

Seat No.	
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ENT-65

Total No. of Pages : 18

Entrance Examination, 2026

Subject: M.Sc. Medical Information Management

Subject Code: 77888

Day and Date : Tuesday, 21-07-2026

Total Marks : 100

Time : 12.30 p.m. to 02.00 p.m.

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.
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1. BCG vaccine is given for the protection against

- | | |
|-----------------|---------------|
| a) Tuberculosis | b) Tooth pain |
| c) Hair fall | d) Headache |

2. bytes correspond to 1 KB.

- | | |
|-----------|---------|
| a) 1024 | b) 10 |
| c) 10,000 | d) 1000 |

3. Which of the following is search engine?

- a) Macromedia Flash
- b) Google
- c) Genome
- d) Librarian's index to the internet

4. A billionth of a second is defined as a
 - a) Milliseconds
 - b) Microseconds
 - c) Nanoseconds
 - d) Picoseconds
5. Computer memory consists of microchips
 - a) RAM
 - b) ROM
 - c) PROM
 - d) All the above
6. Normal human blood pressure is approximately
 - a) 120/80 mmHg
 - b) 10/5 mmHg
 - c) 300/200 mmHg.
 - d) 500/400 mmHg
7. Which disease is caused due to vitamin C deficiency?
 - a) Scurvy
 - b) Fracture
 - c) Fever only
 - d) Hair loss
8. The average of given observations is called
 - a) Mean
 - b) Median
 - c) Mode
 - d) Range
9. Following among is not an operating system
 - a) Linux
 - b) Unix
 - c) Word
 - d) Windows
10. The term used to define all input and output devices in a computer system is
 - a) Monitor
 - b) Software
 - c) Shared resources
 - d) Hardware.

11. A bar diagram is commonly used to represent
- a) Categorical data
 - b) DNA sequence
 - c) Chemical bond
 - d) Cell structure
12. Low level computer language uses
- a) English words
 - b) Mnemonic codes
 - c) Limited grammar
 - d) Mathematical symbols
13. Which of the following has clover-leaf shaped structure?
- a) rRNA
 - b) DNA
 - c) tRNA
 - d) mRNA
14. Which one of the following is an example of non covalent interaction in protein.
- a) Peptide bond
 - b) Disulphide bridge
 - c) both a & b
 - d) Phosphodiester bond
15. In sickle cell anemia the basis of the malfunction of the hemoglobin molecule is
- a) Substitution of single amino acid
 - b) Incorrect secondary structure.
 - c) Faulty binding of heme group
 - d) reduced affinity of oxygen.
16. A double stranded DNA has 30% thymine, and% of cytosine
- a) 30%
 - b) 20%
 - c) 70%
 - d) 15

17. Photosynthesis occurs in
- a) Chloroplast
 - b) Mitochondria
 - c) Nucleus
 - d) Ribosome
18. Enzyme increases rate of reaction by
- a) Increasing the free energy of activation
 - b) increasing free energy change of the reaction
 - c) Changing the equilibrium constant of the reaction
 - d) decreasing the energy of activation
19. Ribozymes are
- a) enzyme which use ribose as substrate
 - b) enzyme working on DNA
 - c) RNAs with enzyme activity
 - d) enzyme RNA complex
20. The K_m of enzyme is
- a) One half of the V_{max}
 - b) a dissociation constant
 - c) the substrate concentration that gives maximal velocity
 - d) the substrate concentration that gives half maximal velocity

21. Golgi complex plays major role in
- a) protein synthesis
 - b) Glycosylation of lipids and proteins
 - c) removal of sulphate from the carbohydrate moiety of glycolipid
 - d) formation of secondary lysozymes
22. The concept of ionic bond was put forward by
- a) lewis
 - b) Kossel
 - c) Arrhenius
 - d) Bronsted
23. these are aromatic amino acids.
- a) Phenylalanine, Tyrosine, Tryptophan
 - b) Phenylalanine, Tyrosine, Glutamine.
 - c) Alanine, Tyrosine, Tryptophan
 - d) Tyrosine, Alanine, Glutamine
24. Following are scalar quantities except
- a) length
 - b) mass
 - c) volume
 - d) acceleration
25. Thermodynamics deals with
- a) The total energy of a system
 - b) rate of chemical reaction
 - c) energy transformation of a system
 - d) initial structure of the atom

26. Among following which molecules are used as raw material for photosynthesis process?

- a) CO₂
- b) H₂O
- c) SO₂
- d) both a & b

27. is a noble gas?

- a) Neon b) Sodium
c) Glucose d) Starch

28. The equation $H\Psi = E\Psi$ is discovered by

- a) Schrodinger b) Newton
- c) CV Raman d) none of the above

29. Radioactivity is property of

- a) the proton b) the nucleus
c) the neutron d) the electron

30. Among following which component is present in Butter?

- a) lactic acid b) butyric acid
c) citric acid d) acetic acid

31. Cellulose is built up of many

- a) sucrose b) glucose units
- c) fructose units d) amino acid units

32. is unit of measurement of DNA sequence.

- a) Cm b) Nm
- c) bp d) None of these

33. Which of the following element is not present in carbohydrates?
- a) oxygen
 - b) hydrogen
 - c) carbon
 - d) nitrogen
34. Glucose is a
- a) Monosaccharide
 - b) disaccharide
 - c) Trisaccharide
 - d) polysaccharide
35. The functional group of aldehyde is
- a) -CHO
 - b) -CO
 - c) -OH
 - d) -COOH
36. Hydrochloric acid is commonly found in which part of the human body?
- a) Stomach
 - b) Lungs
 - c) Kidney
 - d) Brain
37. The complete genetic code consists of
- a) 48 codons
 - b) 64 codons
 - c) 64 nucleotides
 - d) both (b) & (c)
38. The powerhouse of the cell is
- a) Mitochondria
 - b) Skin
 - c) Bone
 - d) None of the above

39. Diffusion is the process
- a) the movement of substance from high concentration to low concentration
 - b) the movement of substance from low concentration to high concentration
 - c) the movement of substance from medium concentration to high concentration
 - d) all of above
40. The site of protein synthesis is
- a) Golgi complex
 - b) Ribosome
 - c) tRNA
 - d) DNA
41. Conversion of muscle glycogen into liver glycogen is explained by
- a) Cori cycle
 - b) Krebs cycle
 - c) C4-cycle
 - d) Ornithine cycle
42. The growth involves
- a) Cell division
 - b) Cell enlargement
 - c) Cell maturation
 - d) All of the above
43. The center of chlorophyll molecule is made up of
- a) Ca
 - b) Mn
 - c) Mg
 - d) Fe
44. The long form of IAA is
- a) Indole-Acetic anhydride
 - b) Indole Acetic Acid
 - c) Indole-acetic acetate
 - d) Indole-Acetoacetic acid

45. Calvin cycle is also known as
- | | |
|----------------|----------------------|
| a) C_4 cycle | b) CAM |
| c) C_3 cycle | d) citric acid cycle |
46. Starch is a polymer of
- | | |
|-------------|------------|
| a) fructose | b) glucose |
| c) sucrose | d) maltose |
47. Among following which animal belongs to phylum Annelida?
- | | |
|--------------|----------|
| a) Earthworm | b) Cat |
| c) Crow | d) Snake |
48. The distinction between mesophyll cell and bundle sheath cell is called as
- | | |
|------------------------|--------------------|
| a) Watson anatomy | b) Kranz anatomy |
| c) Hatch-Slack anatomy | d) Vascular bundle |
49. is the site of photochemical reaction.
- | | |
|----------------|--------------|
| a) Quantasomes | b) Ribosome |
| c) Chromosomes | d) Polysomes |
50. deals with distribution of plants.
- | | |
|-----------------|-------------------|
| a) Biogeography | b) Phytogeography |
| c) Geography | d) Geology |
51. Heart of the frog is basically of chambered.
- | | |
|----------|---------|
| a) One | b) Two |
| c) Three | d) Four |

52. The study of insects is called
- a) Entomology
 - b) Cardiology
 - c) Astrology
 - d) Geography
53. is necessary for normal vision.
- a) Vitamin A
 - b) Rhodopsin
 - c) Vitamin B12
 - d) All of these
54. Which of the following factor affecting enzyme activity?
- a) temperature
 - b) inhibitor
 - c) pH
 - d) all of above
55. Animal virus usually penetrates host cell by
- a) Injection
 - b) Exocytosis
 - c) Endocytosis
 - d) a vector
56. Earthworms respire by
- a) Ctenidia
 - b) Moist skin
 - c) Typhlosole
 - d) Prostomium
57. Malaria is caused by
- a) ascaris
 - b) Filaria
 - c) leech
 - d) plasmodium
58. Cancer is related
- a) Uncontrolled growth of tissue
 - b) Non-malignant tumor
 - c) Controlled division of tissue
 - d) None of the above

59. Marker enzymes of Golgi apparatus is
- a) Acetyl CoA synthetase.
 - b) Pyruvate kinase.
 - c) Galactosyl transferase
 - d) cytochrome oxidase.
60. Which hormone controls blood sugar level?
- a) Insulin
 - b) Keratin
 - c) Melanin
 - d) Saliva
61. The PCR is used to
- a) Amplify a small amount of DNA
 - b) Cleave bacteria plasmids.
 - c) Seal sticky ends.
 - d) Identify target plasmid
62. Glucose is converted into glycogen in the
- a) Ileum
 - b) spleen
 - c) Kidney
 - d) liver
63. Which of the following is selective media
- a) Tryptic soy agar
 - b) Nutrient agar
 - c) MacConkey agar
 - d) Beef extract
64. ATP is known as
- A) Energy currency of the cell
 - B) Genetic material of the cell
 - C) Structural unit of protein.
 - D) Storage form of DNA
65. A separate tRNA synthetase exists for
- a) each amino acid
 - b) each anticodon
 - c) each codon
 - d) both a and c correct

66. Codons are
- a) triplet sequence of nucleotide bases in messenger RNA
 - b) triplet sequence of nucleotide bases in DNA
 - c) triplet sequence of deoxyribose sugar in DNA
 - d) none of the above.
67. The largest of living bird is
- a) Cassowary
 - b) Albatross
 - c) Elephant birds
 - d) Ostrich
68. Restriction endonuclease hydrolyze polynucleotide from
- a) Only 5' end
 - b) Phosphodiester bond within specific sequence
 - c) From either terminal
 - d) None of the above
69. Example of herbivore is
- a) amoeba
 - b) hydra
 - c) grasshopper
 - d) none of the above.
70. Among following has a quaternary structure.
- a) Hemoglobin
 - b) Ribonuclease
 - c) Globulin
 - d) Pepsin
71. RNA does not contain
- a) Uracil
 - b) Thymine
 - c) Adenine
 - d) Cytosine

72. Life originated in

- | | |
|-------------|----------|
| a) Air | b) Soil |
| c) Mountain | d) Water |

73. Islets of langerhans are found in

- | | |
|-------------------|-----------|
| a) Salivary gland | b) Liver |
| c) Pancreas | d) Tongue |

74. *Oryza sativa* belongs to family.

- | | |
|--------------|------------------|
| a) Poaceae | b) Anacardiaceae |
| c) Malvaceae | d) Leguminosae |

75. Plant growth is measured by

- | | |
|-----------------------|---------------------|
| a) Arc auxanometer | b) Drum auxanometer |
| c) Ganong's potometer | d) Both a & b |

76. Glycolysis occurs in

- | | |
|----------------|------------|
| a) Cytoplasm | b) Protein |
| c) Chloroplast | d) Glucose |

77. Which of the following is a cold blooded animal?

- | | |
|------------|------------------|
| a) Duck | b) Tortoise |
| c) Penguin | d) Hippopotamus. |

78. Genome analysis comes under

- | | |
|-----------------|----------------------|
| a) proteomics | b) genomics. |
| c) metabolomics | d) none of the above |

79. Larva of house fly is called

- a) Nymph b) Imago
- c) Maggot d) Tumbler

80. The process of formation of RNA from DNA is known as

- a) Transcription b) Translation
- c) Replication d) Mutation

81. Study of is called as Mycology.

- a) Bacteria b) Fungi
- c) Virus d) Protozoa

82. drug used for the treatment of HIV.

- a) Tetracycline b) Vancomycine
c) AZT d) Ampicillin

83. The substance which absorbs another substance on its surface is called as

- a) adsorption b) absorbate
c) absorption d) adsorbent.

84. pH scale starts from

- a) 0 to 7 b) 7 to 14
- c) 0 to 14 d) Both (a) & (c)

85. is a purine base of nucleic acids.

- a) Guanine
- b) Cytosine
- c) Thymine
- d) Both (b) & (c)

86. The nucleotide of DNA are joined by bond.
- a) Phosphodiester
 - b) Covalent
 - c) Hydrogen
 - d) Peptide
87. Peptide bonds are formed between
- a) Two nucleotides
 - b) Two amino acids
 - c) Both (A) & (B)
 - d) All of these
88. National Institute of Biotechnology Information (NCBI) is located in
- a) Australia
 - b) Mexico
 - c) Nigeria
 - d) USA
89. A plant bearing both male and female flowers is called
- a) Bisexual
 - b) Dioecious
 - c) Monoecious
 - d) Monogamous
90. Bananas are seedless because they are
- a) triploid
 - b) parthenocarpic
 - c) reproduce vegetatively
 - d) Reproduce asexually
91. The cell membrane mainly helps in:
- a) Controlling movement of substances in and out of the cell
 - b) Making food by photosynthesis
 - c) Carrying genetic information
 - d) Producing ribosomes

92. Who had measured an individual electric charge?
- | | |
|-------------|----------------------|
| a) Einstein | b) Millikan |
| c) CV Raman | d) None of the above |
93. Which part of the flower produces pollen grains?
- | | |
|-----------|---------|
| a) Anther | b) Root |
| c) Fruit | d) Leaf |
94. Which tissue transports water in plants?
- | | |
|----------|--------------|
| a) Xylem | b) Skin |
| c) Nerve | d) Cartilage |
95. $F = ma$ equation is discovered by
- | | |
|------------|---------------|
| a) Newton | b) Rutherford |
| c) Galileo | d) Fleming |
96. The relative frequency of occurrence of an event is called as
- | | |
|----------------|----------------------|
| a) probability | b) relativity |
| c) biometry | d) none of the above |
97. 3-D structures of proteins are stored in
- | | |
|----------------------|------------|
| a) Swiss-Prot | b) PubMed |
| c) Protein Data Bank | d) GenBank |
98. Antibiotics are mainly used to control
- | | |
|-------------------------|----------------------|
| a) Bacterial infections | b) Viral fever only |
| c) Fungal spores only | d) Genetic disorders |

99. Plasmids are commonly used as:

- | | |
|-------------|---------------|
| a) Vectors | b) Enzymes |
| c) Hormones | d) Antibodies |

100. Human Genome project was started in

- | | |
|---------|---------|
| a) 2000 | b) 1990 |
| c) 2006 | d) 2003 |



- Rough Work -