	Soil	& Water Conseveration
	11P/289/2	
Set No: (1)	c	Question Booklet No 160
(To be	filled up by the candidate by blue/blac	ck ball-point pen)
Roli No.		
Roli 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 Bookiet 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 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 गए हैं]

Total No. of Printed Pages : 23

No. of Questions : 120 प्रश्नों की संख्या : 120

 Time : 2 hours]
 [Full Marks : 360

 समय : 2 घण्टे]
 [प्रणाँक : 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.

> अधिकाधिक प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न 3 (तीन) अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जायेगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा।

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

यदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हों, तो निकटतम सही उत्तर दें।

- 1. The arithmetic mean method for computing missing rainfall data is suitable, when normal annual precipitations of various stations are within
 - (1) 10% of the normal annual precipitation of missing station
 - (2) 20% of the mean annual precipitation at the missing station
 - (3) 10% of the mean annual precipitation at the missing station
 - (4) 15% of the normal rainfall at missing station

- 2. The flow velocity of run-off at which washing of soil particle takes place is called as
 - (1) Maximum velocity (2) Permissible velocity
 - (3) Critical velocity (4) Super critical velocity
- 3. The average rainfall in India is about
 - (1) 1194 mm (2) 1384 mm (3) 1391 mm (4) 2000 mm
- 4. Infiltration is measured by
 - (1) Cylindrical metal rings (2) USWB class A Pan
 - (3) Lysimeter (4) Rain gauge
- 5. Evaporation from water surface is the process by which liquid on free surface is transformed into
 - (1) a solid state (2) clouds
 - (3) a gaseous state (4) rainfall
- 6. Evaporation from a free water surface is measured by
 - (1) Lysimeter (2) Infiltrometer
 - (3) USWB class A Pan (4) Anemometer
- 7. Infiltration index is the most commonly used method for determination of the
 - (1) Infiltration rate
 - (2) Cumulative infiltration
 - (3) Abstraction from precipitation
 - (4) Consumptive use

- Diameter of rainfall collector in Non-recording type rain gauge is

 8 cm
 13.5 cm
 12.7 cm
 30 cm

 A hyetograph is drawn as a plot of

 (1) run-off discharge vs. time
 - (2) rainfall intensity vs. time
 - (3) cumulative runoff vs. time
 - (4) rainfall volume vs. time
- 10. The mass rainfall curve is drawn as a plot of
 - (1) rainfall intensity vs. time
 - (2) accumulated rainfall depth vs. time in a chronological order
 - (3) cumulative rainfall intensity vs. time
 - (4) rainfall volume vs. time
- 11. Thiessen polygons are drawn by
 - (1) joining rain gauge stations
 - (2) drawing lines of equal elevation
 - (3) drawing perpendiculars of lines joining rain gauge stations
 - (4) drawing lines of equal rainfall
- **12.** Isohyets are drawn by
 - (1) joining rain gauge stations
 - (2) drawing lines of equal elevation
 - (3) drawing perpendiculars of lines joining rain gauge stations
 - (4) drawing lines of equal precipitation depth for a given duration

13.	While calculating optimal numb error for estimation of rainfall i	er of stations in a watershed, the allowable s generally taken as
	(1) 2% (2) 8%	(3) 10% (4) 25%
14.	Which of the following is the stream velocity?	most accurate instrument for measuring
	(1) Coshocton wheel	(2) Surface float
	(3) Current meter	(4) H-flume
15.	Base flow is separated from a	
	(1) Surface hydrograph	(2) Flood hydrograph
	(3) Unit hydrograph	(4) Hyetograph
16.	A Unit hydrograph consist of o	ne unit of
	(1) Effective rainfall duration	(2) Peak discharge
	(3) Hydrograph time base	(4) Direct runoff
17.	If a watershed has high drainag compared to that of a low drain the same, will be	e density then the peak of its hydrograph age density, when all other factors remain
	(1) Sharp crested	(2) Wide crested
	(3) Flat crested	(4) Double crested
18.	In a watershed the number of r	on-recording rain gauge is installed as
	(1) 10	
	(2) 20	
	(3) 90% of the total estimated	rain gauge station
	(4) 5	

(4)

19.	In Rational formula i.e. $Q_p = CIA/360$, the value of rainfall intensity (1) is expressed as		
	(1) cm/hr (2) mm/hr	(3) m/hr (4) m/sec	
20.	Unit of run-off coefficient in the	e Rational formula is	
	 (1) dimensionless (3) mm 	(2) cm (4) m	
21.	Watershed shape is evaluated b	у У	
	(1) Form factor		
	(2) Compactness factor		
	(3) Form factor and compactn	ess factor	
	(4) Stream density		
22.	A small size watershed is domi	nated by	
	(1) Surface run-off		
	(2) Base flow		
	(3) Overland flow		
	(4) Indirect run-off		
23.	A stream in which flow is conti	nued throught the year is called	
	(1) Ephemeral stream	(2) Perineal stream	
	(3) Intermittent stream	(4) Spring	
24.	Area of hydrograph represents	the	
	(1) Rainfall depth	(2) Run-off rate	
	(3) Total run-off volume	(4) Discharge rate	

(Turn Over)

25. Tensiometer can effectively measure soil moisture tension in the range of

(1)	0.0 to	1 atm	(2)	< 0.8 atm

- (3) 0 to 15 atm (4) 15 to 33
- 26. Readily available soil moisture to plants in the soil profile (root zone) is approx equal to
 - (1) 100% of available water holding capacity (AWHC)
 - (2) 50% of AWHC
 - (3) 10% of AWHC
 - (4) 50% of field capacity
- 27. The capillary water in the soil is mostly held between tension of about
 - (1) 0 to 0.01 bar (2) 1/3 bar to 15 bar
 - (3) 15 bar to 33 bar (4) 1 bar to 33 bar
- **28.** Adhesion is
 - (1) Attraction of similar molecules
 - (2) Attraction between two different molecules
 - (3) Both (1) & (2)
 - (4) None of the above
- 29. Wheat supplied with similar quantity of water will cause greatest uptake amongst the following in
 - (1) Saline soils (2) Alkali soils
 - (3) Sodic soils (4) Normal soils

30.	Normally the row	ot zone depth w	cons	sider	ed to be kept	free	from ground-	
	(1) 0.5 m	(2) 1.5 m		(3)	3 m	(4)	4 m	
31.	The relation bet	ween duty and	delta	ı is				
	(1) $\Delta = 864 \text{ B/J}$	D	(2)	Δ	= 860 B/D			
	(3) $\Delta = 864 \text{ D}/$	'B	(4)	No	one of the abov	re		
32.	Overall project India is about	irrigation effici	ency	in g	ovt, owned in	rigati	on projects in	
	(1) 10%	(2) 30%		(3)	60%	(4)	80%	
33.	In normal condi	tion water loss	fron	i sur	face irrigation	varic	s from	
	(1) 30 to 45%	(2) 25 to 30%	0	(3)	10 to 15%	(4)	15 to 20%	
34.	Canal lining is e	ssential to chec	k th	e				
	(1) Seepage los	ses	(2)	Eva	aporation losse	2S		
	(3) Growth of v	veeds	(4)	Flo	w rate of cana	1		
35.	PIM refers to							
	(1) Programme	of integrated n	nana	gem	ent			
	(2) Participator	y irrigation mai	nage	men	t			
	(3) Pressure irr	igation manage	men	t				
(4) Private irrigation management								
36.	Water meter is a	used for measur	ring	the				
	(1) Stream curr	rent	(2)	Pip	e flow			
	(3) Run-off		(4)	Ch	annel flow			

(7)

(Turn Over)

37.	Which of the following is not re	elated to irrigation ?
	(1) Check gate	(2) Water course
	(3) Turnout	(4) Coshocton wheel
38.	Which of the following term is	not related to drainage?
	(1) Venturi meter	(2) Mole
	(3) 20-40 rule	(4) Water logging
39.	Drainable water is the	
	(1) Hygroscopic water	(2) Capillary water
	(3) Gravitational water	(4) Perched water
40.	10 per cent drainable porosity soil	refers that on draining 1 cm water from
	(1) the water table gets lowere	d by 10 cm
	(2) the water table gets lowered by 1 cm	
	(3) 10% water volume has been	n removed
	(4) 100 mm depth of water ha	s been removed from the soil water
41.	Drainage period of vegetables i	S
	(1) 1 day (2) 2 days	(3) 3 days (4) 1 week
42.	Salinity problem can be control	lled by
	(1) Sub-surface drainage	(2) Surface drainage
	(3) Interceptor drains	(4) Tillage operation

(8)

43.	In soil, the available form of wa	In soil, the available form of water to the plant is	
	(1) Gravitational water	(2) Capillary water	
	(3) Hygroscopic water	(4) Ground water	
44.	Matric potential is the result of	phenomena of	
·	(1) Adhesion	(2) Capillarity	
	(3) Both (1) & (2)	(4) None of the above	ð
45.	A centrifugal pump running 14 head. The specific speed of the	450 RPM discharges 20 pump will be	0 lps at 30m total
	(1) 12 (2) 16	(3) 20	(4) 24
46.	Rate of water loss from a short is known as	green grass which is no	ever short of water
	(1) Consumptive use		
	(2) Evapotranspiration		
·	(3) Potential evapotranspiratio	n	
	(4) Transpiration		
47.	Which of the following crop is	most susceptible to wat	er logging
	(1) Fruits	(2) Vegetables	
	(3) Field crops	(4) Paddy	
48.	The ratio of volume of pores to	the volume of solid co	ntent is called
	(1) Void ratio	(2) Porosity	
	(3) Dry bulk density	(4) Wet bulk density	

(Turn Over)

(3) 30 mm/sec

49.	The safe entrance velocity through a well screen is		
	(1) 0.3 mm/sec	(2) 3 mm/sec	

50. An instrument used for measurement of Saturated hydraulic conductivity of soils is

(4) 300 mm/sec

(1)	Permeameter	(2) Hydrometer
(3)	Conductivity bridge	(4) Manometer

51. Ratio of volume of water added or removed directly from the saturated aquifer to the resulting change in volume of aquifer below the water table is called

(1)	Apparent specific yield	(2)	Specific yield
(3)	Storage coefficient	(4)	Specific storage

52. Groundwater refers to the water in

(1) Surface pond	(2) Aquifer
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(4) Capallaries (3) Soils

53. Confined aquifer is also known as

- (1) Water table aquifer (2) Artesian aquifer
- (3) Semi-confined aquifer (4) Perched aquifer
- 54. Unconfined aquifer is also known as
 - (1) Water table aquifer
 - (2) Artesian aquifer
 - (3) Semi-confined aquifer
 - (4) Perched aquifer

- 55. Perched aquifer is located
 - (1) Below main water table
 - (2) Above the main water table
 - (3) Just below the water table
 - (4) None of the above
- 56. A well installed in confined aquifer always contains
 - (1) Higher water level than static groundwater table
 - (2) Lower water level than static water table
 - (3) Same water level as static water table
 - (4) Very less yield of water
- 57. Semi-confined aquifer is also known as
 - (1) Semi-unconfined aquifer (2) Leaky aquifer
 - (3) Perched aquifer (4) Water table aquifer
- 58. The formation which contains sufficient water but has very small quantity to transfer the water is called
 - (1) Aquifuse (2) Acquictude
 - (3) Aquitard (4) Blind aquifer
- 59. Porosity of soil formation is the ratio of
 - (1) Volume of formation to the volume of voids
 - (2) Volume of voids to the volume of formation
 - (3) Water volume to the soil volume
 - (4) Per cent micropores in the formation

- 60. Cavity well is the
 - (1) Shallow well (2) Artesian well
 - (3) Deep well (4) Well gallery
- 61. Well log is prepared during
 - (1) Gravel packing (2) Well development
 - (3) Bore drilling (4) Strainer installation
- 62. Well development refers to
 - (1) Removal of well incrustation
 - (2) Increase in well discharge
 - (3) Removal of final particle from the area around the well screen
 - (4) Well testing
- 63. Mechanical incrustation refers to the
 - (1) Deposition of slims of iron bacteria
 - (2) Deposition due to calcium carbonate
 - (3) Deposition of clay materials around well strainer
 - (4) Blockage of aquifer
- 64. Pumping test in the well is continued
 - (1) till study state (2) for 24 hours
 - (3) for 48 hours (4) for 72 hours
- 65. Piezometer are installed for measuring pressure head in
 - (1) Perched aquifer (2) Confined aquifer
 - (3) Unconfined aquifer (4) Open well

66.	Theis method is used for evaluate	Theis method is used for evaluating the parameters of	
	(1) Root zone	(2) Confined aquifer	
	(3) Unconfined aquifer	(4) Perched aquifer	
67.	The most economical section o	f grass water way is	
	(1) Parabolic	(2) Towards outlet	
	(3) Triangular	(4) Rectangular	
68.	Rill erosion is also known as		
	(1) Gully erosion	(2) Micro channel erosion	
	(3) Micro erosion	(4) Path erosion	
69.	Sheet flow is generated, when		
	(1) Land slope is steep		
	(2) Land surface is rough		
	(3) Land surface is smooth with	h uniform slope	
	(4) Land slope is negative		
70.	Maximum movement of soil pa	rticle takes place, when flow depth is	
	(1) about or equal to particle d	iameter	
	(2) less than 5 cm		
	(3) equal to 10 cm		

(4) None of the above

(13)

	71.	Detachment and transportation of soil particle is greater in		
		(1) Splash erosion	(2) Rill erosion	
		(3) Sheet erosion	(4) Both (2) & (3)	
	72.	Soil detachment in raindrop erosion takes place due to		
		(1) K. E. of raindrop	(2) Running flow	
		(3) P. E. of raindrop	(4) Land slope	
	73. Detachment of soil particle by flowing water varies as			
		(1) $[velocity]^2$	(2) $[velocity]^{1/2}$	
		(3) [velocity] ³	(4) $[velocity]^{3/2}$	
	74. Erosion under shifting cultivation, deforestation cultivation on str without protective measures is associated to		n, deforestation cultivation on steep slopes associated to	
		(1) Anthropogenic erosion	(2) Phytogenic erosion	
		(3) Zoogenic erosion	(4) Extraction	
75. Sheet erosion is also termed as		Sheet erosion is also termed as		
		(1) Attrition	(2) Laminar erosion	
		(3) Detrition	(4) Phytogenic erosion	
	76. Erosion intensity of severe erosion is		sion is	
		(1) $5 \text{ m}^3/\text{ha/y}$	(2) 1.5 to 50 $m^3/ha/y$	
		(3) $10 \text{ m}^3/\text{ha/y}$	(4) $0.5 \text{ m}^3/\text{ha/y}$	

(14)

77.	. Location of permanent gully control structure is decided on basis of				
	(1) Gully depth	(2) Gully width			
	(3) Gully bed slope	(4) All the above			
78.	Stage-3 gully development refe	rs to			
	(1) Healing stage	(2) Stabilizes stage			
	(3) Initiation stage	(4) None of the above			
79.	For design of grassed way, permissible flow velocity for sparse grass co condition is taken as				
	(1) 0.9 to 1.2 m/s	(2) 1.5 to 2.0 m/s			
	(3) 3.0 to 4.5 m/s	(4) 1.0 to 2.0 m/s			
80.	Jse of diversion drains is essential when				
	(1) Specified part of catchment is to keep under protection				
(2) Protection of barren land is essential					
	(3) Diversion of water into gully is required				
	(4) All the above				
81.	ost effective measure for erosion and soil				
	(1) Contour farming	(2) Strip cropping			
	(3) Terracing and bunding	(4) Fertilizing			

(Turn Over)

- 82. Mulch tillage is practiced to minimize
 - (1) Moisture loss from soil
 - (2) Sediment yield from the field
 - (3) Splash effect
 - (4) Sheet erosion
- 83. When drop height exceeds 4 m and there is possibility of silt accumulation in farm pond, then most suitable mechanical spillway to use is
 - (1) Drop inlet spillway (2) Straight drop spillway
 - (3) Chute spiliway (4) Grassed waterway

84. Soil loss phenomena is

- (1) a dynamic (2) a static event
- (3) a cyclic event (4) None of the above

85. Factor-C of USLE is affected by

- (1) Land slope
- (2) Slope length
- (3) Soil properties
- (4) Cropping pattern and management practices
- 86. The retaining walls are constructed for the purpose of
 - (1) Maintaining unequal ground level
 - (2) Controlling soil erosion floss
 - (3) Supporting a soil mass
 - (4) Both (1) & (3)

- 87. A greater soil erosion is observed in case of
 - (1) Soil surface covered by plant canopy
 - (2) Soil surface under grass cover
 - (3) Soil under forest cover
 - (4) Soil under cultivated crop
- 88. The sequence of water erosion is
 - (1) splash, sheet, rill and gully
 - (2) sheet, rill, raindrop and gully erosion
 - (3) rill, sheet, splash and gully erosion
 - (4) gully, splash, rill and sheet erosion
- 89. The purpose of cut-off walls in drop structure is to
 - (1) Provide structural strength against sliding
 - (2) Spill the flow safely
 - (3) Dissipate K E of flow
 - (4) Support gully walls
- 90. The apron length in rubble masonry dam should
 - (1) not less than 1.5 times the dam height
 - (2) be 1.5 m
 - (3) equal to the dam height
 - (4) be 3/4 of dam height

- 91. Hydraulic jump takes place, when flow enters from
 - (1) Super critical to sub critical
 - (2) Critical state to super critical state
 - (3) Sub critical state to super critical state
 - (4) Uniform flow to non-uniform flow
- 92. To ensure the hydraulic structure safe against sliding, the sum of all resisting forces should be equal to
 - (1) 0.75 times the sum of horizontal forces
 - (2) 1.5 times the sum of horizontal forces
 - (3) weight of structure
 - (4) None of the above
- 93. The thickness of apron/stilling basin is decided based on
 - (1) Uplift pressure acting on it (2) Eccentricity of all forces
 - (3) Frictional forces (4) None of the above
- 94. Design of inlet section of drop structures is done by using by
 - (1) Weir formula (2) Orifice formula
 - (3) Flume formula (4) Darcy's formula
- 95. Gully formation is mainly due to
 - (1) Land surface without vegetative cover and over grazing
 - (2) Adoption of faulty tillage work
 - (3) Not checking of developed rills
 - (4) Improper construction of channels etc.

- 96. A hydraulic structure is expected to be safe against floating phenomenon. When resultant of horizontal and vertical forces is acting?
 - (1) Vertical downward (2) Laterally
 - (3) Vertically upward (4) None of the above
- 97. If the water reservoir is intended to meet the low flow requirement in the same year it is termed as
 - (1) Seasonal storage (2) Intra-seasonal storage
 - (3) Perennial storage (4) Carry over storage
- **98.** Use of canal water and groundwater in the same irrigation project command

(1)	Integrated use	(2)	Conjunctive use
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- (3) Consumptive use (4) Double use
- 99. Any statement by which output of a system can be determined, given the policy, the initial value of the state variable and system parameters is known as
 - (1) State variable (2) Objective function
 - (3) System parameter (4) System constraint
- 100. The condition of system proper at an time and place is represented by variable known as
 - (1) Objective (2) State variable
 - (3) System parameter (4) Decision variable

101.	. If the constraint is an inequity rather than equity, an additional decision variable is introduced named as			
	(1)	Lagrange multiplier	(2)	Slack variable
	(3)	Decision variable	(4)	Extended variable
102.	T1 in	ne simplex procedure is use	d to	solve general maximization problem
	(1)	Dynamic programming	(2)	Non-linear programming
	(3)	Linear programming	(4)	Analog simulation
103.	. Ro its	eproducing the essence of a self is	a sys	tem without reproducing the system
	(1)	Simulation	(2)	Forecosting
	(3)	Prototype	(4)	Systemization
104.	. T	he benefits that can be quanti	tively	y measured in monitory terms is called
	(1)	Intangible benefits	(2)	Tangible benefits
	(3)	Indirect benefit	(4)	Project benefit
105	. R	iver flows are described as		
	(1)	Deterministic event	(2)	Stochastic event
	(3)	Constrained event	(4)	Static event
106	. Fo	or Water resources develop ivided by total cost to arrive	men at	t project sum of all allocated benefits
	(1)	Benefit-cost ratio	(2)	Cost-benefit ratio
	(3)	Project viability ratio	(4)	Project benefit index
		(20)		(Continued)

107. Iconic model means				
(1) Ice like	(2) Look alike model			
(3) Formal model	(4) Stochastic model			
108. Deterministic model mak	e			
(1) Forecasts	(2) Predicts			
(3) Guess	(4) Detrimental decision			
109. GIS refers to				
(1) Geological Information System				
(2) Geographic Information System				
(3) Geometrical Information System				
(4) Geological Information	on Science			
110. CAD stands for				
(1) Computer Assisted Drawing				
(2) Computer Aided Design				
(3) Computer Added Data				
(4) Computer Assisted Digitization				
111. NRSA stands for				
(1) National Remote Spa	ace Administration			
(2) National Remote Sat	ellite Agency			
(3) National Remote Spa	ace Agency			
(4) National Remote Ser	ising Agency			

- 112. Airphoto interpretation method predicts the groundwater availability based on
 - (1) Soil Density (2) Formation characteristic
 - (3) Features of top soil surface (4) Vegetation

113. NDVI stands for

- (1) Numerical Digit Vegetation Index
- (2) Normalized Difference Vegetation Index
- (3) Numerical Digitization Value Index
- (4) Numerical Difference Value Indicator
- 114. Negative values of NDVI (values approaching correspond to)
 - (1) Water (2) Barren area
 - (3) Grassland (4) Tropical rain forest
- 115. Satellite imagery consists of photographs of Earth or other planets made by means of
 - (1) Artificial satellites (2) Aeroplane
 - (3) Radar (4) UFO
- 116. Water bodies are observed in LISS III imagery in the colour as
 - (1) Blue (2) Black (3) Red (4) Green
- 117. Spectroscopy is the study of the interaction between
 - (1) Matter and radiated energy
 - (2) Matters
 - (3) Energy sources
 - (4) Spectoral resolutions

118. The following is not related to electromagnetic radiation

(1) Gamma ray	(2) X-ray			
(3) Ultraviolet-ray	(4) Electric-ray			
119. Radar is a system to detect object using				

(1)	Gamma ray	(2)	Radio waves

- (3) X-ray (4) Electric-ray
- 120. An image with a ground resolution of 10 meters shows no ground features with surface area
 - (1) smaller than 10×10 meters
 - (2) greater than 10×10 meters
 - (3) smaller than 10 square meters
 - (4) greater than 10 square meters

अभ्यर्थियों के लिए निर्देश

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

- प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख ले कि प्रश्नपत्र में सभी पृष्ठ मौजूद है 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।
- 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।
- 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 खार 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।
- 1 रफ कार्य के लिये इस पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा अंतिम खाली पृष्ठ का प्रयोग करें।
- 12. परीक्षा के उपरान्त केवल ओः एमः आरः उत्तर-पत्र 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।