Total No. of Pages : 19

Seat		
No.		

## Pg. Re-Entrance Examination 2025-2026 M. Tech. (Rural Technology) Entrance Subject Code : 71140

Day and Date : Thursday, 10-07-2025	Total Marks : 100
Time : 03.30 pm to 05.00 pm	

## **Instructions:**

- 1) All questions are compulsory.
- 2) Each question carries 1 mark.
- 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
- 4) Follow the instructions given on OMR sheet.
- 5) Rough work shall be done on the sheet provided at the end of question paper.
- 1. Where is the headquarters of the United Nations Organisation (UNO) located?
  - a. Tokyo, USA
  - b. Washington DC, USA
  - c. New York. USA
  - d. New Delhi, India
- 2. Who invented the Richter scale?
  - a. Charles Richter b. Alfred Nobel
  - c. Anna Rajam George d. Arundhati Roy
- 3. What is the full form of IGNOU?
  - a. Indira Gandhi National Open University
  - b. Indian Global National Open University
  - c. International Global Nation Open University
  - d. None of these

- 4. Who was the first Asian winner of the Nobel Prize?
  - a. Mahatma Gandhi
  - b. Ratan Tata
  - c. Rabindranath Tagore
  - d. Bankim Chandra Chatterjee
- 5. Thomas Cup is associated with which sport?

	a. Tennis	b. Football	
	c. Badminton	d. Cricket	
6.	Who was the first woman chief minister of India?		
	a. Annie Besant	b. Sarojini Naidu	
	c. Sucheta Kriplani	d. None of these	
7.	Which Country is the leading producer of Diamonds?		
	a. Russia	b. Qatar	
	c. Oman	d. Netherland	
8.	The sea route in India was discover	ed by	
	a. Columbus	b. Amundsen	
	c. Vasco-da-Gama	d. None of these	
9.	The decimal system was introduced by		
	a. Aryabhatta		
	b. Brahmagupta		
	c. Bhaskara		
	d. None of these		
10.	What is the capital of Japan?		
	a. Beijing	b. Tokyo	
	c. Seoul	d. Bangkok	

- 11. What gas is used to extinguish fires?
  - a. Oxygen
  - b. Nitrogen
  - c. Carbon dioxide
  - d. Hydrogen
- 12. What is the name of the process by which plants convert sunlight into energy?
  - a. Respiration
  - b. Photosynthesis
  - c. Oxidation
  - d. Evolution
- 13. What chemical element is designated as "Hg"?
  - a. Silver b. Tin
  - c. Copper d. Mercury
- 14. Which one is the hottest continent?
  - a. Africa b. South Asia
  - c. North America d. Australia
- 15. How many bones are in the body of an adult human?
  - a. 330 b. 206
  - c. 250 d. 210
- 16. What element is the main constituent of diamonds?
  - a. Carbon b. Oxygen c. Silver d. Gold
- 17. Which organ in the human body is responsible for the secretion of bile?
  - a. Liverb. Kidneysc. Spleend. Stomach

18. Which planet in the solar system is known as the "Morning Star" or "Evening Star"?

a. Mars	b. Venus

- c. Mercury d. Jupiter
- 19. What is the name of the science that studies the past of life on Earth?

a.	Pal	laeontology
••••		

- b. Astronomy
- c. Anthropology
- d. Geology
- 20. What chemical element forms the basis of the haemoglobin molecule responsible for the transport of oxygen in the blood?

a. Nitrogen	b. Iron
c. Oxygen	d. Silver

21. What chemical element is used in the manufacture of glass?

a. Silver	b. Sodium

- c. Silicone d. Oxygen
- 22. Which planet in the solar system has the largest diameter?

a. Mercury	b. Venus
c. Earth	d. Jupiter

- 23. Fathometer is used to measure
  - a. Earthquakes b. Rainfall
  - c. Ocean depth d. Sound intensity
- 24. In which season do we need more fat?

a. Autumn	b. Spring

c. Winter d. Summer

25. Who was the first person to walk on the moon?

	a. Yuri Gagarin	b. Neil Armstrong	
	c. John Glenn	d. Buzz Aldrin	
26.	26. What device is used to view content in virtual reality?		
	a. Smartphone	b. 3D glasses	
	c. VR Headset	d. Tablet	
27.	Which of the following inventions i	s attributed to Thomas Edison?	
	a. Bulb	b. Telephone	
	c. Computer	d. Rocket	
28.	8. What is the force of attraction between any two bodies by virtue of thei masses is called?		
	a. Electromagnetic Force		
	b. Gravitational Force		
	c. Centripetal Force		
	d. Nuclear Force		
29.	. What is the SI unit of acceleration due to gravity?		
	a. ms <sup>-2</sup>	b. ms <sup>-3</sup>	
	c. Kgms <sup>-2</sup>	d. ms <sup>-1</sup>	
30.	Which of the following instruments is used to measure the relative density o a liquid?		
	a. Hydrometer	b. Hygrometer	
	c. Lactometer	d. Gravitymeter	
31.	. What atmospheric layer has most of the clouds?		
	a. Mesosphere	b. Thermosphere	
	c. Exosphere	d. Troposphere	

- 32. What is the safe level of noise intensity for humans?
  - a. Up to 90 decibels
  - b. up to 70 decibels
  - c. up to 80 decibels
  - d. up to 100 decibels
- 33. What are planktons?
  - a. Plants living in water
  - b. Very small plants and animals living in water
  - c. Very small animals living on land
  - d. None of these
- 34. The microbes that are active at low temperatures
  - a. thermophiles b. Mesophiles
  - c. Psychrophiles d. neutrophils
- 35. What does UNEP stand for?
  - a. United Nations Educational Plan
  - b. United Nations Environmental Protection
  - c. United Nations Environmental Programme
  - d. United Nations Environmental Policy
- 36. Energy sources that do not increase carbon emissions include
  - a. Solar cells
  - b. Wind mills
  - c. Nuclear power plants
  - d. All of the above

- 37. Climate represents.....
  - a. The long-term average weather and its statistical variation for a given region
  - b. Weather averaged over a year
  - c. It is a measure of variations in the amount of precipitation
  - d. None of the above
- 38. Which of the following materials can be recovered from the recycling of soft drink cans?
  - a. Paper b. Plastic
  - c. Metal d. Glass
- 39. The non-point pollution of river water involves discharge of pollutants through
  - a. urban sewage drains
  - b. industrial effluents
  - c. agricultural fields
  - d. both (a) and (b)
- 40. Which one of the following is the best source of generating electricity in India from the viewpoint of sustainable development?
  - a. Atomic energy b. Coal
  - c. Mineral oil and gas d. Hydroelectricity
- 41. An ideal gas as compared to a real gas at very high pressure occupies
  - a. More volume
  - b. Less volume
  - c. Same volume
  - d. Unpredictable behaviour

- 42. Temperature of a gas is produced due to
  - a. Its heating value
  - b. Kinetic energy of molecules
  - c. Repulsion of molecules
  - d. Attraction of molecules
- 43. According to kinetic theory of gases, the absolute zero temperature is attained when
  - a. Volume of the gas is zero
  - b. Pressure of the gas is zero
  - c. Kinetic energy of the molecules is zero
  - d. Specific heat of gas is zero
- 44. The compression ratio for the compressor is always ..... unity.
  - a. Equal to b. Less than
  - c. More than d. None of these
- 45. Which of the following plants is smallest and lightest for generating a given amount of power?
  - a. Gas turbine plant
  - b. Petrol engine
  - c. Diesel engine
  - d. Solar plant
- 46. Pig iron is name given to
  - a. Raw material to blast furnace
  - b. Product of blast furnace made by reduction of iron ore
  - c. Iron containing huge quantities of carbon
  - d. Iron in molten form in the ladies

- 47. When is the fluid called laminar?
  - a. Low viscosity
  - b. The density of the fluid is high
  - c. Reynolds number is greater than 2000
  - d. Reynolds number is less than 2000
- 48. When a fluid is subjected to resistance, it undergoes a volumetric change due to .....
  - a. Cohesion b. Strain
  - c. Compressibility d. Adhesion
- 49. Which of these is an example of mass transfer?
  - a. Expansion of gas
  - b. Heat conduction in a rod
  - c. Freezing of water
  - d. Mixing of two liquids
- 50. Which among the following is always true for mass transfer to occur?
  - a. Difference in concentration
  - b. Difference in chemical potential
  - c. Difference in pressure
  - d. Difference in temperature
- 51. ..... wall is constructed in order to support lead other than its own.
  - a. Load supporting
  - b. Load distributing
  - c. Load bearing
  - d. Load releasing

52. ..... are structural members design to carry and transfer transverse loads across space to support elements.

a. Beams	b. Columns	
c. Lintels	d. Sills	
For construction of structures under water, the type of lime used, is		
a. Hydraulic lime	b. Fat lime	

- c. Quick lime d. Pure lime
- 54. Which of the following is not required for chain surveying?
  - a. Dumpy level b. Pegs
  - c. Arrows d. 20 m chain
- 55. Which of the following is the principles of surveying?
  - a. Covering the entire area
  - b. Working from whole to part
  - c. Taking measurements
  - d. Determining the elevation differences
- 56. The sewerage system originates from
  - a. house sewers

53.

- b. lateral sewers
- c. branch sewers
- d. main sewers
- 57. Before discharging the foul sewage into rivers, it is generally treated by
  - a. screening
  - b. sedimentation.
  - c. oxidation
  - d. all the above.

- 58. Pick up the correct statement from the following:
  - a. Run off and surface run off are the same
  - b. Run off includes the water flowing over the surface
  - c. Run off is sometimes called discharge of the river
  - d. Surface run off is sometimes called stream flow.
- 59. The entrained air in concrete
  - a. increases workability
  - b. decreases workability
  - c. decreases resistance to weathering
  - d. increases strength
- 60. 1 kg weight in gravitational unit equals
  - a. 8.9 N in SI system b. 9.8 N in SI system
  - c. 4.5 N in SI system d. 5.4 N in SI system
- 61. Hybridization is
  - a. downward movement of water through soil
  - b. a process of tilling the land
  - c. decayed vegetable matter
  - d. cross-fertilization between two varieties
- 62. Which part of the computer helps to store information?
  - a. disk drive b. keyboard
  - c. monitor d. printer
- 63. A persistent fall in the general price level of goods and services is known as:
  - a. Deflation b. Disinflation
  - c. Stagflation d. Depression

- 64. Which of the following combinations is correct?
  - a. NABARD Industrial Loan
  - b. IDBI Short term Loans
  - c. RBI-Long term Loans
  - d. RRB Agricultural Finance
- 65. A Closed economy means:
  - a. Only exports are take place
  - b. Money supply is controlled
  - c. Digital financing take place
  - d. Neither exports nor imports
- 66. Which of the following is not a multicellular organism?
  - a. Fungi b. Hydra
  - c. Spirogyra d. Paramecium
- 67. In India and elsewhere, biomass can be obtained from
  - a. Sugarcane bagasse
  - b. Groundnut shells
  - c. Rice husk
  - d. All of the above
- 68. Which disease is caused by Nickel?
- a. Asthmab. Dermatitisc. ItaiItaid. Learning disability69.The sweet taste of fruits is due to ......a. Fructoseb. Ribose
  - c. Maltose d. Lactose

70. Bacterial decomposition of biological material under anaerobic condition is:

a. Fertilization	b. Fermentation
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- c. Composting d. Contamination
- 71. Air is said to be saturated when:
  - a. it contains maximum content of water vapour
  - b. its pressure is minimum
  - c. its thickness is maximum
  - d. it blows over the barren land
- 72. Which organ is the main digester and absorber of food?
  - a. Colon b. Stomach
  - c. Liver d. Small intestine
- 73. What is the chemical symbol for gold?
  - a. Go b. GI
  - c. Gd d. Au
- 74. What is the process by which plants release water vapour into the atmosphere?
  - a. Condensation
  - b. Photosynthesis
  - c. Transpiration
  - d. Respiration
- 75. Who is credited with the discovery of the laws of motion and universal gravitation?
  - a. Galileo Galilei
  - b. Johannes Kepler
  - c. Isaac Newton
  - d. Albert Einstein

- 76. Which sentence is grammatically correct?
  - a. Neither of them is going to the party.
  - b. Neither of them are going to the party.
  - c. Neither of them am going to the party.
  - d. Neither of them be going to the party.
- 77. Identify the conjunction in the sentence:
  - "I want to go to the movies, but I don't have enough money."
  - a. Warnl b. go
  - c. but d. enough
- 78. Which sentence is punctuated correctly?
  - a. I enjoy cooking; it's fun.
  - b. I enjoy cooking, it's fun.
  - c. 1 enjoy cooking. It's fun.
  - d. I enjoy cooking: it's fun.
- 79. Which sentence is in the past perfect tense?
  - a. She will finish her work later.
  - b. She finishes her work on time.
  - c. She had finished her work before the meeting.
  - d. She is finishing her work right now.
- 80. You should act bravely difficulties.
  - a. in the hope of
  - b. in the rear of
  - c. in the face of
  - d. in the teeth of

81. Select the Antonym for the word Implicit.

a. inherent	b. absolute
c. specific	d. implied

- 82. Select the Synonym for the word **Confusion**.
  - a. Intrepidityb. Stagnationc. Persuald. Commotion
- 83. Fill in the blanks with suitable relative pronoun.

The house ..... belongs to Julie is in London.

- a. Himself b. Which
- c. Who d. their
- 84. Identify the Verb from the given sentence.

We left for the mountain just before six in the morning.

- a. Mountain b. Just
- c. Before d. Left

85. Fill in the blanks with most suitable Phrasal Verb..

It is so dark in here, you can really ..... your sunglasses now.

- a. take off b. take on
- c. put on d. get off
- 86. Select the correctly punctuated sentence.
  - a. I can't see Varun's car, there must have been an accident.
  - b. I cant see Varun's car
  - c. there must have been an accident.
  - d. I can't see Varun's car there must have been an accident.

- 87. Which one of the following best expresses the meaning of phrase TO BREAK THE ICE?
  - a. To start a conversation
  - b. To start quarreling
  - c. To end up partnership
  - d. To end the hostility
- 88. One word substitute: The art of beautiful handwriting
  - a. painter b. Calligraphy
  - c. palegraphy d. Draftsman
- 89. Complete with the correct plural:

Scientists formulate ..... before they carry out research.

- a. hypothesis
- b. hypothesises
- c. hypotheses
- d. hypothesis
- 90. Select the pair which has the same relationship.

GRAIN: SALT

- a. shard: pottery b. shred: wood
- c. blades: grass d. chip: glass
- 91. What is emphasized as an important aspect of learning a positive attitude?
  - a. Avoiding mistakes
  - b. Embracing mistakes as learning experiences
  - c. Ignoring mistakes
  - d. Denying the existence of mistakes

- 92. What is the importance of setting goals in developing personality?
  - a. Goals are unnecessary and can hinder progress
  - b. Goals provide a roadmap for growth and development.
  - c. Goals limit potential by setting boundaries
  - d. Goals lead to dissatisfaction and disappointment
- 93. During interviews, we should express our views.....
  - a. clearly b. in a haste
  - c. aggressively d. none of these
- 94. Unstructured interview is also called .....
  - a. directive interview
  - b. non directive interview
  - c. collaborative approach interview
  - d. approach interview
- 95. The past tense form for word think
  - a. thought b. taught
  - c. thank d. thinked
- 96. What type of communication is through Television?
  - a. Intrapersonal Communication
  - b. Public Communication
  - c. Mass Communication
  - d. Mass media Communication
- 97. Which of these is a main element of non-verbal communication?
  - a. Name of the listener b. The volume of the speaker
  - c. Age of the speaker d. Name of the speaker

- 98. Which of the following is a characteristic of interpersonal communication?
  - a. It is both focused and unfocused
  - b. It is not participant friendly
  - c. It is philosophical
  - d. It is metaphorical
- 99. Which of these factors is not required for communication growth?
  - a. Growth in size of organisations
  - b. Negative atmosphere
  - c. Public relations
  - d. Globalisation
- 100. Which of these proposals are academic in nature?
  - a. Research proposals
  - b. Business proposals
  - c. Musical proposals
  - d. Personal proposals

## -- ROUGH WORK --