

PREVIEW QUESTION BANK

Module Name : Processing and Food Engineering-ENG
Exam Date : 14-Jul-2023 Batch : 14:30-16:30

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	2001	Choose the incorrect statement regarding the composition of election commission. 1. Appointment of the chief election commissioner and other election commissioners shall be made by the president. 2. President can also appoint regional commissioners after consultation with the election commission. 3. Conditions of service and tenure of office of the election commissioners and regional commissioners shall not be determined by the president. 4. Article 324 under constitution of India is dealing with the composition of election commission. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
2	2002	Which one of the following amendment acts is referred to as the 'mini constitution'? 1. 42nd 2. 44th 3. 46th 4. 48th A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
3	2003		4.0	1.00

With regard to the jurisdiction and powers of high court, disputes relating to the election of members of parliament and state legislatures, comes under the ambit of which one of the following jurisdictions?

1. Original
2. Writ
3. Appellate
4. Supervisory

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

4 2004

Which of the following is formed when the moisture is deposited in the form of water droplets on cooler surfaces of solid objects?

1. Frost
2. Fog
3. Mist
4. Dew

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

5 2005

Which of the following is the correct reason for the occurrence of best fishing grounds in the mixing zones (the mixing of warm and cold currents)?

1. It has the moderate temperature
2. It has the slowest sea waves
3. It has the high growth of planktons.
4. It has the sunrays perpendicular to the sea level.

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

6	2006	Eisenhower Cup is associated with which among the following sports? 1. Tennis 2. Chess 3. Football 4. Golf A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

7	2007	Who was the first woman President of the Indian National Congress? 1. Kasturba Gandhi 2. Sarojini Naidu 3. Annie Besant 4. Aruna Ali A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

8	2008	The dockyard was found in which of the following sites in Indus Valley Civilization? 1. Chanhudaro 2. Lothal 3. Kalibangan 4. Banawali A1 : 1	4.0	1.00
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		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

9	2009	Who built the famous Charminar of Hyderabad?	4.0	1.00
		1. Krishndev Rai		
		2. Muhammad Quli Qutb Shah		
		3. Nadir Shah		
		4. Aurangzeb		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

10	2010	Who discovered the right triangle?	4.0	1.00
		1. Pythagoras		
		2. Ancient Egyptians		
		3. Archimedes		
		4. Michelangelo		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

11	2011	Citrus canker is caused by	4.0	1.00
		1. Virus		
		2. Viriod		
		3. Bacteria		
		4. Fungus		

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

12	2012	DBM is a specific insect of	4.0	1.00
		1. Brinjal		
		2. Tomato		
		3. Cabbage		
		4. Bottle gourd		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

13	2013	What is the scientific name of mulberry silkworm?	4.0	1.00
		1. Bombyx mori		
		2. Antherea paphia		
		3. Antheraea assama		
		4. Attacus Ricinii		
		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

14	2014		4.0	1.00
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Subject matter of economics are want, effort and

1. Wealth
2. Growth
3. Satisfaction
4. Income

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

15 2015

The National Bureau of Animal Genetic Resources (NBAGR) is located in

1. Karnal
2. Bengaluru
3. Hisar
4. Jind

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

16 2016

The oldest known agroforestry systems is

1. Alley cropping
2. Taungya systems
3. Home Gardening
4. Shifting cultivation

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

17	2017	The effect or requirement of the relative length of day and night on flowering is called 1. Photomechanics 2. Transpiration 3. Photoperiodism 4. Phytoperiodism A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

18	2018	Which of the following statements are true? (A) Small pores in epidermis of leaves is called stomata. (B) Guard cells present in the stomata are helpful in exchange of gases with atmosphere (C) Transpiration takes place through stomata Choose the correct answer from the options given below: 1. (A) and (B) only. 2. (B) and (C) only. 3. (A) and (C) only. 4. (A), (B) and (C). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

19	2019		4.0	1.00
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Water holding capacity is highest in which of the following soils?

1. Silt soil
2. Clayey soil
3. Chalk soil
4. Peat soil

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

20 2020

Certified seed is the progeny of

1. Nucleus seed
2. Foundation seed
3. Breeder's seed
4. Registered seed

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

21 101001

The effective field capacity of an agricultural implement is a function of:

- (A) Speed of travel
- (B) Time lost during field operation
- (C) Percentage of rated width actually utilized
- (D) Rated width of the machine

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

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

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

22 101002

4.0 1.00

Given below are two statements:

Statement (I) : Fixed costs per hour are inversely proportional to the amount of annual use.

Statement (II) : Operating costs are directly related to the amount of use

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

23 101003

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : The efficiency of updraft gasifier is higher than the downdraft gasifier

Reason (R) : In updraft gasifier hot gases pass through entire fuel bed and leave at lower temperatures

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

24 101004

A cultivator of size 11 X 30 cm is being operated at a depth of 10 cm. The shape of furrow cross section is a triangle with tip angle of 90° . If the unit draft for the soil is 25 kN.m^{-2} , determine the draft required for the cultivator.

1. 2.20 kN
2. 2.50 kN
3. 2.75 kN
4. 3.33 kN

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

25 101005

Given below are two statements:

Statement (I) : Chisel type tillage tools break up the soil without inverting it.

Statement (II) : Disc blades sharpened from the concave side penetrate more readily than disc blades sharpened from convex side.

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

26 101006

4.0 1.00

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

List-I	List-II
Moul board type	Characteristics
(A) General purpose	(I) Short and relatively broad mould board curved abruptly near the top and gives thorough pulverization
(B) Stubble	(II) Preferred for more sticky soils where it is difficult for mould board to scour well
(C) Sod	(III) Medium curvature, turns the soil gentle and gives medium pulverization
	(IV) Long mould board and gives thorough turning but less pulverization

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

- (A) - (IV), (B) - (I), (C) - (III)
- (A) - (II), (B) - (IV), (C) - (I)
- (A) - (III), (B) - (I), (C) - (IV)
- (A) - (III), (B) - (IV), (C) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

27 101007

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : A diesel tractor engine will normally have less speed variation for a given change in torque than a comparable gasoline engine

Reason (R) : Diesel tractors are heavier than comparable gasoline engine

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

- Both (A) and (R) are true and (R) is the correct explanation of (A).
- Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (A) is true but (R) is false.
- (A) is false but (R) is true.

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		

Objective Question

28	101008	Liquefaction is dry process of biomass conversion in which liquids are maximized by: 1. Slow heating of feed stock at comparatively high temperature 2. Rapid heating of feed stock at comparatively low temperature 3. Slow heating of feed stock at low temperature 4. Rapid heating of feed stock at comparatively high temperature A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

29	101009	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Retention period of biogas digester should not be less than 2-4 days Reason (R) : Methanogenic bacteria multiply at the slower rate and become double in 2-4 days or even in more days In light of the above statements, choose the <i>correct</i> 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
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Objective Question

30	101010	The correct sequence of steps for ethanol production from ligno-cellulogenic material is: (A) Hydrolysis (B) Pre-treatment (C) Distillation (D) Fermentation Choose the correct answer from the options given below: 1. (A), (B), (C), (D). 2. (D), (C), (A), (B). 3. (B), (A), (D), (C). 4. (C), (B), (D), (A). A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

31	101011	Consider the following statements (A) Rayleigh scattering of solar radiation takes place when size of particles is much smaller than the wavelength of incident light (B) Total radiation is lesser than global radiation (C) Pyrheliometer is used to measure global solar radiation (D) Angular distance of the sun's rays to the north or south of the equator is known as Zenith angle (E) On equinox days, the sun's declination is 90° Choose the correct answer from the options given below: 1. (A) only. 2. (C) only. 3. (A), (B) and (E) only. 4. (C), (D) and (E) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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		A4 : 4		
Objective Question				
32	101012	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : Down wind turbines are typically noisier than their upwind counterparts Reason (R) : Down wind rotors encounter tower shadow once per revolution In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both (A) and (R) are correct and (R) is the correct explanation of (A). - Both (A) and (R) are correct but (R) is NOT the correct explanation of (A). (A) is correct but (R) is not correct. (A) is not correct but (R) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
33	101013	What will be the total power from a wind turbine of 100 m diameter, if the total power density in wind stream is 500 W.m^{-3} and maximum efficiency is 40 per cent? 6280 kW 2000 kW 1570 kW 1250 kW A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
34	101014		4.0	1.00

The tool used for performance assessment and logical evaluation of avenues for improvement in energy management and audit is:

1. Monitoring and verification
2. Energy pricing
3. Energy budgeting
4. Bench marking

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

35 101015

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : A soil is at its liquid limit if the consistency index of the soil is equal to zero

Reason (R) : The consistency index of a soil is defined as the ratio of liquid limit minus the natural water content to plasticity index of a soil

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

36 101016

4.0 1.00

Given below are two statements:

Statement (I) : Weight transfer from drawbar pull increases the soil reaction against front wheels and decreases the reaction against rear wheels

Statement (II) : For towed wheel axle torque is zero and for self-propelled wheel pull is zero

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

Objective Question

37 101017

High speed cutting elements/ tools are made from:

1. Boron steel
2. High speed steel
3. Stainless steel
4. Malleable cast iron

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

38 101018

A spherical drop of molten metal of radius 2 mm was found to solidify in 10 seconds. A similar drop of radius 4 mm will solidify in how many seconds?

1. 20
2. 31
3. 40
4. 62

4.0 1.00

		A1 : 1		
		A2 : 2		
		A3 : 3		
		A4 : 4		
Objective Question				
39	101019	In a petrol engine, the voltage required to jump spark in a given spark-plug gap does not depend on: 1. Compression ratio of the engine 2. Indicated mean effective pressure 3. Speed of the engine 4. Size of the engine A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
40	101020	The air flow rate through the radiator core of an agricultural tractor engine is usually in the range of: 1. $1-5 \text{ m.s}^{-1}$ 2. $5-10 \text{ m.s}^{-1}$ 3. $10-15 \text{ m.s}^{-1}$ 4. $15-20 \text{ m.s}^{-1}$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
41	101021		4.0	1.00

Given below are two statements:

Statement (I) : An instantaneous unit hydrograph is a direct runoff hydrograph of unit rainfall excess precipitating instantaneously over the catchment.

Statement (II) : In instantaneous unit hydrograph, the intensity of rainfall excess increases and the unit hydrograph becomes more skewed.

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

Objective Question

42 101022

Combination with 1 correct option

- (A) Infiltration is the movement of water through the soil surface.
- (B) The runoff process is not affected by infiltration.
- (C) Infiltration helps in natural ground water recharge.
- (D) Sandy soil will have a larger infiltration capacity than a clay soil.
- (E) The land use does not have influence on infiltration capacity.

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

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

43	101023	The probability P of an event equalled to or exceeded for N number of years record by Weibull formula is given by 1. $P = m/n$ 2. $P = \{m/(N+1)\}$ 3. $P = \{(m+1)/N\}$ 4. $P = (m+1)/(N+1)$ A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

44101024

4.01.00

Match List-I with List-II	
List-I	List-II
(Book/Theory proposed/Characteristic, etc.)	(Author/Thinker/Name of Theory, etc.)
(A) Rainfall data of a station	(I) Plotting position
(B) Exceedence probability of event by an empirical formula	(II) Attenuation
(C) Reduction in peak between inflow and outflow hydrograph	(III) Unit hydrograph
(D) Direct runoff hydrograph resulting from unit depth of rainfall	(IV) Point rainfall

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (I), (C) - (IV), (D) - (III)
- (A) - (IV), (B) - (I), (C) - (II), (D) - (III)
- (A) - (IV), (B) - (III), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

45	101025	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The dilution method of flow measurement depend upon the continuity principle applied to a tracer. Reason (R) : Dilution method of gauging is based on steady flow and if the flow is unsteady, there will be a change in storage volume in the channel reach and the steady-state continuity equation technique becomes invalid. In light of the above statements, choose the correct answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

46	101026	Which are the layouts of file drainage system ? - Grid iron - Herringbone - Bedding system - Interceptor Choose the correct answer from the options given below: (A), (B) and (D) only. (A), (C) and (D) only. (A), (B) and (C) only. (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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A4 : 4

Objective Question

47 101027

4.0 1.00

Sequencing type.

Which is the correct sequence of process for unit hydrograph derivation.

- (A) Storm hydrograph preparation
- (B) ER determination
- (C) DRH determination
- (D) Baseflow separation
- (E) UH determination

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

48 101028

4.0 1.00

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

List-I	List-II
(Book/Theory proposed/ Characteristic, etc.)	(Author/Thinker/ Name of Theory, etc.)
(A) Profile method	(I) Seepage control
(B) Channel lining	(II) Volume of cut or fill
(C) Drop structure	(III) Land grading
(D) Four point method	(IV) Conveyance system

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
- (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
- (A) - (III), (B) - (I), (C) - (IV), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

49 101029

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : A straight drop spillway stilling basin completely prevents the soil scour in the downstream channel.

Reason (R) : The stilling basins are normally used when flows are too less than the design value and occur for short duration.

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

- Both (A) and (R) are true and (R) is the correct explanation of (A).
- Both (A) and (R) are true but (R) is NOT the correct explanation of (A).
- (A) is true but (R) is false.
- (A) is false but (R) is true.

A1 : 1

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

50	101030	The capacity of drop spillway is controlled by 1. Size of drop 2. Size of inlet 3. Size of inlet and apron 4. Size of apron A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

51	101031	Given below are two statements: Statement (I) : Shelterbelt is used for controlling wind erosion. Statement (II) : Shelterbet constitutes the barriers of trees or shrubs. In light of the above statements, choose the <i>most appropriate</i> 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
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Objective Question

52	101032		4.0	1.00
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Combination with 1 correct answer

- (A) Hooghoudt's equation gives the relation between the spacing of drains and the height of the water table built up between the drains due to constant rate of irrigation.
- (B) In derivation of Hooghoudt's equation the flow follows the Darcy's law.
- (C) The Hooghoudt's equation holds good for rainfall only.
- (D) The soil is considered to be homogenous in the derivation of Hooghoudt's equation.
- (E) The Hooghoudt's equation is meant for irrigation water only.

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

53 101033

4.0 1.00

Match List-I with List-II

List-I	List-II
(Book/Theory proposed/Characteristic, etc.)	(Author/Thinker/Name of Theory, etc.)
(A) Isohyet	(I) A line joining places of same air pressure at a particular time
(B) Isopleth	(II) Line joining the points on the area having equal time of travel
(C) Isobar	(III) Line joining points of equal rainfall magnitude
(D) Isochrone	(IV) Line on a map through places having equal depths of evapotranspiration

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

- (A) - (IV), (B) - (III), (C) - (II), (D) - (I)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (I), (C) - (IV), (D) - (III)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

54 101034

Which method of irrigation is suitable for wheat?

- Furrow method
- Check basin method
- Border method
- Sub-surface method

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

55	101035	Given below are two statements: Statement (I) : An aquifer found between two impermeable layers is called confined aquifer. Statement (II) : The water in the pores of a confined aquifer is at atmospheric pressure. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

56	101036	Which is not the objectives of watershed management programme? - Control damaging runoff - Enhance groundwater recharge - Reduce the rainfall intensity - Moderate floods in downstream area. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

57	101037		4.0	1.00
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Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : The reclamation of alkali soils is achieved by leaching the products of reaction after amendments are added.

Reason (R) : The main objective in alkali soils is to reduce the exchangeable sodium percentage and remove the released sodium salts.

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

58	101038	Which of the crops are not generally grown under green house? 1. Tomato 2. Capsicum 3. Sugarcane 4. Potato	4.0	1.00
		A1 : 1 A2 : 2 A3 : 3 A4 : 4		

Objective Question

59	101039		4.0	1.00

The sequence of stages of gully development is

- (A) Initiation
- (B) Healing
- (C) Development
- (D) Stabilisation

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

60 101040

Which is not a passive heating system in the greenhouse?

- 1. Rock bed storage
- 2. North wall
- 3. Latent heat storage material
- 4. Water storage

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

61 101041

4.0 1.00

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

List-I	List-II
(A) Length	(I) Spiral separator
(B) Density	(II) Indented cylinder
(C) Shape	(III) Velvet roll separator
(D) Texture	(IV) Destoner

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

- (A) - (II), (B) - (I), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
- (A) - (II), (B) - (I), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

62 101042

A cream separator is used to separate milk into which of the following components?

- Skim milk
- Milk solids
- Water
- Cream

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

- (A) and (C) only.
- (A), (B) and (D) only.
- (A) and (D) only.
- (D) only.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

63 101043

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : When the material is dried under constant rate condition, the material temperature exceeds wet bulb temperature of the drying air.

Reason (R) : During constant rate period, moisture is available on the entire surface of the material being dried.

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

64 101044

4.0 1.00

Ultra High Temperature (UHT) processing of milk is performed at :

- (A) Elevated temperature
- (B) Elevated pressure
- (C) Below eutectic temperature
- (D) Reduced pressure conditions

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

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

A1 : 1

A2 : 2

A3 : 3

		A4 : 4		
Objective Question				
65	101045	Rice bran, once detached from brown rice, deteriorate at a faster rate due to which of the following reason(s)? (A) Breakdown of starch by amylase (B) Hydrolysis of oil by lipase (C) Conversion of FFA into fatty acids (D) Gelatinization of oil by lipase Choose the correct answer from the options given below: (B) and (C) only. (B) only. (A), (B), (C) and (D). (C) and (D) only. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
66	101046	Transient heat flow method is used to determine - - Thermal conductivity - Specific heat - Roundness - Latent heat A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
67	101047		4.0	1.00

The antifriction bearings used in belt conveyors results in -

1. High throughput capacity
2. High mechanical efficiency
3. Low stability
4. High friction

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

68 101048

Which among the following are/is a temporary grain storage structure?

- (A) Bunker
- (B) Shed
- (C) Silo
- (D) CAP Structure

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

69 101049

Critical speed is related to which of the following size reduction equipment?

1. Burr mill
2. Hammer mill
3. Jaw crusher
4. Ball mill

4.0 1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

70 101050

Rubber roll shellers are used for -

- (A) Paddy dehusking
- (B) Paddy polishing
- (C) Millet polishing
- (D) Wheat milling

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

71 1002101

Given below are two statements:

Statement (I) : Wet bulb depression is the difference between the dry bulb temperature and wet bulb temperature of a moist air.

Statement (II) : The wet bulb depression for a moist air will decrease when the moist air is saturated on constant enthalpy line.

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

4.0 1.00

A2 : 2

A3 : 3

A4 : 4

Objective Question

72 1002102

4.0 1.00

Given below are two statements:

Statement (I) : Double pipe heat exchangers are basically cross flow type or counter flow type.

Statement (II) : In case of a double pipe heat exchanger, the log mean temperature difference for counter flow arrangement is usually more than that of a concurrent flow type.

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

73 1002103

4.0 1.00

Given below are two statements:

Statement (I) : Eddy diffusion is associated with diffusion due to physical mixing and turbulent flow.

Statement (II) : In all mass transfer operations, diffusion occurs in at least one phase or both phases.

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					
74	1002104	Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R). Assertion (A) : The EMC of a grain will decrease with the increase in temperature of the surrounding air at constant RH. Reason (R) : This is because of the lower of heat of vapourisation of grain moisture at higher temperature. In light of the above statements, choose the <i>correct</i> answer from the options given below. - Both (A) and (R) are true and (R) is the correct explanation of (A). - Both (A) and (R) are true but (R) is NOT the correct explanation of (A). (A) is true but (R) is false. (A) is false but (R) is true. A1 : 1 A2 : 2 A3 : 3 A4 : 4		4.0	1.00
Objective Question					
75	1002105	Given below are two statements: Statement (I) : If the flow velocity is increased, the boundary layer thickness for a given fluid and flow geometry will decrease. Statement (II) : The thickness of boundary layer in a fluid flow is affected by the Reynolds Number of the flow. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct.		4.0	1.00

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

76 1002106

4.0 1.00

Given below are two statements:

Statement (I) : A first order reaction is characterized by a logarithmic change in concentration of a reaction with time.

Statement (II) : Most of the reactions involved in the processing of food follows first order reaction.

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

77 1002107

4.0 1.00

Given below are two statements:

Statement (I) : Microwaves can be used for blanching of fruits and vegetables.

Statement (II) : Blanching is done primarily for inactivation of selected microorganisms.

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

78 1002108

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : In pulse dry conditioning process, pitting of the pulses is done in a machine before conditioning.

Reason (R) : Pitting process facilitates oil penetration during conditioning.

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

79 1002109

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : The conditioning of wheat is done at a temperature lower than 47°C.

Reason (R) : It is because at temperatures above 47°C, the starch in wheat degrades, which affects the quality of flour.

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

80 1002110

4.0 1.00

Given below are two statements:

Statement (I) : The PEF technology of food processing is not suitable for solid foods.

Statement (II) : The PEF uses high voltage pulse in the range of 400 – 800 kV/cm.

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

81 1002111

4.0 1.00

Given below are two statements:

Statement (I) : Nano technology refers to the control of matter at an atomic or molecular scale between 1 to 1000 nm.

Statement (II) : The diameter of an atom is usually from 0.1 to 0.5 nm.

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				
82	1002112	Paddy has a bulk density of 550 kg/m^3. It is conveyed in belt conveyer having a speed of 1 m/s and the cross section area of the load is 45 cm^2, then the capacity of the system in kg/h is : 1. 7510 2. 8910 3. 9870 4. 987.0 A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
Objective Question				
83	1002113	Given below are two statements: Statement (I) : A screw conveyor is typically used for short distance transfer of granular materials. Statement (II) : Screw conveyor can be used as a metering device at the product outlet of a continuous dryer like LSU dryer. In light of the above statements, choose the <i>most appropriate</i> 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				
84	1002114		4.0	1.00

Given below are two statements:

Statement (I) : The steel used in metal cans are usually stainless steel.

Statement (II) : In the preparation of cans for food, aluminum and chromium are also used in addition to steel and tin.

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

85 1002115

4.0 1.00

Given below are two statements:

Statement (I) : In a typical CA storage, only the oxygen concentration is changed, CO₂ concentration changes due to the change in oxygen.

Statement (II) : In an actively modified CAS, activate charcoal is used for absorbing oxygen.

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

86 1002116

4.0 1.00

Which of the following is not true?

1. Form-fill-seal system is used only for flexible packages.
2. Vibrating conveyor feeder is used for pasty materials.
3. Aseptic filling can be done for both flexible and rigid plastic bottles.
4. Injection molding can be used to prepare plastic bottles to be used for food purpose.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

87 1002117

4.0 1.00

Given below are two statements:

Statement (I) : For the selection of site for a food processing plant, the availability of labour is one major consideration.

Statement (II) : A good plant layout helps in maintaining reduced inventory in the process.

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

88 1002118

4.0 1.00

Given below are two statements:

Statement (I) : The circumferential stress in a pressure vessel is otherwise known as tangential stress.

Statement (II) : If the mean diameter of the shell is increased by two times, then for the same internal design pressure and thickness of pressure vessel, the circumferential stress increases by 4 times.

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

89 1002119

4.0 1.00

Given below are two statements:

Statement (I) : Case hardening is a process in which the surface layer of steel is saturated with tin.

Statement (II) : Galvanizing is the process of coating iron with a layer of Nickel for avoiding corrosion.

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

90	1002120	Given below are two statements: Statement (I) : ISO is an international standard used for food plant layout and management. Statement (II) : ISO 22000 is specifically food safety standard. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

91	1002121	Given below are two statements: Statement (I) : Other parameters remaining constant, the drag coefficient decreases with increase in surface area of a particle. Statement (II) : Drag coefficient is a function of Reynolds number. In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

92	1002122		4.0	1.00
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The energy, which must be supplied to the reactants before any reaction can start is known as

1. Base energy
2. Activation energy
3. Surface energy
4. Q_{10} quotient

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

93 1002123

In an unsteady state heat transfer process like heating in a jacketed open kettle, the time taken by heated medium to reach the same temperature as heating medium is

1. Dependent on time constant
2. Dependent on time constant and temperature difference
3. Dependent on Fourier's number
4. Infinity

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

94 1002124

4.0 1.00

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

List-I	List-II
(Book/Theory proposed/ Characteristic, etc.)	(Author/Thinker/Name of Theory, etc.)
(A) Prandtl number	(I) Ratio of inertia force and gravity force
(B) Graetz number	(II) Ratio of momentum diffusivity to thermal diffusivity
(C) Froude number	(III) Laminar flow heat transfer
(D) Sherwood number	(IV) Mass transfer

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

- (A) - (II), (B) - (III), (C) - (I), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (II), (B) - (I), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

95 1002125

4.0 1.00

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

List-I	List-II
(Book/Theory proposed/ Characteristic, etc.)	(Author/Thinker/ Name of Theory, etc.)
(A) Stokes' law	(I) Isotherm
(B) Plank's law	(II) Laminar flow
(C) Poisseulli equation	(III) Settling in fluid
(D) Langmuir equation	(IV) Radiation

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

- (A) - (I), (B) - (IV), (C) - (III), (D) - (II)
- (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
- (A) - (III), (B) - (I), (C) - (II), (D) - (IV)
- (A) - (III), (B) - (IV), (C) - (II), (D) - (I)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

96 1002126

Two sorghum grains of 1 and 2 mm diameter are passing through an air column. If the terminal velocity of the first grain is 4 m/s, then the terminal velocity of the second grain will be

- 2 m/s
- 4 m/s
- 8 m /s
- 16 m/s

A1 : 1

A2 : 2

A3 : 3

A4 : 4

4.0 1.00

Objective Question

97 1002127

4.0 1.00

Match List I with List II

List I	List II
Biological material	Rheological behaviour
(A) Whipped cream	(I) Thixotropic
(B) Gelatine	(II) Newtonian
(C) 40% corn starch solution	(III) Pseudoplastic
(D) Honey	(IV) Dilatant

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (IV), (C) - (III), (D) - (I)
- (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
- (A) - (IV), (B) - (III), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

98 1002128

Volumetric heating can be used for the pasteurization of packaged fruit puree by

- Microwave radiation
- Radiofrequency radiation
- Ohmic heating
- Infrared radiation

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

- (A), (B) and (C) only.
- (A), (B) and (D) only.
- (A), (B), (C) and (D).
- (B), (C) and (D) only.

A1 : 1

A2 : 2

4.0 1.00

A3 : 3

A4 : 4

Objective Question

99 1002129

4.0 1.00

Given below are two statements:

Statement (I) : The tristimulus colourimeters measure colour based on Munshell and Hunter scale only

Statement (II) : Colourimeters measure the colour parameters related to sensory quality

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

Objective Question

100 1002130

4.0 1.00

Given below are two statements; one is labelled as **Assertion (A)**, and the other one is labelled as **Reason (R)**.

Assertion (A) : Wheat flour mixed with flaxseed flour increases the water absorption of the mixture dough

Reason (R) : Wheat Gluten has a higher water absorption capacity than the native starch

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

Objective Question

101 1002131

4.0 1.00

Arrange the following unit operations in sequence as performed in modern wheat milling.

- (A) Sifting
- (B) Scratching
- (C) Conditioning
- (D) Grinding

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

102 1002132

4.0 1.00

The principle of Impact is followed in the following size reduction equipment

- (A) Hammer mill
- (B) Ball mill
- (C) Pin mill
- (D) Comminution mill

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

103 1002133

4.0 1.00

Match List I with List II

List I	List II
Unit Operation	materials
(A) Dehusking	(I) Ground nut
(B) Shelling	(II) Pigion pea
(C) Dehulling	(III) Corn
(D) Decortication	(IV) Paddy

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (IV), (B) - (III), (C) - (II), (D) - (I)
- (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

104 1002134

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : Water jet polishers are used in the final polishing of rice

Reason (R) : Abrasive rollers removes the bran from the rice surface

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

- Both (A) and (R) are correct and (R) is the correct explanation of (A).
- Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (A) is correct but (R) is not correct.
- (A) is not correct but (R) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

105 1002135

4.0 1.00

Fruit classification

Fruits are passed through a water tank with water jets and conveyed to the roller through singulation to the end of the tunnel, where the fruits are scanned for any deformities and colour. Finally, the normal fruits are passed through a sensing platform, where they are weighed and passed to different outlets based on weight.

The machine described above can be termed as

1. Cleaner cum Sorter
2. Cleaner cum grader
3. Sorter cum Grader
4. Cleaner cum sorter cum grader

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

106 1002136

4.0 1.00

Computer-Aided Design can perform the following functions

- (A) Create 2-D drawings and 3D models
- (B) Analyzes material-to-material interaction
- (C) Simulate stress tests
- (D) 3 D printing

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

107 1002137

4.0 1.00

Given below are two statements:

Statement (I) : Cyclone separators are used in spray dryers

Statement (II) : The height of the cyclone is smaller than the critical diameter of the cyclone

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

108 1002138

4.0 1.00

Spray drying of milk includes the phases sequentially

- (A) Nucleation
- (B) Homogenization
- (C) Crust formation
- (D) Surface drying

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

109 1002139

4.0 1.00

Which types of baffles are used in shell and tube heat exchangers

- (A) Segmental baffles
- (B) Spiral baffles
- (C) Orifice baffles
- (D) Dough nut baffles

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

110 1002140

4.0 1.00

Given below are two statements:

Statement (I) : Roller chains are suitable for higher torque and low-speed operations

Statement (II) : The chordal action can be minimized by using a lower number of tooth irrespective of sprocket tooth

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

Objective Question

111 1002141

4.0 1.00

Match List I with List II

List I	List II
IMP practices	Principles
(A) Vacuum hermetic storage	(I) Semiochemicals
(B) Ozone fumigation	(II) Desiccation
(C) Biological control	(III) Oxidation
(D) Inert dust	(IV) Hypoxia

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (IV), (B) - (II), (C) - (I), (D) - (III)
- (A) - (IV), (B) - (III), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

112 1002142

4.0 1.00

Given below are two statements, one is labelled as **Assertion (A)** and other one labelled as **Reason (R)**.

Assertion (A) : Temperature and humidity sensors indicate the biological activity in grain storage.

Reason (R) : Hotspots are caused by the respirational heat of insects in a grain silo.

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

- Both (A) and (R) are correct and (R) is the correct explanation of (A).
- Both (A) and (R) are correct but (R) is NOT the correct explanation of (A).
- (A) is correct but (R) is not correct.
- (A) is not correct but (R) is correct.

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

113 1002143

4.0 1.00

Match List I with List II

List I	List II
Commodity	Recommended storage temperature
(A) Ripened Tomato	(I) 0-4°C
(B) Onion	(II) Ambient temperature
(C) UHT-packed milk	(III) >8°C
(D) Banana	(IV) 4-8°C

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

- (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (A) - (II), (B) - (IV), (C) - (I), (D) - (III)
- (A) - (IV), (B) - (I), (C) - (II), (D) - (III)
- (A) - (III), (B) - (IV), (C) - (II), (D) - (I)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

114 1002144

4.0 1.00

Thermodynamics of the wheat storage in silo can not be modelled through

- Computational Fluid Dynamics modelling
- Finite Element Method
- Discrete Element Method
- Finite Volume Method

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

115	1002145	Given below are two statements: Statement (I) : Mechanical ventilation systems can be used in vertical silos only Statement (II) : Axial fans are used for vertical large vertical silos In light of the above statements, choose the <i>most appropriate</i> answer from the options given below. - Both Statement (I) and Statement (II) are correct. - Both Statement (I) and Statement (II) are incorrect. Statement (I) is correct but Statement (II) is incorrect. Statement (I) is incorrect but Statement (II) is correct. A1 : 1 A2 : 2 A3 : 3 A4 : 4	4.0	1.00
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Objective Question

116	1002146	Online monitoring of food quality can be done through the following systems (A) e-nose (B) e-vision (C) e-tongue (D) TTIs Choose the <i>correct</i> answer from the options given below: (A), (B) and (C) only. (A), (B) and (D) only. (A), (B), (C) and (D). (B), (C) and (D) only. A1 : 1 A2 : 2 A3 : 3	4.0	1.00
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A4 : 4

Objective Question

117 1002147

4.0 1.00

A blockchain-Machine Learning food traceability process will have the following sequential operations

- (A) Supply chain establishment
- (B) Blockchain-machine learning integration
- (C) Machine learning technology
- (D) Fuzzification

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

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

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

118 1002148

4.0 1.00

Given below are two statements:

Statement (I) : Piezoelectric sensors are suitable for static pressure measurement

Statement (II) : The change in piezoelectric quartz crystal size can indicate the chemical composition of an environment

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

Objective Question

119 1002149

4.0 1.00

Match List I with List II

List I	List II
Automatic Identification and Data Capture Technique	(Author/Thinker/ Name of Theory, etc.)
(A) 2 D Barcode	(I) changing Pole orientation
(B) RFID	(II) Stacked symbology
(C) Machine vision	(III) Electronic chip
(D) Magnetic stripes	(IV) Geometrical features

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

- (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
- (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
- (A) - (IV), (B) - (III), (C) - (I), (D) - (II)
- (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

A1 : 1

A2 : 2

A3 : 3

A4 : 4

Objective Question

120 1002150

4.0 1.00

A walk-in cold room for mango requires maintaining a temperature of 12-13 °C and relative humidity of 90-95% to delay the ripening. However, the mango lot must be treated for 48 h using ethylene gas at 18 °C before marketing. The essential sensors needed to be included in the storage systems are

- Temperature, carbon dioxide and ethylene sensors only
- Temperature, humidity, ethylene and proximate sensors only
- Carbon dioxide, Oxygen and ethylene sensors only
- Uric acid, ethylene, proximate sensors only

A1 : 1

A2 : 2

A3 : 3

A4 : 4