GATE 2026 Agricultural Engineering Question Paper

General Instructions

(i) This question paper contains 65 questions. All questions are compulsory.

(ii) It comprises 44 single-correct multiple-choice questions and 21 numerical / integer-type questions.

(iii) Attempt every question; detailed solutions are provided in the companion solutions booklet.

(iv) For numerical questions, report the answer rounded exactly as asked.

1. Suresh said, "I did it yesterday." Which one of the following options is the correct form of this sentence in indirect speech?

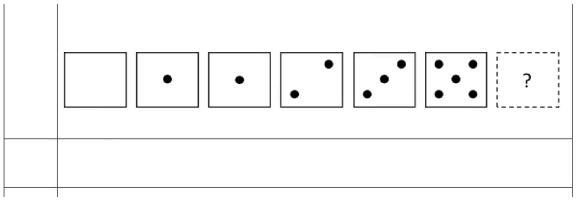
(A) Suresh said that I did it yesterday.

(B) Suresh says I did it yesterday.

(C) Suresh says that he did it the day before.

(D) Suresh said that he had done it the day before.

2. To continue the sequence of tiles shown, the tile indicated by the question mark should be



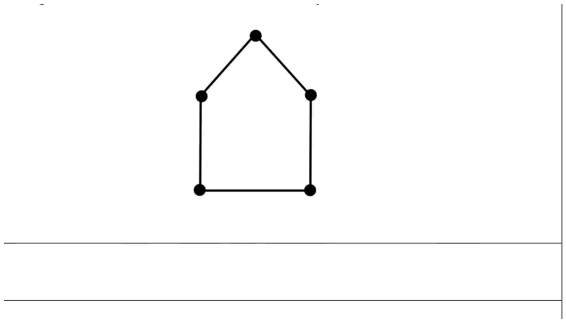
(A)

(B)

(C)

(D)

3. Consider an art gallery whose walkways are shown as lines in the diagram. A black dot represents a junction of two walkways. A guard may be placed at a junction to watch over the walkways that join at that junction. The minimum number of guards needed to watch all the walkways is _____.



(A) 2

(B) 3

(C) 4

(D) 5

4. The 2nd of June is a Thursday in a certain year. Which day of the week is the 3rd of July in that year?

(A) Thursday

(B) Friday

(C) Saturday

(D) Sunday

5. A coin with heads facing up is shown as (H) and a coin with tails facing up is shown as (T). Six coins are placed in the Starting Arrangement, as shown below. A "step" is defined as interchanging a pair of adjacent coins without flipping them. The minimum number of steps needed to go from the Starting Arrangement to the Final Arrangement, as shown below, is _____.

Starting Arrangement: (H) (H) (H) (T) (T) (T)

Final Arrangement: (T) (T) (T) (H) (H) (H)

(A) 3

(B) 6

(C) 9

(D) 12

6. Exacerbate : Mitigate :: _____

Choose the option with the correct pair of words to fill the blank.

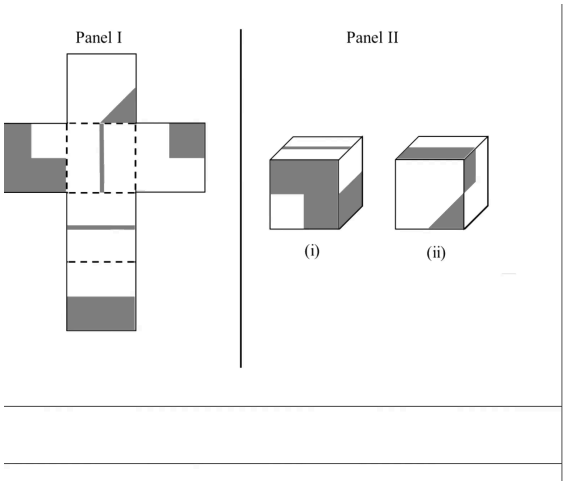
(A) Aggravate : Alleviate

(B) Alleviate : Precipitate

(C) Aggravate : Precipitate

(D) Emancipate : Exonerate

7. A paper shown in Panel I is folded along the dashed lines (- - -) to construct a cube. The shaded regions shown in Panel I appear on the outer surface of the cube. Referring to cubes shown in Panel II, which one of the options is correct?



(A) Only (i) can correspond to the unfolded cube in Panel I.

(B) Only (ii) can correspond to the unfolded cube in Panel I.

(C) Both (i) and (ii) can correspond to the unfolded cube in Panel I.

(D) Neither (i) nor (ii) can correspond to the unfolded cube in Panel I.

8. In a population, patients who have high cholesterol also have high blood-pressure (BP). Some patients with high BP also have diabetes. There are no patients who have both high cholesterol and diabetes. Furthermore,

1. the total number of patients with at least one of these conditions is 75,
2. the number of patients with high cholesterol is 10,
3. the number of patients with high BP is 45, and
4. the number of patients with only high BP and no other conditions is 20.

Then the number of patients who have both diabetes and high BP is _____

(A) 0

(B) 15

(C) 20

(D) 10

9. Four people P, Q, R, and S, of different ages, make the following observations.

P: I am younger than S.

Q: I am neither the youngest nor the oldest.

R: P is older than me.

Based on these observations, the youngest person is _____.

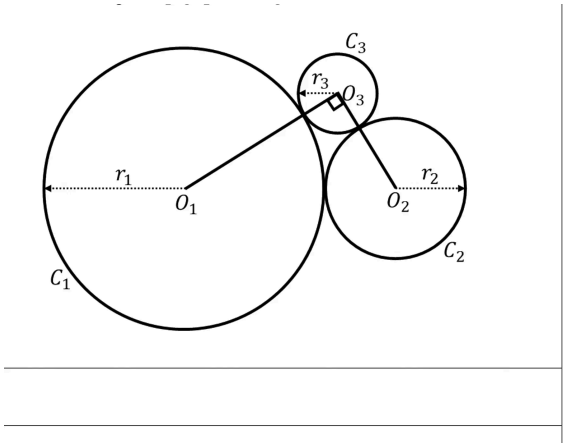
(A) P

(B) Q

(C) R

(D) S

10. Circles C_1, C_2, and C_3, with centers O_1, O_2, and O_3, and radii r_1, r_2, and r_3, respectively, touch each other as shown in the following figure.



Given $r_1 = 2$ cm, $r_2 = 1$ cm and the angle $\angle O_1O_3O_2$ is 90°, $r_3 =$ _____ cm.

(A) $\frac{1}{2}(-3+\sqrt{17})$

(B) $\frac{1}{2}(3+\sqrt{17})$

(C) $\frac{1}{2}(-2+\sqrt{17})$

(D) $\frac{1}{2}(-3+2\sqrt{17})$

11. Identify the following partial differential equations in the given order based on their generic form where c is a constant, and u_1 and u_2 are functions of (x, t) and (x, y), respectively:

(i)

$$\frac{\partial^2 u_1}{\partial t^2} = c^2 \frac{\partial^2 u_1}{\partial x^2}$$

(ii)

$$\frac{\partial u_1}{\partial t} = c^2 \frac{\partial^2 u_1}{\partial x^2}$$

(iii)

$$\frac{\partial^2 u_2}{\partial x^2} + \frac{\partial^2 u_2}{\partial y^2} = 0$$

(A) (i) Wave equation, (ii) Heat equation, (iii) Laplace equation

(B) (i) Heat equation, (ii) Laplace equation, (iii) Wave equation

(C) (i) Laplace equation, (ii) Wave equation, (iii) Heat equation

(D) (i) Heat equation, (ii) Wave equation, (iii) Laplace equation

12. A box contains one red ball and two blue balls. One ball is drawn at random, its colour is noted and the ball is returned to the box. The process is repeated. In the first two draws, blue ball appears each time. The probability of drawing blue ball again in the third draw is

(A) $\frac{2}{3}$

(B) $\frac{1}{3}$

(C) $\frac{1}{2}$

(D) 1

13. The general solution to the ordinary differential equation $\frac{d^2y}{dx^2} = \cos 2x$ is

(A) $y = -\frac{\cos 2x}{4} + C_1x + C_2$, where C_1 and C_2 are constants

(B) $y = \frac{\sin 2x}{2} + C_1$, where C_1 is a constant

(C) $y = \frac{\cos 2x}{4} + C_1x + C_2$, where C_1 and C_2 are constants

(D) $y = -\frac{\sin 2x}{2} + C_1$, where C_1 is a constant

14. Two square matrices **A** and **B** of the same order are such that $\det[\mathbf{A} \cdot \mathbf{B}] = -80$ and $\det[\mathbf{A}] = 5$. Here, $\mathbf{A} \cdot \mathbf{B}$ is the product of **A** and **B**. The value of $\det[\mathbf{B}^T]$ is

(A) -16

(B) $-\frac{1}{16}$

(C) -400

(D) 28

15. Consider the simultaneous equations

$$2x + 4y = -7; \quad 3x + 5y = 1$$

While solving using Gauss elimination without pivoting, after the forward elimination, the diagonal elements of the coefficient matrix are

(A) 2 and -1

(B) 3 and 2

(C) 5 and -2

(D) 3 and 4

16. A plough attachment, which is a miniature plough bottom that cuts a narrow, shallow furrow ahead of the shin and moves trash and roots toward the main furrow so that they are completely covered by the mouldboard, is called as

(A) Jointer

(B) Coulter

(C) Subsoiler

(D) Weed hook

17. Fuel property that predominantly governs 'hard / cold starting' in SI engine is P; and the property that predominantly governs 'ignition delay' in CI engine is Q. Identify the correct option for P and Q combination.

(A) P: Octane number
Q: Calorific value

(B) P: Volatility
Q: Cetane number

(C) P: Flash point
Q: Viscosity

(D) P: Calorific value
Q: Octane number

18. A tractor engine delivers 382 N.m brake torque at a rated speed of 2000 rpm. The radiator cooling fan draws 5% of the engine brake power. The fan pushes $2.8\ m^3s^{-1}$ of air against 0.9 kPa static pressure rise. Assuming air as incompressible, and ignoring other losses, the fan efficiency, in %, is nearest to (Take $\pi = 3.14$)

(A) 58

(B) 60

(C) 63

(D) 65

19. A 2WD tractor's driving axle experiences total dynamic normal load of 28 kN. The driving wheels have 0.60 m rolling radius. The total driving axle torque measured is 10.7 kN.m. At 18% wheel slip, the coefficient of net traction is 0.35. Tractive efficiency of the driving wheels, in %, is nearest to

(A) 45

(B) 35

(C) 55

(D) 58

20. The RMS sound pressure is increased by 50%. This increases the sound pressure level, in dB, nearly by

(A) 3.52

(B) 8.11

(C) 100.21

(D) 43.52

21. A trapezoidal channel carries $5\ m^3s^{-1}$ of water under uniform flow condition. The channel has a bottom width of 2 m, side slope of 2:1 (horizontal: vertical), and a bed slope of 1%. If the Manning roughness coefficient is 0.03, the conveyance of the channel, in m^3s^{-1}, is

(A) 2

(B) 5

(C) 15

(D) 50

22. In wind erosion, the amount of soil transported varies

(A) directly as the cube of the threshold wind velocity and inversely as the square of the mean soil particle diameter

(B) directly as the cube of the actual wind velocity and inversely as the square of the mean soil particle diameter

(C) directly as the cube of the difference in actual and threshold wind velocity and the square of the mean soil particle diameter

(D) directly as the cube of the difference in actual and threshold wind velocity and the square root of the mean soil particle diameter

23. When the bed slope of the discharge carrier in a chute spillway changes from steeper to milder, we provide a

(A) concave vertical curve

(B) convex vertical curve

(C) reverse curve

(D) converging transition

24. A natural colloidal clay, having the characteristics of absorbing water and swelling 8 to 15 times its dry size, used as an efficient and effective sealing material for farm ponds, is

(A) EPDM (Ethylene Propylene Diene Monomer)

(B) Butyl

(C) Bentonite

(D) Soil cement

25. By depth-area-duration (DAD) analysis, the maximum average depth of rainfall over a 10^3 km^2 catchment due to a 6-hour storm is 80 mm. For the same storm, the maximum average depth of rainfall for a 10^4 km^2 catchment, in mm, is

(A) greater than 88

(B) lesser than 80

(C) equal to 80

(D) between 81 and 88

26. Dimensionless parameter among the following options is

(A) heat exchanger effectiveness

(B) humid heat of air-water vapour mixture

(C) humid volume of air-water vapour mixture

(D) overall heat transfer coefficient

27. It is given that the water activity of a food is equal to the relative humidity of the atmosphere that is in equilibrium with the food. The partial pressure of water vapour of the food at a specific temperature is

(A) equal to the partial pressure of water vapour in air

(B) lesser than the partial pressure of water vapour in air

(C) greater than the partial pressure of water vapour in air

(D) not dependent on the partial pressure of water vapour in air

28. Air carrying dust particles enters a cyclone separator of 800 mm diameter at a tangential velocity of 30 $\mathbf{m.s^{-1}}$ near the wall. The average diameter of the dust particles is 100 $\mu\mathbf{m}$. The separation factor is nearest to (Take $\mathbf{g = 9.81\ m.s^{-2}}$)

(A) 229.36

(B) 611.62

(C) 485.72

(D) 3.75

29. A circular mild steel storage bin of 8 m height contains wheat having bulk density of 800 $\mathbf{kg.m^{-3}}$. The coefficient of static friction between wheat grain and bin wall is 0.40 and hydraulic radius of the bin is 1 m. Equivalent diameter of the bin, in m, is

(A) 4

(B) 8

(C) 1

(D) 2

30. Specific heat, coefficient of viscosity, and thermal conductivity are related in the

(A) Prandtl number

(B) Reynolds number

(C) Froude number

(D) Biot number

31. Mechanical model/method NOT related to rheological behaviour of food products is known as

(A) Liebman's method

(B) Newton's model

(C) Maxwell's model

(D) Saint-Venant's model

32. At an initial pressure of 100 kPa, 1 kg air is compressed reversibly from 15 litres to 1 litre at final pressure of 2000 kPa. Neglecting other losses, the Polytropic Exponent (n) is _____. (Rounded off to three decimal places)

33. A tubewell operating 10 hours per day discharges water at a rate of $25\ m^3.h^{-1}$. The average irrigation depth is 80 mm, and the irrigation interval is 20 days. If the intensity of irrigation is 80%, the culturable command area (in hectares) is _____. (Rounded off to two decimal places)

34. A tile drainage system having a drainage coefficient of 25 mm drains an area of $0.2\ \text{km}^2$. The average discharge from the system (in $\text{m}^3.\text{s}^{-1}$) is _____. (Rounded off to three decimal places)

35. The impeller speed of a centrifugal pump is increased by 30%. The power requirement of the pump increases by n times. The value of n is _____. (Rounded off to two decimal places)

36. The value of the integral $I = \int_0^1 \int_0^1 x\cos(xy)\,dx\,dy$ is

(A) $1 - \cos(1)$

(B) $1 + \cos(1)$

(C) $1 - \sin(1)$

(D) $1 + \sin(1)$

37. The determinant of a 2×2 square matrix is 1.6. If the sum of the eigenvalues is -2.8, the eigenvalues are

(A) -2 and -0.8

(B) -1.8 and -1

(C) -3 and 0.2

(D) -1.2 and -1.6

38. A flat belt of negligible mass and thickness drives an output pulley of 0.6 m diameter, rotating at 500 rpm without slip. The arc of contact is 190° for this pulley, while it is 170° for the smaller input pulley. The coefficient of friction between the belt and the pulleys is 0.30. The measured slack side tension is 250 N. Neglecting other losses, the power transmitted by the belt drive, in kW, is nearest to (take $\pi = 3.14$)

(A) 4.8

(B) 5.6

(C) 6.5

(D) 7.3

39. A tractor PTO runs at a constant speed of 540 rpm to drive a rotary tiller through a flange coupling having a shear pin parallel to the shaft. The shear pin axis is located 60 mm from the PTO shaft axis. The allowable shear stress of the pin material is 200 MPa. For overload safety, the pin must fail at 150% of the rated torque to protect the gearbox. The tiller requires 40 kW under normal load at the rated PTO speed. Neglecting bending, stress concentration effects, and other losses, the pin diameter, in mm, is nearest to (take $\pi = 3.14$)

(A) 7.5

(B) 10.6

(C) 6.1

(D) 8.6

40. A small horizontal axis wind turbine (HAWT) is designed to deliver 2 kW shaft power at a steady wind speed of $7\ \mathrm{m.s^{-1}}$. The HAWT operates with an aerodynamic power coefficient of 0.36, a drivetrain efficiency of 0.90, and an air density of $1.225\ \mathrm{kg.m^{-3}}$. Neglecting other losses, the required rotor diameter is X m. When the wind speed drops to $6\ \mathrm{m.s^{-1}}$, the shaft power is Y kW. Identify the nearest correct option for the X and Y combination (take $\pi = 3.14$)

(A) $X = 6.12$ m
$Y = 1.28$ kW

(B) $X = 3.06$ m
$Y = 0.63$ kW

(C) $X = 6.12$ m
$Y = 2.00$ kW

(D) $X = 6.75$ m
$Y = 1.50$ kW

41. The ratio of moisture content on wet basis to moisture content on dry basis for wheat grain is 4:5. The ratio of weight of dry matter to weight of water in the grain is

(A) 4:1

(B) 4:5

(C) 1:4

(D) 5:4

42. A refrigeration system based on reverse Carnot cycle operates between $-30\,^{\circ}C$ and $20\,^{\circ}C$. The refrigeration capacity of the system is 70 kW. Heat rejected at the condenser to atmosphere (hot reservoir), in kW, is nearest to

(A) 84.40

(B) 14.41

(C) 186.67

(D) 116.67

43. A 2 mm diameter electric wire is insulated with 2 mm thick plastic. The plastic has a thermal conductivity of $0.5\ W.m^{-1}.K^{-1}$. The wire is exposed to air at 320 K and outside convective heat transfer coefficient is $25\ W.m^{-2}.K^{-1}$. Wire surface temperature is constant at 420 K and remains unaffected by the covering. Assuming steady state heat transfer conditions, the ratio of heat loss per metre of wire length with insulation to that without insulation is nearest to (Take $\pi = 3.14$)

(A) 2.58

(B) 0.39

(C) 1.87

(D) 0.54

44. In grinding of black pepper, 80% feed passes through 6 mm screen, and 80% product passes through 0.5 mm screen. The gross energy required is 10 kW.h per ton of material. Assuming Bond's law holds good, and for the same feed conditions, if 80% product passes through 0.2 mm screen, the energy required, in kW.h per ton of material, is nearest to

(A) 18.17

(B) 9.09

(C) 5.50

(D) 11.00

45. A single effect evaporator is used to concentrate orange fruit juice with 2.7:1 concentration ratio of product solid to feed solid. The juice is fed to the evaporator at $100\ kg.h^{-1}$ and $30\ °C$, where the product moisture evaporates at $60\ °C$. The specific heat of juice is $3.9\ kJ.kg^{-1}.°C^{-1}$. The latent heat of vaporisation at 60 °C is $2450\ kJ.kg^{-1}$. Heat to accomplish the evaporation, in $MJ.h^{-1}$, is nearest to

(A) 165.96

(B) 117.06

(C) 154.26

(D) 142.56

46. At $60\ °C$ dry bulb temperature, saturated water vapour pressure is 20 kPa and relative humidity is 20%. The corresponding absolute humidity of air at atmospheric pressure is nearest to (Take molecular weight of water = 18.02 $g.mol^{-1}$, molecular weight of air = 28.97 $g.mol^{-1}$, and atmospheric pressure = 101.325 kPa)

(A) 0.026

(B) 0.032

(C) 0.004

(D) 0.041

47. Pasteurisation of milk can be carried out either at 91 °C for 3 s or at 73 °C for 30 s to inactivate vegetative cells of microorganism(s). The sterilisation value is 10 in both the cases. Thermal death time constant (z value) for reference temperatures of 73 °C and 91 °C, in °C, is nearest to

(A) 18.0

(B) 1.8

(C) 9.0

(D) 0.9

48. Mass fractions of carbohydrate, protein, fat, ash, and water in banana are 0.220, 0.010, 0.005, 0.015, and 0.750, respectively. The density of carbohydrate, protein, fat, ash, and water are 1550, 1220, 900, 610, and 1000 $kg.m^{-3}$, respectively. The density of banana, in $kg.m^{-3}$, is nearest to

(A) 1116.85

(B) 1056.05

(C) 1000.00

(D) 1107.70

49. The following two vectors are adjacent sides of a parallelogram: $\vec{A} = 2\hat{i} + 3\hat{j} - \hat{k}$ and $\vec{B} = 5\hat{i} - 4\hat{k}$.

The magnitude of area of the parallelogram is _____ (Rounded off to two decimal places)

50. While solving the equation $e^{-x} - x = 0$ for x, using the Newton-Raphson method with initial guess $x_0 = 2$, the solution after the first iteration (x_1) is _____ (Rounded off to two decimal places)

51. A four-cylinder four-stroke engine (100 mm bore and 120 mm stroke) runs at 1800 rpm mean speed with 0.9 MPa indicated mean effective pressure (IMEP).
The flywheel constant (ratio of the energy fluctuation to the indicated work per crankshaft revolution) is 0.30. All other losses are neglected.
For an allowable speed fluctuation of ±1% about the mean, the required flywheel mass moment of inertia (in $kg.m^2$) is _____. (Rounded off to two decimal places)
(Take $\pi = 3.14$)

52. A 2WD tractor has to develop 30 kN gross tractive force at the ground. Rolling radius of the rear-wheels is 0.73 m.
Each rear-wheel is driven by a simple planetary final-drive in which sun gear (26 teeth) is input, ring gear (78 teeth) is fixed, and the carrier is bolted to the rear-wheel hub.
The sun-planet external mesh efficiency is 98.5%, while the planet-ring internal mesh efficiency is 99%. Losses upstream of the final-drive are neglected.
The required sun-shaft input torque per rear-wheel (in kN.m) is _____. (Rounded off to two decimal places)

53. A tractor-mounted boom sprayer carries a horizontal row of 12 identical flat-fan nozzles (spray angle 110°). To achieve uniform coverage, the required lateral overlap between adjacent nozzle footprints at the target plane is 30% of a single nozzle footprint. Boom height is 0.60 m above the target plane.

The tractor is set to travel at a theoretical forward speed of 8 km/h. Wheel slip is 8% and the field efficiency is 75%. All other losses are neglected.

The total time (in minutes) required to spray a 25 ha field is _____. (Rounded off to the nearest integer)

54. A stationary Ackerman-steer tractor on a dry, clean concrete surface carries 12 kN vertical load on each front steered wheel of 0.28 m nominal tyre width (b). Assume uniform pressure distribution on the circular tyre-print area having diameter b. Effective friction coefficient between tyre and surface is 0.30.

The steering is individually power-assisted by a single-rod hydraulic cylinder, acting through a pitman arm resulting in 60 mm effective moment arm. The hydraulic relief valve is set to 8 MPa, and the cylinder bore is 32 mm (ignore rod area). Neglect other losses.

The maximum kingpin offset (in mm), which does not cause the maximum allowable kingpin torque to be exceeded, is _____. (Rounded off to the nearest integer)

(Take $\pi = 3.14$)

55. An 8 x 20 cm seed drill has a 0.60 m diameter ground wheel. On a hard-surface calibration stand, the drill delivers 814 g of seeds in 30 wheel revolutions.
When operated in a field having soft soil, the wheel's effective rolling circumference reduces by 4%. Neglecting other losses, the actual-field seed application rate (in kg/ha) is _____. (Rounded off to two decimal places)
(Take $\pi = 3.14$)

56. A tractor PTO shaft, through a spur-gear reduction, drives a small grain auger, the PTO running at the standard 540 rpm. The driving gear on the PTO shaft has a 0.18 m pitch circle diameter.
The auger requires 3.5 kW, transmitted through this gear. The normal force along the line of action between the meshing teeth is 760 N. Assume involute spur gears, single tooth contact, and neglect friction.
The pressure angle (in degrees) is _____. (Rounded off to two decimal places)
(Take $\pi = 3.14$)

57. A homogeneous earthen embankment has an upstream water level of 12 m. The top width of the embankment is 3 m, and its upstream and downstream slopes (horizontal:vertical) are 2 : 1 and 2.5 : 1, respectively. A freeboard of 2 m is provided. The coefficient of permeability of the fill material is 2.5×10^{-5} m/s. If a 20 m long horizontal filter is placed inward from the downstream toe, the seepage discharge per unit length of the embankment is $n \times 10^{-5}$ m^3/s per m. The value of n is _____.
(Rounded off to two decimal places)

58. A 0.80 km^2 agricultural watershed has a slope of 0.30% and the maximum length of travel of water is 1 km. The 10-year maximum depth of rainfall is tabulated below:

Duration (minutes)	**5**	**10**	**20**	**30**	**40**	**60**
Maximum depth of rainfall (mm)	16	24	39	50	60	65

Half of the watershed has row crops (runoff coefficient = 0.40), whilst the other half of the watershed has pasture (runoff coefficient = 0.35). The peak flow rate for the watershed (in m^3/s) for the 10-year return period is _____. (Rounded off to two decimal places)

59. Two catchments M and N are meteorologically similar. The basin length (L), length to the centroid (L_{ca}), and the drainage area (A) of catchment M are 36 km, 18 km, and 250 km^2, respectively. The L, L_{ca} and A for catchment N are 50 km, 30 km, and 400 km^2, respectively.
For a 6-h unit hydrograph in catchment M, the peak discharge of 50 m^3/s occurs at 12 h from the beginning of the rainfall excess. Using Snyder's method, the peak of the 6-h unit hydrograph for catchment N (in m^3/s) is _____. (Rounded off to two decimal places)

60. Two rectangular channels, A and B, join to form a large rectangular channel, C. Each rectangular channel is lined with the same material and has the same bottom slope. The bottom widths of Channels A and B are 2 m and 1 m, respectively. If the flow depth in each channel is 2 m, the bottom width of Channel C (in m) is _____. (Rounded off to two decimal places)

61. A well fully penetrates a 30 m thick confined aquifer. After a long period of pumping at a constant rate of 0.06 m^3/s, drawdowns of 3.6 m and 2.0 m are found at distances 60 m and 120 m away from the well, respectively. The hydraulic conductivity of the aquifer is $n \times 10^{-4}$ m/s. The value of n is _____ (Rounded off to two decimal places)

62. Bench terraces are planned on 15% hill slope. The vertical interval is 2.5 m, and the riser has a slope of 1 : 1. The earthwork in cutting is equal to the earthwork in filling. The volume of earthwork per hectare (in m^3/ha) is _____ (Rounded off to the nearest integer)

63. An undisturbed soil sample is collected from a field with core cylinder having an internal diameter of 60 mm and length of 100 mm. The weights of moist soil and oven dried soil are 0.48 kg and 0.44 kg, respectively. Assuming density of water as 1000 kg/m^3, the water depth (in metres per metre depth of soil) is _____ (Rounded off to two decimal places)

64. The crop period is divided into four stages, initial, grand growth, mid-season, and late-season, with each stage spanning 25 days. The crop coefficient (K_c) varies linearly from 0.4 at the initial stage to 1.2 at the mid-season stage. The reference crop evapotranspiration on the 40th day is 8 mm. The corresponding actual crop evapotranspiration (in mm) is _____.

65. Uniformity of irrigation is checked in a border strip by measuring the water penetration depth at 16 equally spaced stations along the strip. The depths of penetration of water recorded (in mm) are as follows:

0.65 0.83 0.79 0.87
0.67 0.85 0.86 0.68
0.88 0.77 0.73 0.59
0.89 0.63 0.72 0.70

The distribution uniformity low-quarter (DULQ), in fraction, is _____.