

Test Booklet No. _____

This booklet consists of 100 questions and 09 printed pages.

RGUCET/2024/___/___

Series

NIL

RGUCET 2024
Common Entrance Test, 2024
POST GRADUATE DIPLOMA (FORENSIC SCIENCE)

Full Marks: 100

Time: 2 Hours

Roll No.

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Day and Date of Examination: _____

Signature of Invigilator(s) _____

Signature of Candidate _____

General Instructions:

PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 100 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall after the commencement of the entrance test or leave the examination hall within one hour thirty minutes.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidates are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy.

| | | | | | |
|----|---|--------------------------|----------------------------------|---|-----------------------|
| 1 | Which of the following is a circulatory fluid in human body other than blood? | | | | c |
| | a) RBC | b) Platelets | c) Lymph | d) Plasma | Lymph |
| 2 | Which instrument is used to hear the sound of heart? | | | | a |
| | a) Stethoscope | b) Haemometer | c) Sphygmomanometer | d) Electrocardiograph | Stethoscope |
| 3 | Which of the following is a heritable characteristic? | | | | b |
| | a) Learned behavior | b) Eye color | c) The ability to ride a bicycle | d) The ability to play a musical instrument | Eye color |
| 4 | Which of the following is not a renewable source of energy? | | | | c |
| | a) Solar energy | b) Wind energy | c) Fossil fuels | d) Hydroelectric energy | Fossil fuels |
| 5 | Which of the following is an example of non-biodegradable waste? | | | | b |
| | a) Paper | b) Plastic bags | c) Fallen leaves | d) Vegetable peels | Plastic bags |
| 6 | Chemical name of common salt is- | | | | b |
| | a) Sodium Nitrate | b) Sodium chloride | c) Sodium bicarbonate | d) Sodium hydroxide | Sodium chloride |
| 7 | What is the normal heart beat of a healthy man? | | | | b |
| | a) 60-70 times/minute | b) 70-80 times/minute | c) 80-90 times/minute | d) 85-95 times/minute | 70-80 times/minute |
| 8 | Which is the longest bone in human? | | | | a |
| | a) Femur | b) Humerus | c) Tibia | d) Fibula | Femur |
| 9 | What is the dental formula of human | | | | d |
| | a) 2-1-3-3 | b) 2-1-3-2 | c) 2-1-2-2 | d) 2-1-2-3 | 2-1-2-3 |
| 10 | How many components are present in the basic unit of DNA? | | | | c |
| | a) one | b) two | c) three | d) four | three |
| 11 | What is the full form of DNA? | | | | b |
| | a) Degenerative Acid | b) Deoxyribonucleic acid | c) Distilled Nucleic acid | d) Disoriented acid | Deoxyribonucleic acid |
| 12 | How many types of nucleic acids are present in the living systems? | | | | c |
| | a) four | b) three | c) two | d) one | two |
| 13 | Mendel used the term _____ for gene. | | | | a |
| | a) factor | b) allele | c) locus | d) DNA | factor |
| 14 | The acids produced by stomach in human body to help in digestion is called- | | | | a |
| | a) Hydrochloric acid | b) Sulphuric acid | c) Nitric acid | d) Benzoic acid | Hydrochloric acid |
| 15 | Rusting of iron is due to - | | | | d |

| | | | | | |
|----|--|---|---|--|--|
| | a) Hydrolysis process | b) Reduction Process | c) Carbonation Process | d) Oxidation Process | Oxidation Process |
| 16 | Which of the Vitamin helps in blood clotting? | | | | d |
| | a) Vitamin A | b) Vitamin C | c) Vitamin D | d) Vitamin K | Vitamin K |
| 17 | Which organelle is known as the power house of a cell? | | | | b |
| | a) Nuclei | b) Mitochondria | c) Golgi bodies | d) Lysosome | Mitochondria |
| 18 | Other than the nucleus, which organelle has DNA | | | | b |
| | a) Cytoplasm | b) Mitochondria | c) Golgi bodies | d) Lysosome | Mitochondria |
| 19 | Pollination is the process of | | | | b |
| | a) Growth of pollen tube in ovule | b) Transfer of pollen from anther to stigma | c) Germination of pollen grain | d) visiting flowers by insects | Transfer of pollen from anther to stigma |
| 20 | Plants receive their nutrients mainly from | | | | d |
| | a) Chlorophyll | b) Atmosphere | c) light | d) soil | soil |
| 21 | Oxygen are carried to various parts of human body by | | | | c |
| | a) Plasma | b) Nerves | c) Red blood cells | d) White blood cells | Red blood cells |
| 22 | The difference between cartilage and bone is | | | | c |
| | a) bone is a more primitive tissue than cartilage | b) bone is rubbery, and cartilage is firm | c) bone is firm, and cartilage is rubbery | d) bone is inside the body, and cartilage is outside | bone is firm, and cartilage is rubbery |
| 23 | Which of the following statement(s) is/ are incorrect? A. bone protects and supports the body and its organs B. bone is where most blood cells are made C. bone serves as a storehouse for various minerals D. bone is a dry and non-living supporting structure | | | | d |
| | a) B, C and D | b) B and D | c) C and D | d) only D | only D |
| 24 | What makes bones so strong? | | | | b |
| | a) cartilage | b) calcium and phosphorus | c) silica | d) bone marrow | calcium and phosphorus |
| 25 | The first cervical vertebra is called - | | | | b |
| | a) Axis | b) Atlas | c) Venus | d) Heraclius | atlas |
| 26 | Ribs are attached to | | | | b |
| | a) scapula | b) sternum | c) clavicle | d) ilium | sternum |
| 27 | The father of Indian missile technology is - | | | | c |
| | a) Homi Bhabha | b) U. R. Rao | c) A.P.J Abdul Kalam | d) P Chidambaram | A.P.J Abdul Kalam |
| 28 | The largest public sector undertaking in India is - | | | | b |

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|----|---|---|--|---|--|
| | a) Airways | b) Railways | c) Roadways | d) Iron and Steel plants | Railways |
| 29 | The study of Heavenly bodies is known as - | | | | d |
| | a) Astrophysics | b) Astronautics | c) Astrology | d) Astronomy | Astronomy |
| 30 | Which state does not share its boundary with Myanmar? | | | | d |
| | a) Arunachal Pradesh | b) Mizoram | c) Manipur | d) Sikkim | Sikkim |
| 31 | Digestion of food in human beings begins in which part of alimentary canal? | | | | a |
| | a) Mouth | b) Stomach | c) Small intestine | d) Large intestine | Mouth |
| 32 | Who among the following nations is not a member of BRICS? | | | | b |
| | a) India | b) Japan | c) China | d) Russia | Japan |
| 33 | Who wrote the book 'A brief history of time'? | | | | a |
| | a) Stephen Hawking | b) John Green | c) J K Rowling | d) Suzame Colling | Stephen Hawking |
| 34 | 'Playing it my way' is the biography of - | | | | b |
| | a) Mohammad Azaruddin | b) Sachin Tendulkar | c) Kapil Dev | d) Harbhajan Singh | Sachin Tendulkar |
| 35 | Match the following famous personality with their autobiography. | | | | a |
| | A Mary Kom | | i Long Walk to Freedom | | |
| | B Nelson Mandela | | ii Unbreakable | | |
| | C APJ Abdul Kalam | | iii Freedom in Exile | | |
| | D Dalai Lama | | iv Wings of Fire | | |
| | a) A-ii; B-i; C-iv; D- iii | b) A-ii; B-i; C-iii; D- iv | c) A-ii; B-iii; C-iv; D- i | d) A-iii; B-i; C-iv; D- ii | A-ii; B-i; C-iv; D- iii |
| 36 | The book 'War and Peace' is written by - | | | | a |
| | a) Leo Tolstoy | b) Dalai Lama | c) Maroof Raza | d) HG Wells | Leo Tolstoy |
| 37 | In which state of India does the sunrise first appear? | | | | a |
| | a) Arunachal Pradesh | b) Meghalaya | c) West Bengal | d) Nagaland | Arunachal Pradesh |
| 38 | Who was the first woman to become the governor of an Indian state? | | | | c |
| | a) Aruna Asif Ali | b) Vijay Laxmi Pandit | c) Sarojini Naidu | d) Krishna Hutheesing | Sarojini Naidu |
| 39 | Which state celebrate the Hornbill festival in December, every year? | | | | b |
| | a) Manipur | b) Nagaland | c) Arunachal Pradesh | d) Mizoram | Nagaland |
| 40 | The national sport of Bhutan is - | | | | a |
| | a) Archery | b) Football | c) Table Tennis | d) Badminton | Archery |
| 41 | Which of the following is true? | | | | d |
| | a) Red Blood Cells are devoid of nucleus and are biconvex in shape | b) Red Blood Cells are nucleated and are biconcave in shape | c) Red Blood Cells are nucleated and are biconvex in shape | d) Red Blood Cells are devoid of nucleus and are biconcave in shape | Red Blood Cells are devoid of nucleus and are biconcave in shape |
| 42 | How is 1/4 expressed as percentage? | | | | c |
| | a) 0.25% | b) 1.40% | c) 25% | d) 2.5% | 25% |

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| 43 | Most common form of colour blindness is- | | | | a |
| | a) Red-green | b) Blue-yellow | c) Red-yellow | d) Blue-green | Red-green |
| 44 | What is demography? | | | | c |
| | a) Study of race | b) study of tribe | c) study of population | d) study of earth's crust | study of population |
| 45 | Identify the correct sequence | | | | c |
| | a) premolar-molar-canine-incisor | b) canine-incisor-premolar-molar | c) incisor-canine-premolar-molar | d) incisor-premolar-canine-molar | incisor-canine-premolar-molar |
| 46 | Sartang is a tribe of - | | | | c |
| | a) Manipur | b) Mizoram | c) Arunachal Pradesh | d) Nagaland | Arunachal Pradesh |
| 47 | 'Rasleela' is a dance form of which state? | | | | c |
| | a) Assam | b) Punjab | c) Manipur | d) Andhra Pradesh | Manipur |
| 48 | Which of the following bone is not a part of human skull? | | | | d |
| | a) Parietal | b) Frontal | c) Temporal | d) Sacrum | Sacrum |
| 49 | The study of measurement of different aspects of human body is called as | | | | d |
| | a) Osteometry | b) Paleoanthropology | c) Serology | d) Somatometry | Somatometry |
| 50 | Agriculture first developed during | | | | c |
| | a) Paleolithic | b) Mesolithic | c) Neolithic | d) Chalcolithic | Neolithic |
| 51 | Skin Colour in Human is an example of | | | | d |
| | a) Sex-linked trait | b) Monogenic trait | c) Sex-influenced trait | d) Polygenic trait | Polygenic trait |
| 52 | World AIDS Day is observed on | | | | b |
| | a) 10 th December | b) 1 st December | c) 14 th November | d) 10 th November | 1 st December |
| 53 | Dyslexia is associated with | | | | a |
| | a) reading disorder | b) writing disorder | c) mental disorder | d) behavioural disorder | reading disorder |
| 54 | Alzheimer Disease leads to | | | | a |
| | a) Dementia | b) Malnutrition | c) Diabetes | d) Cancer | Dementia |
| 55 | Who wrote the book "A Philosophy for NEFA" | | | | c |
| | a) D. N Majumdar | b) T. C Das | c) Verrier Elwin | d) C. V. F Haimendorf | Verrier Elwin |
| 56 | A man with type 'O' blood group marries a woman with type 'AB' blood group. What are the different blood group type their children could NOT have? | | | | c |
| | a) 'A' group | b) 'B' group | c) 'O' group | d) 'AB' group | 'O' group |
| 57 | DNA fingerprinting is used to identify the - | | | | d |
| | a) Parents | b) Thieves | c) Rapist | d) All of the above | All of the above |
| 58 | Which of the following is/ are not a characteristic feature of human? | | | | d |

| | | | | | |
|----|--|--|--|--|---|
| | A. Anteriorly placed foramen magnum B. Reduced Olfactory bulb C. Precision gripping D. U-shape dental arcade | | | | |
| | a) A, B, C and D | b) B, C and D | c) C and D | d) D only | D only |
| 59 | Which of the following human bone does not exist in pair | | | | d |
| | a) Parietal Bone | b) Frontal Bone | c) Zygomatic Bone | d) Temporal Bone | Temporal Bone |
| 60 | Which of the following instrument is not use in Anthropometry? | | | | d |
| | a) Spreading Calliper | b) Sliding Calliper | c) Weighing Balance | d) Cubic Craniophore | Cubic Craniophore |
| 61 | What is the title of the famous book by Charles Darwin where he discusses about natural selection? | | | | a |
| | a) On the Origin of Species | b) Origin of Species through Natural selection | c) Organic Evolution | d) Human Evolution | On the Origin of Species |
| 62 | Who has the largest cranial capacity? | | | | a |
| | a) Neandertal man | b) Homo sapiens | c) Homo erectus | d) Homo heidelbergensis | Neandertal man |
| 63 | Which one is not true about mitochondrial DNA? A. It does not under recombination B. It transmitted maternally C. Its circular in shape D. It is useful for evolutionary study | | | | a |
| | a) A, B, C and D | b) B, C and D | c) C and D | d) D only | A, B, C and D |
| 64 | Which nitrogenous base is not found in DNA? | | | | a |
| | a) Uracil | b) Thymine | c) Cytosine | d) Adenine | Uracil |
| 65 | Which of the following is NOT true for human skull? | | | | c |
| | a) cranium is larger than facial portion | b) sutures are highly serrated | c) prominent supraorbital ridges | d) nuchal lines are less mark | prominent supraorbital ridges |
| 66 | The condition of chromosomal aberration having only a X in sex chromosome is called | | | | a |
| | a) Turner syndrome | b) Klinefelter syndrome | c) Down syndrome | d) Trisomy X | Turner syndrome |
| 67 | Identify the correct sequence of organization of genetic material in decending order | | | | b |
| | a) gene - nucleotide - chromosome - genome | b) genome - chromosome - gene - nucleotide | c) genome - gene - chromosome - nucleotide | d) chromosome - gene - nucleotide - genome | genome - chromosome - gene - nucleotide |
| 68 | Which of the following is NOT a blood grouping system? | | | | d |

| | | | | | |
|----|---|--|--|--|---|
| | a) Duffy | b) MN | c) Rh | d) PTC | PTC |
| 69 | The study of human growth is known as | | | | a |
| | a) Auxology | b) Philology | c) Ethology | d) Nosology | Auxology |
| 70 | Differences in physical characteristics between male and females of the same species is also term as | | | | b |
| | a) Polymorphism | b) Sexual dimorphism | c) Sex difference | d) Sexual polymorphism | Sexual dimorphism |
| 71 | Mendel's law which says that different pairs of alleles are passed to offspring independently is called | | | | d |
| | a) Law of dominance | b) Law of progeny | c) Law of segregation | d) Law of independent assortment | Law of independent assortment |
| 72 | What measures Earthquake? | | | | d |
| | a) Haemometer | b) Barometer | c) Odometer | d) Seismometer | Seismometer |
| 73 | When is Indigenous Faith Day (IFD) celebrated? | | | | a |
| | a) First December | b) Tenth December | c) Twenty-fifth December | d) First November | First December |
| 74 | Complete set of genetic information for an organism is called | | | | d |
| | a) Chromosome | b) Gene | c) Genetic load | d) Genome | Genome |
| 75 | Humans are genetically closest to | | | | c |
| | a) Gibbons | b) Gorillas | c) Chimpanzees | d) Orangutans | Chimpanzees |
| 76 | Which epoch is known as Planet of Apes? | | | | b |
| | a) Oligocene | b) Miocene | c) Pliocene | d) Pleistocene | Miocene |
| 77 | Colour blindness is a/an | | | | b |
| | a) X linked dominant trait | b) X linked recessive trait | c) autosomal dominant trait | d) autosomal recessive trait | X linked recessive trait |
| 78 | The totality of deleterious alleles in a population is known as | | | | c |
| | a) genetic equilibrium | b) genetic mortality | c) genetic load | d) genome | genetic load |
| 79 | Random changes in gene frequency in a population is called | | | | b |
| | a) founder effect | b) genetic drift | c) gene flow | d) genetic bottleneck | genetic drift |
| 80 | Which of the following is not correctly matched? | | | | d |
| | a) founder effect - genetic drift | b) fitness - natural selection | c) speciation - macroevolution | d) mutation - gene flow | mutation - gene flow |
| 81 | Essential amino acids mean - | | | | b |
| | a) amino acids which are required for protein synthesis | b) amino acids which cannot be synthesis by the body | c) amino acids which are present in every enzyme | d) amino acids which are synthesis in the body | amino acids which cannot be synthesis by the body |
| 82 | Which of the following is NOT a mechanic of evolution? | | | | c |
| | a) Natural selection | b) Genetic drift | c) Speciation | d) Sexual selection | Speciation |

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| 83 | Which of the following is correctly matched? | | | | b |
| | a) blood group - polymorphism | b) segregation - independent assortment | c) mitosis - cell division | d) trisomy - chromosomal aberration | segregation - independent assortment |
| 84 | The total number of permanent teeth in human is | | | | d |
| | a) 28 | b) 30 | c) 34 | d) 32 | 32 |
| 85 | Age- related deterioration process is known as | | | | d |
| | a) Dementia | b) Maturation | c) Spurt | d) Senescence | Senescence |
| 86 | Which of the following bone lies horizontally in our body? | | | | a |
| | a) clavicle | b) sternum | c) fibula | d) tibia | clavicle |
| 87 | Which of the following is NOT a flat bone? | | | | d |
| | a) scapula | b) parietal | c) temporal | d) phalanges | phalanges |
| 88 | Which of the following is NOT a part of vertebral column? | | | | a |
| | a) ischium | b) thoracic | c) lumber | d) cervical | ischium |
| 89 | Erythrocyte is another name for a | | | | b |
| | a) white cell | b) red cell | c) platelet | d) plasma | red cell |
| 90 | Chromosomes are found in | | | | a |
| | a) nucleus | b) cytoplasm | c) mitochondria | d) all of the above | nucleus |
| 91 | How many different types of amino acids are there? | | | | a |
| | a) 20 | b) 24 | c) 46 | d) 100-200 | 20 |
| 92 | Phenotype refers to the | | | | b |
| | a) genetic makeup | b) actual physical appearance | c) recessive alleles | d) dominant alleles | actual physical appearance |
| 93 | Which of the following molecule is the building block of proteins | | | | b |
| | a) DNA | b) Amino Acids | c) Polypeptide | d) RNA | Amino Acids |
| 94 | Recombination of DNA occur during | | | | a |
| | a) meiosis | b) mitosis | c) both the above | d) None of the above | meiosis |
| 95 | Diagram used in the study of human genetics that shows the transmission of a genetic trait over generations of a family is called | | | | b |
| | a) Family tree | b) Pedigree | c) Genealogy | d) Phytology | Pedigree |
| 96 | Which types of waves are used in a night vision apparatus? | | | | c |
| | a) Radio waves | b) Microwaves | c) Infra-red waves | d) None of the above | Infra-red waves |
| 97 | Which of the following is used in pencils? | | | | c |
| | a) Silicon | b) Phosphorous | c) Graphite | d) Charcoal | Graphite |
| 98 | The weight of an object will be minimum when it is placed at? | | | | d |
| | a) The North Pole | b) The South Pole | c) The Equator | d) The center of the Earth | The center of the Earth |
| 99 | Air pollution level is considered to be moderate if Air Quality index between - | | | | d |
| | a) 0 to 50 | b) 51 to 100 | c) 101 to 150 | d) 151 to 200 | 151 to 200 |
| 100 | The first Indian communication satellite was | | | | a |

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|--|----------|--------------|---------------|---------------------|-------|
| | a) Apple | b) Aryabhata | c) Bhaskara-I | d) Chandrayaan-I | Apple |
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