficient 2. Runoff Coefficient 3. Uniformity Coefficient 4. Drainage Coefficient A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

105	1905		4.0	1.00

		The seasonal water requirement of rice, sugarcane and jute crop are in the sequence of (A). Rice >Sugarcane>Jute (B). Sugarcane>Rice>Jute (C). Jute>Rice>Sugarcane (D). Rice>Jute>Sugarcane Choose the **correct** answer from the options given below: 1. (A) 2. (B). 3. (C). 4. (D). A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
106	1906	Effective root zone depth of rice, wheat,maize and sugarcane are in the sequence of: (A) Rice < Wheat < Maize < Sugarcane. (B) Wheat < Rice < Maize < Sugarcane (C) Maize < Rice < Wheat < Sugarcane (D) Sugarcane < Maize < Wheat < Rice 1. (A) 2. (B) 3. (C) 4. (D) A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
107	1907		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A). Alkalisation	(I). Low permeability
(B). Dispersed soil	(II). Increase in exchangable sodium content
(C). CEC	(III). Degree of saturation
(D). ESP	(IV). Milliequivalents/100gm

Choose the **correct** answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (II), (B) - (I), (C) - (IV), (D) - (III)
3. (A) - (IV), (B) - (III), (C) - (I), (D) - (II)
4. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

108 1908

The reagents of Cation Exchange Capacity are:

(A). Sodium Acetate (1N)

(B). Ammonium Acetate (1N)

(C). Isopropyl alcohol(90%)

(D). The sodium bicarbonate

Choose the ***correct*** answer from the options given below:

1. (A), (B) and (C) only.
2. (B), (C) and (D) only.
3. (A), (C) and (D) only .
4. (A), (B) and (D) only.

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

109	1909	The selection of a particular method of water spreading depends upon factors like (A) topography (B) slope (C) crop (D) soil type (E) land use and land cover Choose the ***correct*** answer from the options given below: 1. (A), (B) and (C) only. 2. (A), (B) and (E) only. 3. (A), (B), and (D). 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

110	1910	The aquifer characteristics influencing yield of an artesian well are : (A) hydraulic conductivity (B) transmissibility (C) coefficient of storage (D) drawdown (E) circle of influence Choose the ***correct*** answer from the options given below: 1. (A), (B) and (D) only. 2. (A), (B) and (C) only. 3. (A), (B) and (E) only. 4. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

111	1911		4.0	1.00

		Given below are two statements: Statement (I): Well logging consists of recording the characteristic properties of the samples of sub surface materials obtained during the progress of test drilling. Statement (II): Geophysical methods provide indirect evidence of the sub surface formations that indicates whether the formations may possibly be aquifers. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
112	1912	Identify the land capability classes suitable for cultivation. 1. III, IV, V 2. IV, V, I 3. VII, VIII, IV 4. II, III, IV A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
113	1913		4.0	1.00

Match **List-I** with **List-II**

List-I	**List-II**
(A) Cable tool method	(I) crab winch
(B) Hand boring set	(II) hydraulic jack
(C) Anchor bolt method	(III) large size holes
(D) Reverse circulation rotary drilling	(IV) drilling in boulders

Choose the **correct** answer from the options given below:

1. (A) - (IV), (B) - (I), (C) - (II), (D) - (III)
2. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
3. (A) - (I), (B) - (IV), (C) - (II), (D) - (III)
4. (A) - (IV), (B) - (I), (C) - (III), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

114 1914 4.0 1.00

Given below are two statements:
Statement (I): Erosivity can be defined as the potential ability of the rain to cause erosion

Statement (II): Erodibility can be defined as the vulnerability or susceptibility of the soil to cause erosion.

In light of the above statements, choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are correct.
2. Both Statement (I) and Statement (II) are incorrect.
3. Statement (I) is correct but Statement (II) is incorrect.
4. Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115 1915 4.0 1.00

		The main causes of soil erosion can be A. destruction of natural protective cover B. change of climate C. increase of wind speed D. improper use of land 1. A and B only 2. B and C only 3. C and D only 4. A and D only A1 : 1 A2 : 2 A3 : 3 A4 : 4		
Objective Question				
116	1916	The USBR recommendations for minimum freeboard of a control spillway over its maximum water level for earth dam having height less than 60m is : A. Between 2m to 3m B. 2.5m above top of gates C. 3m above top of gates D. Between 1.5m to 2.5m 1. A 2. B 3. C 4. D A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
117	1917		4.0	1.00

Identify the valid assumptions applied in Laplacian equation

(A) Water is compressible

(B) The soil is incompressible and porous.

(C) The quantity of water entering the soil in any given time is the same as the quantity flowing out of soil.

(D) Darcy's law is valid for the given soil and hydraulic boundary conditions at the entry and exit are known.

Choose the ***correct*** answer from the options given below:

1. (B), (C) and (D) only.
2. (A), (B) and (C) only.
3. (A), (B) and (D) only.
4. (A), (C) and (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118	1918	Which possible combination of aquifers are encountered by deep wells depending on the hydro-geological characterictics of a particular area (A) A series of confined aquifers (B) A series of semi confined aquifers (C) A combination of confined and semi confined aquifers (D) A confined aquifer underlain by a series of unconfined aquifers (E) An unconfined aquifer underlain by a series of semi-confined aquifers Choose the ***correct*** answer from the options given below: 1. (A), (B) , (C) and (E) only. 2. (A), (B) , (D) and (E) only. 3. (A), (C), (D) and (E) only. 4. (B), (C) (D) and (E) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00

Objective Question

119	1919		4.0	1.00

Given below are two statements:

Statement (I): The soil moisture depletion method is usually employed to determine the consumptive use of unirrigated field crops grown on fairly uniform soils when the depth to the ground water is such that it will not influence the soil moisture fluctuation within the root zone .

Statement (II): The field experimental plots technique though satisfactory for computing seasonal water requirements , does not provide information on intermediate soil moisture condition , short term use , profile use, deep percolation losses and peak use rate of the crop.

In light of the above statements, choose the *most appropriate* answer from the options given below.

1. Both Statement (I) and Statement (II) are correct.
2. Both Statement (I) and Statement (II) are incorrect.
3. Statement (I) is correct but Statement (II) is incorrect.
4. Statement (I) is incorrect but Statement (II) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

120	1920	Given below are two statements: Statement (I): Low salinity water can be used for irrigation with most crops and most soils. But some leaching is required. Statement (II): Medium salinity water can be used with crops that can tolerate moderate salinity and leaching. But high salinity water is not ordinarily suitable for irrigation but to be used under special conditions with good drainage and with salt tolerant crops. In light of the above statements, choose the *most appropriate* answer from the options given below. 1. Both Statement (I) and Statement (II) are correct. 2. Both Statement (I) and Statement (II) are incorrect. 3. Statement (I) is correct but Statement (II) is incorrect. 4. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00