

(To be filled up by the candidate by **blue/black ball-point pen**)

Roll No.

--	--	--	--	--	--	--	--

Roll No.

(Write the digits in words)

Serial No. of Answer Sheet

Day and Date

(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only **blue/black ball-point pen** in the space above and on both sides of the Answer Sheet)

1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall *except the Admit Card without its envelope.*
3. A separate Answer Sheet is given. *It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.*
4. Write your *Roll Number and Serial Number of the Answer Sheet* by pen in the space provided above.
5. *On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.*
6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and Roll No. and OMR sheet No. on the Question Booklet.
7. Any changes in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
8. Each question in this Booklet is followed by four alternative answers. *For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet.*
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. *Note that the answer once filled in ink cannot be changed.* If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit *only the OMR Answer Sheet* at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

[उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गये हैं।]

No. of Questions : 120**Time : 2 Hours]****[Full Marks : 360**

Note : (1) Attempt as many questions as you can. Each question carries 3 (three) marks. *One mark will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.*

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

1. Authority for efficient canal water management at field level is known as :
 - (1) Central water commission
 - (2) National water policy authority
 - (3) Command area development authority
 - (4) Central board of irrigation and power

2. An irrigation project is classified as a major project, when the culturable command involved in the project, is more than :
 - (1) 2000 hectares
 - (2) 5000 hectares
 - (3) 10,000 hectares
 - (4) None of the above

3. Darcy's law is valid under condition of :
 - (1) Laminar flow with Reynold's number > 10
 - (2) Reynold's number < 1
 - (3) Newtonian flow
 - (4) Steady uniform flow

4. In well drained soil, the useful soil moisture for plant growth essentially comes from :
 - (1) Gravity water
 - (2) Capillary water
 - (3) Hygroscopic water
 - (4) Water of adhesion

5. In drip irrigation design, the design criteria is generally based on an emitter flow variation of :
 - (1) $< 20\%$
 - (2) $> 20\%$
 - (3) $< 5\%$
 - (4) $< 10\%$

P. T. O.

6. Trapezoidal weir with 1 : 4 side slopes is known as :
- (1) Triangular weir (2) Rectangular weir
(3) Sharp crested weir (4) Cipolletti weir
7. The value of dimensionless Froude number $\left(\frac{V}{\sqrt{gh}}\right)$ for critical flow should be :
- (1) < 1 (2) $= 1$ (3) > 1 (4) < 0
8. The conjunctive use of water in a basin means :
- (1) Combined use of water for irrigation and hydro power generation
(2) Use of water by co-operative farmers
(3) Use of water for irrigating both rabi and kharif crops
(4) Combined use of surface and ground water resources
9. The line of equal depth of ground water level is known as :
- (1) Isolytes (2) Isochrones (3) Isobars (4) Isobaths
10. Time-domain reflectometry (TDR) is the method of monitoring :
- (1) Soil moisture (2) Vapour pressure
(3) Salt concentration (4) Solar radiation
11. From the hydraulic efficiency point of view, the most efficient cross-section of an open channel is :
- (1) Semi-circular (2) Trapezoidal
(3) Parabolic (4) Rectangular
12. Particle density and bulk density of a soil are 2.8 g/cm^3 and 1.4 g/cm^3 , its void ratio will be :
- (1) 1.0 (2) 0.5 (3) 1.4 (4) 2.8
13. A practical method of reducing sheet erosion from sloping lands is :
- (1) Keeping the land fallow (2) Farming on contour strips
(3) Construction of small reservoirs (4) Using plastic sheet cover
14. Casagrande's apparatus is used to determine :
- (1) Liquid limit (2) Shrinkage limit
(3) Plastic limit (4) Elastic limit

15. Plant roots extract moisture from soil by a process called :
- (1) Osmosis (2) Hydrolysis
(3) Photosynthesis (4) Respiration
16. Area under a hydrograph represents :
- (1) Volume of runoff (2) Area of watershed
(3) Volume of rainfall (4) Average rate of runoff
17. Curve number represents :
- (1) Rainfall property (2) Runoff trend
(3) Watershed feature (4) Stream flow feature
18. The dimension of intrinsic permeability :
- (1) $M^0L^2T^{-1}$ (2) $M^0L^2T^{-2}$ (3) $M^0L^0T^0$ (4) $M^0L^2T^0$
19. The velocity head in the case of fluid flow is the :
- (1) Kinetic energy per unit area (2) Kinetic energy per unit flow area
(3) Kinetic energy per unit weight (4) Kinetic energy per unit time
20. A critical condition of flow :
- (1) Specific energy is minimum (2) Viscous force is minimum
(3) Specific energy is maximum (4) Total force is maximum
21. If the diameter of a pipe is halved, flow of water in it experiences the increase in the head loss due to friction :
- (1) Two times (2) Ten times
(3) Four times (4) Sixteen times
22. A plot between rainfall intensity versus time is called as :
- (1) Hydrograph (2) Mass curve
(3) Hyetograph (4) Isohyet

23. In Rational formula, $Q = CiA$, i standard for :
- (1) Intensity of rainfall
 - (2) Runoff coefficient
 - (3) Hydraulic gradient
 - (4) Mean intensity of rainfall for a duration equal to time of concentration
24. If the saturated hydraulic conductivity of a soil is 1 m/day, the rate of water transmission across a rectangular area 100 m long and 1 m height under a unit hydraulic gradient will be :
- (1) 10 m³/day
 - (2) 1 m³/day
 - (3) 100 m³/day
 - (4) 1000 m³/day
25. Hydraulic conductivity is the proportionality constant in :
- (1) Bernauli's equation
 - (2) Darcy's equation
 - (3) Rational formula
 - (4) Laplace's equation
26. Hydraulic jump takes place when the flow changes :
- (1) From sub critical to critical
 - (2) From critical to super critical
 - (3) From super critical to sub critical
 - (4) From sub critical to super critical
27. Pumps used in surface drainage works are of the type :
- (1) Centrifugal
 - (2) Axial
 - (3) Reciprocating
 - (4) Treadle
28. An aquifer bounded by a partially pervious layer and below by a layer that is either impervious or partially pervious is called :
- (1) Confined aquifer
 - (2) Unconfined aquifer
 - (3) Semi-confined aquifer
 - (4) Perched aquifer
29. A centrifugal pump delivers 10 L/sec water against a total head of 7.5 m for 10 hours. The energy consumption is :
- (1) 1.00 KW
 - (2) 7.46 K Wh
 - (3) 10.00 KWh
 - (4) 74.6 K Wh
30. A foot valve is used in a centrifugal pumping system so as to :
- (1) Measure the flow
 - (2) Give strength at the foot
 - (3) Keep it primed
 - (4) Control water entry

31. The power consumption of a centrifugal pump varies as :
- (1) First power of speed
 - (2) Second power of speed
 - (3) Third power of speed
 - (4) Fourth power of speed
32. Hydrologic soil Group-A stands for :
- (1) Low runoff potential
 - (2) Moderately low runoff potential
 - (3) Moderately high runoff potential
 - (4) High runoff potential
33. The latest method of the estimation of PET (potential evapotranspiration) is :
- (1) Penman's Equation
 - (2) Blaney criddle formula
 - (3) Class A pan evaporation
 - (4) Penman Monteith Equation
34. With increase in supplied irrigation water, the yield of crops :
- (1) Increases continuously
 - (2) Increases up to a certain limit and then becomes constant
 - (3) Decreases continuously
 - (4) Increases up to a certain limit and then decreases
35. In standard design of drip irrigation system, the maximum allowed pressure variation within the entire network is :
- (1) 5%
 - (2) 10%
 - (3) 15%
 - (4) 20%
36. Cut-fill ratio in land leveling is kept around :
- (1) 1.2
 - (2) 0.8
 - (3) 2.0
 - (4) 4.0
37. Submersible pumps are suitable for the condition where :
- (1) Water is to be lifted from smaller depths
 - (2) Water is to be lifted from deep tube well
 - (3) Large quantity of water is required
 - (4) Any where

38. Hydraulic ram is most suited to lift water from :
- (1) Open wells
 - (2) Shallow **tube wells**
 - (3) Deep tube wells
 - (4) Rivers in **hilly regions**
39. Application rate in sprinkler irrigation should be :
- (1) More than infiltration rate
 - (2) Equal to **infiltration rate**
 - (3) Lesser than infiltration rate
 - (4) Irrespective of **infiltration rate**
40. In a cavity well :
- (1) length of screen is kept $\frac{1}{3}$ of aquifer thickness
 - (2) length of screen is kept $\frac{1}{2}$ of well depth
 - (3) No screen is provided
 - (4) Screen is provided to cover the cavity
41. Thiessen polygon is used to :
- (1) find area of a polygon
 - (2) perimeter of a polygon
 - (3) average depth of rainfall
 - (4) average depth of runoff
42. Measure of dryness of a region is referred to as :
- (1) Aridity index
 - (2) Drying coefficient
 - (3) Humidity
 - (4) Anti-wetness index
43. Field capacity, wilting point etc are referred to as :
- (1) Soil moisture coefficients
 - (2) Soil moisture constants
 - (3) Soil moisture indices
 - (4) Soil moisture standards
44. The stilling basin with a chute spillway is provided for :
- (1) Energy formation
 - (2) Energy dissipation
 - (3) Wave formation
 - (4) Flow measurement
45. The conjunctive use of water in a basin means :
- (1) Combined use of water for irrigation and hydro power generation
 - (2) Use of water for irrigation both rabi and kharif crops
 - (3) Use of water by co-operative farmers
 - (4) Combined use of surface and ground water resources

46. The movement of soil particles having sizes in the range of 0.05 to 0.5 mm through a series of benches is known as :
- (1) Surface creep (2) Saltation
(3) Surface transportation (4) Suspension
47. Froude number is the ratio of the :
- (1) Inertial force to the shear force
(2) Inertial force to the gravitational force
(3) Inertial force to the viscous force
(4) Viscous force to the gravitational force
48. Frequency-domain reflectometry (FDR) is the method of monitoring :
- (1) Soil moisture (2) Solar radiation
(3) Vapor pressure (4) Salt concentration
49. A circular shaped watershed has a Form Factor of :
- (1) 0.78 (2) 1.57 (3) 1 (4) 3.14
50. Rain drops are spherical in shape because of :
- (1) Surface tension (2) Cohesion and adhesion
(3) Capillary (4) Acceleration due to gravity
51. Water horse power of a centrifugal pump of 10 litre/sec capacity and 30 meter total head will be equal to :
- (1) 3 (2) 4 (3) 5 (4) 6
52. If the electrical conductivity of irrigation and drainage water is 0.2 mmhos/cm and 0.4 mmhos/cm respectively, the leaching requirement will be equal to :
- (1) 80% (2) 50% (3) 40% (4) 20%
53. 10 cm of irrigation is applied to a field. 1 cm goes as runoff loss and 2 cm goes as percolation loss. The application efficiency is :
- (1) 90% (2) 80% (3) 60% (4) 70%

54. Subsurface drains remove :
- (1) Excess surface water
 - (2) Subsurface **gravitational** water
 - (3) Capillary subsurface water
 - (4) Excess **runoff water** from rainfall
55. A chute spillway is used to convey water for an elevation **difference** :
- (1) Less than 1 m
 - (2) 1 m
 - (3) 1 m to 2 m
 - (4) **More than 3 m**
56. A 75% dependable rainfall means :
- (1) Magnitude of rainfall equal to 75% of normal
 - (2) Rainfall will be equal to or more than the given value 75% of the time
 - (3) Chances of normal rainfall are 75%
 - (4) Rainfall will be less than the given value 75% of the time
57. The cumulative infiltration equation is $I = 2t^{0.5}$ (I in cm, t in minutes). The instantaneous infiltration rate at 4 minutes from start will be :
- (1) 0.1 cm/min
 - (2) 1.0 cm/min
 - (3) 0.5 cm/min
 - (4) 1.5 cm/min
58. A Gypsum block is used as a :
- (1) soil moisture measurement device
 - (2) soil amendment
 - (3) a device to stop flow
 - (4) a device to compact soils
59. Soil water moves from :
- (1) High potential to low potential
 - (2) Low potential to high potential
 - (3) High to low as well as low to high
 - (4) Potential and water flow are unrelated
60. GPS is a device :
- (1) To indicate position of a point on the globe
 - (2) To indicate position of the globe in a room
 - (3) To indicate position of earth in respect of the sun
 - (4) To determine if a series is GP (geometric progression)

61. Operating pressure for drip irrigation system is normally kept between :
- (1) 0-1 Kg/cm² (2) 5-10 Kg/cm²
 (3) 1-5 Kg/cm² (4) More than 10 Kg/cm²
62. "Classical tail enders problem" means :
- (1) Farmers having their land holdings at tail of a canal are problematic
 (2) Lesser availability of water at tail end of canal
 (3) Smaller land holdings are located at the tail end of canal
 (4) There is nothing called a tail enders problem
63. The term "conservation agriculture" represents :
- (1) Agriculture profession is conservative
 (2) Conserving the agricultural produce
 (3) Protecting crops
 (4) Optimize use of available natural resources
64. A pressure compensating emitter :
- (1) Maintains constant pressure all along the laterals
 (2) Maintains constant discharge along the lateral
 (3) Maintains constant discharge of an emitter
 (4) Maintains pressure and discharge in permissible range
65. Effective rainfall in irrigation planning is equal to :
- (1) Total rainfall (2) Rain water stored in root zone
 (3) Rainfall - runoff (4) Rainfall + runoff
66. IW/CPE ratio is used for :
- (1) Irrigation scheduling (2) Fixing irrigation duration
 (3) Fixing fertilizer dose (4) Determining soil moisture
67. Wheat crop requires about 7.5 cm depth of water after every 28 days and base period for wheat is 140 days. What will be the value of delta for wheat ?
- (1) 40.2 cm (2) 37.5 cm (3) 36 cm (4) 30.2 cm

68. A cross regulator is provided on a main canal :
- (1) to minimize the amount of silt entering the branch canal
 - (2) to let maximum silt is carried into the branch canal
 - (3) for no specific purpose
 - (4) to carry the canal across the drain
69. Rivers meander but man made canals do not, why ?
- (1) Straight canals look good
 - (2) Rivers are made by Almighty to cover larger area
 - (3) General slope of earth surface is more too high to sustain uniform flow
 - (4) Rivers do not like to move straight
70. The standard recording rain gauge adopted in India :
- (1) Weighing bucket type
 - (2) Natural syphon type
 - (3) Tipping bucket type
 - (4) Telemetry type
71. The standard unit of expressing specific gravity of solids is :
- (1) g/cm^3
 - (2) g/cc
 - (3) kg/m^3
 - (4) $1/\text{m}^3$
72. Isobaths maps indicates :
- (1) Areas affected by high water table problems
 - (2) Flow of water
 - (3) Extent of salinity
 - (4) Amount of ground water
73. In an underground pipeline water distribution system a pump stand is provided for :
- (1) Holding the pump
 - (2) Plate form near the pump to stand
 - (3) Feeding pumped water
 - (4) Stopping the pump in emergency
74. Crop factor relates :
- (1) Crop yield and water used
 - (2) Crop yield and temperature
 - (3) PET and ETc
 - (4) PET and pan evaporation

75. Black zones are the areas identified for :
- (1) Uncontrolled further development of ground water
 - (2) No relation with ground water utilization
 - (3) Ground water exploitation with caution
 - (4) No further exploitation of ground water
76. An 'S' curve in hydrology is obtained by summing :
- (1) Rainfall
 - (2) Runoff
 - (3) Snowfall
 - (4) Evaporation
77. The line joining the static water levels in several wells, excavated through a confined aquifer, is known as the :
- (1) cone of depression
 - (2) perched water table
 - (3) piezometric surface
 - (4) hypsometric curve
78. Pond infiltration test is used for determining :
- (1) Recharge rate
 - (2) Capacity of pond
 - (3) Infiltration rate
 - (4) Hydraulic conductivity
79. Mole drainage is suitable under :
- (1) Sandy soils
 - (2) Clay soils
 - (3) Loam soils
 - (4) Rocky soils
80. Infrared thermometer gun is used for :
- (1) Scaring away animals
 - (2) Soil temperature
 - (3) Canopy temperature
 - (4) Fraction of infrared light
81. What for the cocopeat, perlite and agropeat are used :
- (1) As organic manure
 - (2) A substitute for soil
 - (3) As fertilizers
 - (4) As plant protection chemicals Correct
82. A drop spillway is used for :
- (1) Erosion control
 - (2) Flow measurement
 - (3) Flow diversion
 - (4) Flow regulation

83. In a wide open channel, the hydraulic radius is practically equal to :
- (1) Flow depth
 - (2) Flow width
 - (3) Flow area
 - (4) Wetted perimeter
84. When a canal is carried over a natural drain, at crossing, the structure provided is called :
- (1) syphon
 - (2) aqueduct
 - (3) super passage
 - (4) level crossing
85. For a row crops, e.g. potatoes, sugarbeets etc. the most commonly adopted method of surface irrigation :
- (1) check flooding
 - (2) free flooding
 - (3) basin flooding
 - (4) furrow and corrugation irrigation
86. The centrifugal pumps are used for pumping water when :
- (1) Both head and discharge are high
 - (2) Discharge is high and head is low
 - (3) Both discharge and head low
 - (4) Discharge is low and head is high
87. Mathematical equation used to describe saturated-unsaturated flow of water in drip irrigation :
- (1) Richard equation
 - (2) Continuity equation
 - (3) Bernoulli's theorem
 - (4) Laplace equation
88. Water logging is eliminated by :
- (1) Deep ploughing
 - (2) Shallow ploughing
 - (3) Irrigation
 - (4) Providing the drains
89. Irrigation water having an SAR value of 20 is called as :
- (1) very high sodium water
 - (2) high sodium water
 - (3) medium sodium water
 - (4) low sodium water
90. Hydrologic Soil Group-A stands for :
- (1) Low runoff potential
 - (2) Moderately low runoff potential
 - (3) Moderately high runoff potential
 - (4) High runoff potential

91. Which of the following mineral particle size is classified as silt according ISSS :
- (1) 0.05 to 0.1 mm (2) 0.002 to 0.05 mm
(3) 0.002 to 0.002 mm (4) None of the above
92. The time of concentration of a watershed is proportional to :
- (1) $L^{1.77}$ (2) $S^{-0.385}$ (3) $L^{1.77} S^{0.385}$ (4) $S^{0.385}$
93. When two centrifugal pumps are operated in series, the discharge :
- (1) increases (2) decreases
(3) remains constant (4) stop functioning
94. Flow in an irrigation channel is considered as :
- (1) Gradually varied (2) Spatially varied
(3) Rapidly varied (4) Uniform
95. A difference of 5 cm is recorded in a manometer whose two ends are connected 10 cm apart on a flowing pipe. The hydraulic gradient is :
- (1) 5.0 (2) 2.0 (3) 0.5 (4) 50.0
96. The Froude's number of flow in an open rectangular channel 1 m wide and 1 m depth of flow is 1.5. The flow velocity is approximately :
- (1) 4.7 m/sec (2) 1 m/sec (3) 1.5 m/sec (4) 3 m/sec
97. The head loss due to friction when water flows through a pipe is proportional to :
- (1) Velocity (2) Square of velocity
(3) Square root of velocity (4) Reciprocal of velocity
98. Land use capability classification is primarily based on :
- (1) Soil texture (2) Rainfall
(3) Ground water (4) Land slope
99. Land having slopes of more than 10 per cent should be cultivated only after making :
- (1) Contour trenches (2) Contour benches
(3) Broad based terraces (4) Bench terraces

100. The water holding capacity of soil will be highest if it contains more of :
(1) Organic matter (2) Sand (3) Clay (4) Large pores
101. Wheat crop requires about 7.5 cm depth of water after every 28 days and base period for wheat is 140 days. What will be the value of delta for wheat ?
(1) 40.2 cm (2) 37.5 cm (3) 36 cm (4) 30.2 cm
102. The land is said to be waterlogged, if the soil pores within :
(1) a depth of 40 cm is saturated
(2) a depth of 60 cm is saturated
(3) root zone of crops is saturated
(4) soil up to ground water table is saturated
103. Land having no significant limitations to sustained application of a given use can be put under the class :
(1) Class S1 (2) Class S2
(3) Class S3 (4) Class SN
104. Which one of the following defines aridity index (AI) ?
(1) $AI = \frac{PET - AET}{PET} \times 100$ (2) $AI = \frac{PET}{AET} \times 100$
(3) $AI = \frac{AET}{PET} \times 100$ (4) $AI = \frac{AET - PET}{AET} \times 100$
105. Platy structure soils are :
(1) Maximum water transmitting (2) Good for crop production
(3) Least water transmitting (4) Black in colour
106. A linear reservoir is one in which :
(1) Volume varies linearly with elevation
(2) The storage varies linearly with the outflow rate
(3) The storage varies linearly with time
(4) The storage varies linearly with the inflow rate

107. Which soil structure breaks easily into small pebbles ?
 (1) granular (2) alluvium (3) rill erosion (4) soil testing
108. Small watersheds are those, in which :
 (1) Runoff is major flow (2) Overland flow is major flow
 (3) Base flow is major flow (4) All of the above
109. The difference between a shallow tube well and a deep tube well is on the basis of :
 (1) Depth of the tube well (2) Position of water table and pump
 (3) Type of aquifer (4) Depth of aquifer
110. In a radial centrifugal pump, the inlet angle will be designed to have :
 (1) Relative velocity vector in the radial direction
 (2) Absolute velocity vector in the radial direction
 (3) Velocity of flow to be zero
 (4) Peripheral velocity to be zero
111. Pressure plate apparatus is used for the measurement of soil moisture tension up to :
 (1) 10 bars (2) 15 bars (3) 50 bars (4) 100 bars
112. The normal range in specific speeds (MKS units) encountered in single suction impeller design is :
 (1) 10-300 (2) 300-500
 (3) 500-1500 (4) None of the above
113. Binding of tiles refers to :
 (1) Trenching the drain (2) Laying the tiles
 (3) Joining the tiles (4) Covering the tiles with loose earth
114. Coefficient of storage is a property of :
 (1) Confined aquifer (2) Unconfined aquifer
 (3) Semi-confined aquifer (4) None of them are

- 115.** Leakage factor has the dimensions of :
- (1) Length
 - (2) Time
 - (3) Velocity
 - (4) Resistance
- 116.** The portion of a chute spillway, which is known as its control structure, is :
- (1) Low ogee weir
 - (2) Chute channel
 - (3) Approach channel leading the water from the reservoir to the ogee weir
 - (4) Stilling basin at its bottom
- 117.** Corrosion of tube well pipes may cause :
- (1) reduced discharge from the tube well
 - (2) excessive discharge of sand with water
 - (3) discharge of highly alkaline water
 - (4) none of the above
- 118.** The capillary fringe also called :
- (1) Suspended water
 - (2) Vadose water
 - (3) Gravity water
 - (4) All of the above
- 119.** Removal of a thin and fairly uniform layer of the soil from the land surface by runoff water is called :
- (1) Torrent erosion
 - (2) Sheet erosion
 - (3) Glacial erosion
 - (4) Geologic erosion
- 120.** The universal soil loss equation, primarily developed for small watersheds, estimates :
- (1) Permissible annual soil loss
 - (2) Maximum annual soil loss
 - (3) Average annual soil loss
 - (4) Minimum permissible annual soil

अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल नीली/काली बाल-प्वाइंट पेन से ही लिखें)

1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख ले कि प्रश्नपत्र में सभी पृष्ठ मौजूद हैं और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
2. परीक्षा भवन में लिफाफा रहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
3. उत्तर-पत्र अलग से दिया गया है। इसे न तो मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा। केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
4. अपना अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से निर्धारित स्थान पर लिखें।
5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक संख्या और ओ० एम० आर० पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।
7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
11. रफ कार्य के लिये इस पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा अंतिम खाली पृष्ठ का प्रयोग करें।
12. परीक्षा के उपरान्त केवल ओ० एम० आर० उत्तर-पत्र ही परीक्षा भवन में जमा करें।
13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।
14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की भागी होगा/होगी।