



NUMS 2026

Original Entry Test Paper

Complete • 150 MCQs • 150 minutes • No negative marking
Biology 55 • Chemistry 40 • Physics 40 • English 15

70%+

of this paper repeats from the NUMS Book question bank

NUMS Entry Test Book by MbBs.Com.Pk • mbbs.com.pk/product/nums-book/

FREE — ALWAYS

Built by NUMS qualifiers who couldn't afford academies.
Every past paper, every solution, free for every student in Pakistan.

All NUMS past papers: mdcatguide.com/nums-past-papers-html/

NUMS syllabus: mdcatguide.com/nums-syllabus/

Free practice portal: mdcatguide.com/practice

WhatsApp: +92 316 4047600

NUMS 2026 — Original Paper

This is the complete NUMS 2026 entry test, reproduced as it was sat: 150 questions, 150 minutes, no negative marking. Attempt it under timed conditions first, then mark yourself against the Quick Answer Grid at the back.

Paper structure

- **Biology** Q1-Q55 (55 questions)
- **Chemistry** Q56-Q95 (40 questions)
- **Physics** Q96-Q135 (40 questions)
- **English** Q136-Q150 (15 questions)

A note on the answer key

NUMS does not release an official key. Every answer here has been worked out against the FSc / federal board syllabus. Nine questions are worded in a way that different academics key differently — those are marked * in the answer key so you know to check the concept rather than memorise a letter. We would rather tell you that than pretend to a certainty nobody has.

RESEARCH BADGE

Before you start: what this paper is really telling you

More than 70% of the questions below repeat from the MCQ question bank in the NUMS Entry Test Book by MbBs.Com.Pk. NUMS recycles its concepts. Students who had already drilled these MCQs recognised most of this paper on sight — that is the whole advantage.

NUMS Entry Test Book → mbbs.com.pk/product/nums-book/

BIOLOGY

Q1 – Q55 • 55 questions

1. Identify the type of glycoprotein, responsible for cell fusion process in HIV cycle:

- ☐ **A** gp 40
- ☐ **B** gp 41
- ☐ **C** gp 120
- ☐ **D** gp 121

2. Which of the following enzymes converts mRNA to complementary DNA (cDNA)?

- ☐ **A** Integrase
- ☐ **B** Reverse transcriptase
- ☐ **C** Protease
- ☐ **D** DNAase

3. see note Edward Jenner used material removed from the lesion on the hand of milkmaid and vaccinated a boy suffering from which of the following disease?

- ☐ **A** Small pox
- ☐ **B** Chicken pox
- ☐ **C** Cow pox
- ☐ **D** Measles

4. Adenovirus are classified as:

- ☐ **A** Helical capsid
- ☐ **B** Polyhedral capsid
- ☐ **C** Enveloped virus
- ☐ **D** Coupler capsid

5. If a person is doing strenuous exercise, how many ATPs are produced by cellular respiration?

- ☐ **A** 2 ATPs
- ☐ **B** 3 ATPs
- ☐ **C** 4 ATPs
- ☐ **D** 6 ATPs

6. The end product of non-cyclic electron pathway is:

- ☐ A ATP and NADPH
- ☐ B ATP
- ☐ C FADH_2
- ☐ D NADPH_2

7. Pyruvic acid is converted into acetaldehyde through which step?

- ☐ A Decarboxylation
- ☐ B Oxidation
- ☐ C Addition of coenzyme A
- ☐ D Reduction

8. Choose the correct sequence of electron carrier in respiratory ETC:

- ☐ A Coenzyme Q $\rightarrow$ cytochrome a $\rightarrow$ cytochrome a_3 $\rightarrow$ cytochrome b $\rightarrow$ cytochrome c
- ☐ B Coenzyme Q $\rightarrow$ cytochrome b $\rightarrow$ cytochrome c $\rightarrow$ cytochrome a $\rightarrow$ cytochrome a_3
- ☐ C cytochrome a $\rightarrow$ cytochrome a_3 $\rightarrow$ cytochrome b $\rightarrow$ cytochrome c $\rightarrow$ coenzyme Q
- ☐ D Cytochrome b $\rightarrow$ cytochrome c $\rightarrow$ coenzyme Q $\rightarrow$ cytochrome a $\rightarrow$ cytochrome a_3

9. Pumping movement of protons occur from:

- ☐ A Outer membrane and inner membrane
- ☐ B Matrix of mitochondria and mitochondrial intermembrane space
- ☐ C Inner membrane and cisternae
- ☐ D Inner membrane and intermembrane space

10. Net product of Krebs cycle is:

- ☐ A 2CO_2 , 3ATP, 6NADH, 2FADH
- ☐ B 4CO_2 , 3NADH, 6ATP, 3FADH
- ☐ C 4CO_2 , 2ATP, 6NADH, 2FADH
- ☐ D CO_2 , NADH, FADH

RESEARCH BADGE

Cell biology and enzymes carry the Biology paper

22% of every NUMS Biology section comes from cell biology and enzymes alone. The NUMS Book groups these MCQs together so you drill the highest-yield block first instead of reading 600 pages front to back.

See the Biology block [→ mbbs.com.pk/product/nums-book/](https://mbbs.com.pk/product/nums-book/)

11. The electron carrier of mitochondria are found in:

- ☐ A Outer mitochondrial membrane
- ☐ B Stroma
- ☐ C Intermembrane space
- ☐ D Inner mitochondrial membrane

12. Which one of the following is a monosaccharide?

- ☐ A Sucrose
- ☐ B Maltose
- ☐ C Lactose
- ☐ D Fructose

13. What is percentage of water in brain cells?

- ☐ A 20%
- ☐ B 70%
- ☐ C 85%
- ☐ D 30%

14. Proportion of carbohydrate in bacterial and mammalian cell is:

- ☐ A 2%, 4%
- ☐ B 3%, 4%
- ☐ C 4%, 2%
- ☐ D 3%, 2%

15. Water has very high heat capacity due to its:

- ☐ A High polarity
- ☐ B Hydrogen bonding
- ☐ C High heat of vaporization
- ☐ D Ionization

16. Which one of the following biomolecule is involved in the transport of oxygen?

- ☐ A Protein
- ☐ B Fats
- ☐ C Carbohydrate
- ☐ D Nucleic acid

17. Which is the second most abundant organic molecule on earth?

- ☐ A Starch
- ☐ B Glycogen
- ☐ C Cellulose
- ☐ D Chitin

18. Glycerol reacts with fatty acids to produce:

- ☐ A Phospholipids
- ☐ B Terpenes
- ☐ C Acyl glycerol
- ☐ D Steroids

19. During cell wall formation absence of magnesium results in:

- ☐ A Lack of primary cell wall
- ☐ B Lack of secondary cell wall
- ☐ C Lack of middle lamella
- ☐ D No effect on cell wall formation

20. Identify the mismatch in the following:

- ☐ A Mitochondria – cellular respiration
- ☐ B Endoplasmic reticulum – detoxification
- ☐ C Mitochondria – deamination
- ☐ D Lysosome – autophagy

21. Which organelle will increase in number, in muscles of athlete?

- ☐ A Mitochondria
- ☐ B Ribosome
- ☐ C Golgi apparatus
- ☐ D Lysosome

22. In secretory cells which pathway is followed for the transport of material?

see note

- ☐ A Golgi complex → RER → SER
- ☐ B RER → golgi complex → SER
- ☐ C RER → SER → golgi complex
- ☐ D SER → golgi complex → RER

23. How many number of chromosomes are present in onion?

- ☐ A 16
- ☐ B 8
- ☐ C 14
- ☐ D 26

24. A cell is treated with a toxin that disrupts Golgi apparatus. Which function is affected?

- ☐ A Lipid metabolism
- ☐ B Protein modification
- ☐ C Chromosome separation during cell division
- ☐ D ATP production

25. Where modification and packaging occur in secretory cells?

- ☐ A Golgi apparatus
- ☐ B Mitochondria
- ☐ C Endoplasmic reticulum
- ☐ D Nucleus

26. A person continuously faces water imbalance in body due to damage of which part of the brain?

- ☐ A Amygdala
- ☐ B Thalamus
- ☐ C Medulla
- ☐ D Hypothalamus

27. Which part of brain is activated to release excess CO₂ from body produced during strenuous exercise?

- ☐ A Pons
- ☐ B Medulla
- ☐ C Cerebellum
- ☐ D Cerebrum

28. The cerebrospinal fluid (CSF) is present between:

- ☐ A Dura matter & arachnoid matter
- ☐ B Arachnoid matter & Pia matter
- ☐ C Dura matter & Pia matter
- ☐ D Arachnoid matter & Dura matter

RESEARCH BADGE

Preparing for MDCAT too? You get a bonus

Students sitting both MDCAT and NUMS gain a 12-18% overlap bonus — the same concepts appear in both papers, so one round of preparation counts twice.

MDCAT Past Papers Book (8 years) → mbbs.com.pk/product/mdcat-book/

29. What is the role of growth hormone after adolescence?

- ☐ A Promotes protein synthesis
- ☐ B Inhibits protein synthesis
- ☐ C Decreases amino acid uptake
- ☐ D Inhibits cell division

30. Which of the following is correct function of calcitonin?

see note

- ☐ A Resorption of calcium in bone matrix
- ☐ B Inhibits Ca^{+2} absorption by intestine
- ☐ C Increase reabsorption by kidneys
- ☐ D Increase blood calcium level

31. What is secreted when the levels of blood glucose get too low?

- ☐ A Calcitonin
- ☐ B Glucagon
- ☐ C Insulin
- ☐ D Corticoid hormones

32. Pathway followed by nerve impulse during reflex action is:

- ☐ A Interneuron → synapse → dendrites → cell body of motor neuron
- ☐ B Interneuron → dendrite → synapse → cell body of motor neuron
- ☐ C Interneuron → synapse → cell body of neuron
- ☐ D Interneuron → dendrites → cell body of neuron

33. Identify the animals having both mammalian and reptilian features:

- ☐ A Mice
- ☐ B Spiny ant eater
- ☐ C Opossum
- ☐ D Bat

34. An enzyme which requires a cofactor to become active is called:

- ☐ A Apoenzyme
- ☐ B Holoenzyme
- ☐ C Prosthetic group
- ☐ D Co-enzyme

35. Which statement best describes competitive inhibitors?

- ☐ A Denature enzyme permanently
- ☐ B Used as drugs
- ☐ C Prevent enzyme product complex
- ☐ D Alter the shape of enzymes

36. Due to snake bite a person's heart stops working. Which type of venom will be found in his body?
see note

- ☐ A Hemotoxic
- ☐ B Hepatotoxic
- ☐ C Neurotoxic
- ☐ D Cytotoxic

37. Identify the enzyme which shows absolute specificity:

- ☐ A Carbonic anhydrase
- ☐ B Hexokinase
- ☐ C Urease
- ☐ D Isomerase

38. Some industries are continuously polluting aquatic bodies. This can affect metabolic pathway of plants by changing their pH.

- ☐ A More alkaline
- ☐ B More acidic
- ☐ C Less acidic
- ☐ D Less alkaline

39. All flowering plants are thought to be evolved from a common ancestor on the basis of which homologous structures?

- ☐ A Stamen, carpel, sepals, petals
- ☐ B Stamen, carpel, thalamus, sepals
- ☐ C Stamen, carpel, thalamus, sepals, petals, stalk
- ☐ D Stamen, carpel, sepals, thalamus

40. Barriers which effect geographical distribution of life are:

- ☐ A Physical and chemical
- ☐ B Environmental & Physical
- ☐ C Ecological & chemical
- ☐ D Physical, Ecological or Environmental

41. Why are some genes called pseudoautosomal, even though they are present on sex chromosome?

- ☐ A They are present on X chromosomes only
- ☐ B They are present on Y chromosomes only
- ☐ C They are present on both X and Y chromosomes
- ☐ D They are absent from both X and Y chromosomes

42. As a result of natural disaster, few species continue to survive due to their characteristics. This results in:

- ☐ A Increase in favorable alleles
- ☐ B Decrease in favorable alleles
- ☐ C Increase in unfavorable alleles
- ☐ D Decrease in unfavorable alleles

43. Which of these correctly order the structure of arteries?

- ☐ A Connective tissues → Smooth muscle → Elastic tissue → Endothelium
- ☐ B Connective tissues → Smooth muscle → Endothelium → Elastic tissue
- ☐ C Elastic tissue → Smooth muscle → Connective tissue → Endothelium
- ☐ D Smooth muscle → Connective tissues → Elastic tissue → Endothelium

44. Epidermis is outer most layer of the skin, which is composed of:

- ☐ A Loosely packed cells
- ☐ B Tightly packed cells
- ☐ C Scattered cells
- ☐ D Ciliated cells

45. Which type of muscle controls the movement of substance through hollow organs?

- ☐ A Cardiac muscle
- ☐ B Smooth muscles
- ☐ C Sphincter muscles
- ☐ D Skeleton muscle

46. Smallest contractile unit of muscle fibers present between two lines is known as:

- ☐ A Sarcoplasm
- ☐ B Sarcolemma
- ☐ C Sarcomere
- ☐ D Sarcodina

47. Which ion is responsible for the attachment of tropomyosin with the head of myosin during cross bridge?

- ☐ A K^+ ions
- ☐ B Ca^{++} ions
- ☐ C Na^+ ions
- ☐ D Mg^+

48. During muscle contraction which type of events occurs respectively?

- ☐ A I band shorten → H-zone appears
- ☐ B I band strengthen → H-zone disappears
- ☐ C I band shorten → H-zone disappears
- ☐ D I band strengthen → H-zone appears

49. Which one of the following organism is responsible for transforming nitrogen gas into ammonium?

- ☐ A Cyanobacterium
- ☐ B Nitrobacteria
- ☐ C Rhizobium
- ☐ D Nitrosomonas

50. Identify one of the following chemo-therapeutic agent used to control bacterial infections:

- ☐ A Nitrofurans
- ☐ B Hydrogen peroxide
- ☐ C Sodium hypochlorite
- ☐ D Potassium sorbate

51. Why male gonads are present outside the body?

- ☐ A They need temperature equal to human body
- ☐ B They need 2°C temperature higher than human body
- ☐ C They need 2°C temperature less than human body
- ☐ D They need environmental condition for sperm production

52. Which set of events will occur if fusion of gametes does NOT take place?

- ☐ A Corpus luteum degenerate, LH increase, progesterone increase
- ☐ B Corpus luteum degenerate, LH decline, progesterone increase
- ☐ C Corpus luteum degenerate, LH increase, progesterone decline
- ☐ D Corpus luteum degenerate, LH decline, progesterone decline

53. Which of the following is correct order of the transport of bicarbonate from blood to lungs?

- ☐ A Capillaries → Alveoli → Red blood cells
- ☐ B Red blood cells → Alveoli → Capillaries
- ☐ C Alveoli → Capillaries → Red blood cells
- ☐ D Red blood cells → Capillaries → Alveoli

54. Which set of digestive enzymes play a vital role in breakdown of protein?

- ☐ A Pepsin, maltase, erepsin
- ☐ B Pepsin, trypsin, amylase
- ☐ C Pepsin, trypsin, erepsin
- ☐ D Pepsin, amylase, lipase

55. Gene of one allele which inhibits the effect of other allele at different locus is called as:

- ☐ A Hypostatic gene
- ☐ B Hylostatic gene
- ☐ C Polystatic gene
- ☐ D Epistatic gene

WHY 70%+ OF THIS PAPER FELT EASY

NUMS Entry Test Book

by MbBs.Com.Pk

Students who practised our MCQ question bank walked into NUMS 2026 having already seen most of what the paper asked. More than 70% of the questions in this paper repeat from the bank inside this book.

That is not luck. NUMS recycles its concepts every year — and the book is built from every past paper, sorted topic by topic, with the answer and the reasoning beside each MCQ.

70%+of this paper
repeats from the book**4.9/5**from 1,200+
verified reviews**50,000+**students have
used this book

What you get

- Complete topic-wise MCQ bank — Biology, Chemistry, Physics, English
- Every NUMS past paper solved, with explanations, not just answer letters
- Free home delivery anywhere in Pakistan
- Cash on delivery — you pay when the book reaches your hand

Where the marks actually are

Share of each section held by its single highest-yield block — the book drills these first.

Biology	Cell biology + enzymes		22%
Chemistry	Organic chemistry		18%
Physics	Mechanics		38%
English	Vocabulary + idioms		47%

★★★★★ **4.9 / 5**

1,200+ verified reviews • 50,000+ students • delivered to every district in Pakistan
Questions before ordering? WhatsApp +92 316 4047600 — a real person answers.

Order now — mbbs.com.pk/product/nums-book/

Free home delivery • Cash on delivery • WhatsApp +92 316 4047600

Also available: MDCAT Past Papers Book (8 years complete) — mbbs.com.pk/product/mdcat-book/

CHEMISTRY

Q56 – Q95 • 40 questions

56. Which of the following is equal to 1 mole of Na^+ ?

- ☐ A 6.02×10^{23} atoms
- ☐ B 6.02×10^{23} ions
- ☐ C 6.02×10^{-23} atoms
- ☐ D 6.02×10^{-23} ions

57. The e/m value for positive rays depends upon nature of gas used because:
see note

- ☐ A Number of electrons
- ☐ B Number of neutrons
- ☐ C Number of protons
- ☐ D Number of electrons and protons

58. Select the correct increasing energy order of orbitals?

- ☐ A $4s < 3d < 4p < 5s$
- ☐ B $3d > 4s < 4p < 5s$
- ☐ C $3d < 4s < 5s > 4p$
- ☐ D $4s > 3d > 4p > 5s$

59. Which of the following expressions represent Boyle's law?

- ☐ A $P_1/V_1 = P_2/V_2$
- ☐ B $P_1/V_1 \neq P_2/V_2$
- ☐ C $P_1V_1 \neq P_2V_2$
- ☐ D $P_1V_1 = P_2V_2$

60. Which Celsius temperature represents zero kelvin or absolute zero?

- ☐ A 0°C
- ☐ B $+273.16^\circ\text{C}$
- ☐ C -273.16°C
- ☐ D 25°C

61. An egg takes 5 minutes to boil at sea level while 10 minutes at Murree hills because of:

- ☐ A Low vapour pressure
- ☐ B High vapour pressure
- ☐ C High external pressure
- ☐ D Low external pressure

62. Fluorine is a gas and Iodine is a solid at room temperature due to:

- ☐ A High electronegativity
- ☐ B Low electronegativity
- ☐ C High polarizability
- ☐ D Low polarizability

63. Ionic solids are bad conductors of heat and electricity because:

- ☐ A They have strong covalent bonds
- ☐ B They have strong intermolecular forces
- ☐ C Ions can only vibrate about their fixed position
- ☐ D Ions are free to move

64. If 10% urea is present in aqueous solution of sodium chloride. What will be the shape of crystals obtained?

- ☐ A Octahedral
- ☐ B Triclinic
- ☐ C Cubic
- ☐ D Hexagonal

65. $K_c = K_p$ when Δn is equal to:

- ☐ A Zero
- ☐ B +1
- ☐ C -1
- ☐ D -2

66. The pH of human blood is maintained at:

- ☐ A 5.37
- ☐ B 5.73
- ☐ C 7.53
- ☐ D 7.35

67. The unit of rate constant is same as the rate of reaction in:

- ☐ A Third order reaction
- ☐ B Second order reaction
- ☐ C First order reaction
- ☐ D Zero order reaction

68. Which of the following represents Arrhenius constant expression?

- ☐ A $K = Ae^{(E_a/T)}$
- ☐ B $K = Ae^{(-E_a/RT)}$
- ☐ C $K = Ae^{(RT/E_a)}$
- ☐ D $K = e^{(-E_a/RT)}$

69. Which expression is according to the Hess's law?

- ☐ A $\Sigma \Delta H (\text{cycle}) = 0$
- ☐ B $\Sigma \Delta H = 2$
- ☐ C $\Sigma \Delta H (\text{cycle}) = 3$
- ☐ D $\Sigma \Delta H (\text{cycle}) = -1$

70. Which of the following represents the expression of internal energy?

- ☐ A $\Delta E = q + t$
- ☐ B $\Delta E = q + w$
- ☐ C $\Delta E = q + v$
- ☐ D $\Delta E = q + p$

RESEARCH BADGE

18% of Chemistry is organic — and it is predictable

Organic chemistry alone is 18% of the NUMS Chemistry section, and it repeats harder than any other topic. Nomenclature, functional groups and reaction types come back year after year.

Topic-wise Chemistry MCQs → mbbs.com.pk/product/nums-book/

71. Which is added in the product side to balance equation? $\text{H}_2\text{SO}_3 + \text{H}_2\text{O} \rightarrow \text{HSO}_4^-$

- ☐ A $1e^-, \text{H}^+$
- ☐ B $2e^-, 3\text{H}^+$
- ☐ C $5e^-$
- ☐ D $3e^-$

72. The oxidation state of Mn in KMnO_4 is:

- ☒ A +6
- ☐ B +3
- ☐ C +7
- ☐ D +4

73. When atoms approaches each other for chemical bond formation, it leads to:

- ☒ A Decrease in energy
- ☐ B Increase in energy
- ☐ C Energy remains same
- ☐ D Increase in bond length

74. The number of bonds in oxygen molecules are:

- ☒ A Two σ bond
- ☐ B Two σ one π bond
- ☐ C One σ one π bond
- ☐ D Two π one σ

75. The decreasing order of ionization energy is:

- ☒ A $\text{O} < \text{S} < \text{N}$
- ☐ B $\text{F} > \text{Cl} > \text{Br}$
- ☐ C $\text{Br} < \text{Cl} < \text{F}$
- ☐ D $\text{C} < \text{N} < \text{B}$

76. The size of Ar is larger than Cl due to:

- ☒ A Steric hindrance
- ☐ B Inter-electronic repulsion
- ☐ C High ionization energy
- ☐ D High shielding effect

77. Which element is lighter than water?

- ☒ A Cs
- ☐ B Rb
- ☐ C Fe
- ☐ D K

78. Which of the following decreases as we move from top to bottom in Group IA or IIA?

- ☐ A Metallic bond strength
- ☐ B Electro-positivity
- ☐ C Reactivity
- ☐ D Ionic radii

79. Which one of the following is the correct order of electronegativity of group IIA elements?

- ☐ A $\text{Be} < \text{Mg} < \text{Ca} < \text{Sr} < \text{Ba}$
- ☐ B $\text{Be} < \text{Ca} < \text{Mg} < \text{Ba} < \text{Sr}$
- ☐ C $\text{Ba} < \text{Sr} < \text{Ca} < \text{Mg} < \text{Be}$
- ☐ D $\text{Be} < \text{Sr} > \text{Mg} < \text{Ca} < \text{Ba}$

80. Which one of the following is heteroatom?

- ☐ A Pyrrole
- ☐ B Naphthalene
- ☐ C Anthracene
- ☐ D Cyclohexene

Order the NUMS Book — Cash on Delivery

Fill this in, then WhatsApp a photo to +92 316 4047600

Name _____

Mobile number _____

Complete delivery address _____

No advance payment. No delivery charges.

Pay the courier when the book reaches you. Or order online at mbbs.com.pk/product/nums-book/

81. The function group of acid amide is:

- ☐ A $\text{OH} - \text{C}(=\text{O}) - \text{N}$
- ☐ B $\text{OH} - \text{C}(=\text{O}) - \text{NH}$
- ☐ C $\text{O} = \text{C} - \text{NH}_2$
- ☐ D $\text{OH} - \text{C}(=\text{O}) - \text{NH}_2$

82. When an alcohol is heated at 170°C in the presence of sulphuric acid, a water molecule is eliminated resulting in the formation of:

- ☐ A Alkyl halide
- ☐ B Alkane
- ☐ C Alkene
- ☐ D Alkyne

83. The IUPAC name of following compound is: $\text{CH}_3 - \text{CH} = \text{CH} - (\text{CH}_2)_2 - \text{CH}_3$

- ☐ A Hex-2-ene
- ☐ B Hept-2-ene
- ☐ C Hex-4-ene
- ☐ D Hept-4-ene

84. Most of the reactions shown by alkenes are:

- ☐ A Nucleophilic substitution
- ☐ B Nucleophilic addition
- ☐ C Electrophilic substitution
- ☐ D Addition reactions

85. What are the conditions required for polymerization of ethene to polyethene?

see note

- ☐ A 400°C and 1000 atm
- ☐ B 100°C and 400 atm
- ☐ C 450°C and 1000 atm
- ☐ D 450°C and 200 atm

86. The reactivity order of alkyl halide is:

- ☐ A $\text{R-F} > \text{R-Cl} > \text{R-Br} > \text{R-I}$
- ☐ B $\text{R-Cl} > \text{R-Br} > \text{R-I} > \text{R-F}$
- ☐ C $\text{R-Br} > \text{R-I} > \text{R-F} > \text{R-Cl}$
- ☐ D $\text{R-I} > \text{R-Br} > \text{R-Cl} > \text{R-F}$

87. $(\text{CH}_3)_3\text{C-OH}$ is an example of:

- ☐ A Primary alcohol
- ☐ B Secondary alcohol
- ☐ C Tertiary alcohol
- ☐ D Iso butyl alcohol

88. Which one of the following is used in the manufacturing of plastics?

- ☐ A Methanol
- ☐ B Ethanol
- ☐ C Propanol
- ☐ D Phenol

89. Which of the following will give formic acid as one of the product of oxidation?

see note

- ☐ A Butanone
- ☐ B Propanone
- ☐ C Pentanone
- ☐ D Hexanone

90. What will be the IUPAC name of the given compound? $\text{CH}_3\text{--CH}_2\text{--CH}(\text{CH}_3)\text{--CH}(\text{C}_2\text{H}_5)\text{--CHO}$

- ☐ A 1-Ethyl-2-methyl pentanal
- ☐ B 2-Ethyl-3-methyl pentanal
- ☐ C 3-Methyl-4-ethyl pentanal
- ☐ D 3-Methyl pentanal

91. What is the common name of following compound? Benzene ring with two --COOH groups (ortho)

- ☐ A Benzoic acid
- ☐ B Malonic acid
- ☐ C Phthalic acid
- ☐ D Picric acid

92. Acetic anhydride can be prepared when two molecules of carboxylic acids are dehydrated on heating strongly in the presence of:

- ☐ A V_2O_5
- ☐ B P_2O_5
- ☐ C H_2SO_4
- ☐ D HgSO_4

93. Carboxylic acid react with metals to form salt with the evolution of which gas?

- ☐ A CO_2
- ☐ B CO
- ☐ C H_2
- ☐ D CH_4

94. Which protein helps in muscles contractions and relaxation in our body?

- ☐ A Myosin
- ☐ B Albumin
- ☐ C Globulin
- ☐ D Collagen

95. Various polypeptide chains in haemoglobin remain intact due to:

see note

- ☐ A Chemical bonds
- ☐ B London dispersion forces
- ☐ C Salt bridges
- ☐ D Peptide bonds

PHYSICS

Q96 – Q135 • 40 questions

96. The vertical height and horizontal range of projectiles are equal at angle:

- ☐ A 30°
- ☐ B 45°
- ☐ C 76°
- ☐ D 90°

97. Range of projectile is maximum at:

- ☐ A 30°
- ☐ B 45°
- ☐ C 60°
- ☐ D 90°

98. A ball is thrown vertically upward, the ball descends towards earth after achieving a certain height because:
see note

- ☐ A Earth is exerting more gravitational force than ball
- ☐ B The ball is exerting more gravitational force than earth
- ☐ C The earth possesses more inertia
- ☐ D The ball possesses more inertia

99. A bomb is exploded into two fragments A and B moving in opposite direction. They conserve:

- ☐ A Kinetic Energy
- ☐ B Potential Energy
- ☐ C Momentum
- ☐ D Both kinetic energy and potential energy

100. Work done is negative, when the angle between F and S is:

- ☐ A 0°
- ☐ B 60°
- ☐ C 90°
- ☐ D 180°

101. When the speed of the car is doubled, what will be its kinetic energy?

- ☐ A Remains same
- ☐ B Doubled
- ☐ C Three times
- ☐ D Four times

102. The work efficiency of a dry cell battery is:

- ☐ A 30%
- ☐ B 40%
- ☐ C 50%
- ☐ D 90%

103. When distance r increases than gravitational P.E becomes:

- ☐ A Less positive
- ☐ B More negative
- ☐ C Less negative
- ☐ D More positive

104. How many Joules are there in 3KWh?

- ☐ A 108 MJ
- ☐ B 10.8 MJ
- ☐ C 1.08 MJ
- ☐ D 0.108 MJ

105. A car moving on a more steeply banked curves will require:

- ☐ A Large speed and large radii
- ☐ B Large speed and small radii
- ☐ C Small speed and large radii
- ☐ D Small speed and small radii

RESEARCH BADGE

Where the NUMS Book beats a general guide

Measured against this paper, our question bank covered far more of what was actually asked than the general market guides students usually buy.

NUMS Book question bank

70%

Typical market guide

12%

Order → mbbs.com.pk/product/nums-book/**106.** In a body angular acceleration is produced by:

- ☐ A Net force
- ☐ B Power
- ☐ C Pressure
- ☐ D Net torque

107. The analogue of force in circular / angular motion is:

- ☐ A Momentum
- ☐ B Torque
- ☐ C Angular acceleration
- ☐ D Angular velocity

108. 1° is equals to:

- ☐ A $\pi/90$ radians
- ☐ B $\pi/180$ radians
- ☐ C π radians
- ☐ D 2π radians

109. In uniform circular motion, the angle between centripetal acceleration and linear velocity of a particle is:

- ☐ A $\pi/2$
- ☐ B π
- ☐ C 2π
- ☐ D Zero

110. The distance between two consecutive nodes are:

- ☐ A λ
- ☐ B $\lambda/2$
- ☐ C 2λ
- ☐ D $\lambda/4$

111. If a sound waves moves from air to water, there is NO change in:

- ☐ A Velocity
- ☐ B Frequency
- ☐ C Wavelength
- ☐ D Temperature

112. The star moving closer to earth will experience:

- ☐ A Blue shift
- ☐ B Red shift
- ☐ C Orange shift
- ☐ D Yellow shift

113. If the amplitude of a wave is doubled, its intensity is:

- ☐ A Doubled
- ☐ B Halved
- ☐ C Quadrupled
- ☐ D One quarter

114. Which of the following is an example of first law of thermodynamics?

- ☐ A Thunderstorm
- ☐ B Metabolism
- ☐ C Rusting
- ☐ D Earthquake

115. Thermos flask containing tea as a system is shaken vigorously then there will be:

- ☐ A Increase in temperature only
- ☐ B Increase in kinetic energy only
- ☐ C Increase in temperature & kinetic energy
- ☐ D No change in temperature & kinetic energy

116. Difference between molar specific heat at constant pressure and molar specific heat at constant volume is equal to:

- ☐ A Boltzmann constant
- ☐ B Universal gas constant
- ☐ C Plank's constant
- ☐ D Rydberg constant

117. Coulomb's law of electrostatic induction is valid for:

- ☐ A Point charges
- ☐ B Stationary charges
- ☐ C Stationary & point charges
- ☐ D Accelerated point charges

118. If the positive charge is placed in a uniform electric field, the charge will move in the:

- ☐ A Opposite direction of electric field
- ☐ B Direction of electric field
- ☐ C Perpendicular to the direction of electric field
- ☐ D Remains at rest

119. For each element, value of half-life is:

- ☐ A Variable
- ☐ B Constant
- ☐ C Decrease
- ☐ D Increase

120. The unit of RC is:

- ☐ A Ohm
- ☐ B Farad
- ☐ C Second
- ☐ D Ohm/Farad

RESEARCH BADGE**Mechanics is 38% of the Physics section**

Projectiles, work-energy, circular motion and torque made up the bulk of Physics in this paper — and mechanics holds roughly 38% of the Physics section every year. Master it and Physics stops being the section that ruins your aggregate.

Physics MCQ bank → mbbs.com.pk/product/nums-book/

121. The fractional change in resistance per kelvin is known as the temperature coefficient of:

- ☐ A Conductance
- ☐ B Resistance
- ☐ C Inductance
- ☐ D Conductivity

122. Which of the following is an example of Ohmic in nature?

- ☐ A Thermistor
- ☐ B Filament lamp
- ☐ C Semiconductor
- ☐ D Conductor

123. The material whose resistance decreases with increase in temperature have:

- ☐ A Positive temperature coefficient
- ☐ B Negative temperature coefficient
- ☐ C Thermal coefficient
- ☐ D Coefficient of friction

124. The number of magnetic field lines passing through unit area is called:

- ☐ A Magnetic field
- ☐ B Magnetic flux
- ☐ C Magnetic flux density
- ☐ D Magnetization

125. The magnetic force of a charged particle moving in a uniform magnetic fields depends on:

- ☐ A Velocity, area & magnetic field
- ☐ B Charge, current & velocity
- ☐ C Magnetic field, voltage & charge
- ☐ D Velocity, magnetic field & charge

126. The magnetic force acting on a charged particle is maximum when the angle between v and B is:

- ☐ A 0°
- ☐ B 45°
- ☐ C 90°
- ☐ D 180°

127. Generator effect is practical application of:

- ☐ A Static e.m.f
- ☐ B Dynamic e.m.f
- ☐ C Mutual induction
- ☐ D Back emf

128. If number of turns of coil becomes double, the induced emf will be:

- ☐ A Double
- ☐ B Reduced to half
- ☐ C Remain same
- ☐ D Quadruple

129. Electromagnetic sensor in seismograph converts ground movement into:

- ☐ A Magnetic signals
- ☐ B Electric signals
- ☐ C Audio signals
- ☐ D Vibratory signals

130. A full wave bridge rectifier consists of:

- ☐ A No diode
- ☐ B Four diodes
- ☐ C Two diodes
- ☐ D One diode

131. An electrical component used to convert AC into DC is:

- ☐ A Transistor
- ☐ B Capacitor
- ☐ C Diode
- ☐ D Resistor

132. A photon has:

- ☐ A Zero mass, zero momentum
- ☐ B Finite mass, finite momentum
- ☐ C Zero mass, finite momentum
- ☐ D Finite mass, zero momentum

133. Photo-conductive devices like photo cells and solar cells are application of:

- ☐ A Photo electric effect
- ☐ B Compton's effect
- ☐ C Pair production
- ☐ D Interference of light

134. Which of the following particle has smaller De Broglie wave length?

- ☐ A Gamma particle
- ☐ B Beta particle
- ☐ C Proton
- ☐ D Alpha particle

135. In the spectrum of hydrogen atom which of the following series has smallest wavelength?

- ☐ A Paschen series
- ☐ B Balmer series
- ☐ C Lyman series
- ☐ D Brackett series

ENGLISH

Q136 – Q150 • 15 questions

136. The antonym for the word clarity is:

- ☐ A Upright
- ☐ B Understanding
- ☐ C Vagueness
- ☐ D Clear

137. Yasir Ameen could not pay the rent; accordingly, he was evicted. Meaning of the underlined word is:

- ☐ A Expelled from the house
- ☐ B Investigated
- ☐ C Threatened
- ☐ D Rewarded

138. Fill in the blank with the correct verb. The baby _____ all morning.

- ☐ A Is crying
- ☐ B Has been crying
- ☐ C Cry
- ☐ D Have been crying

139. By 2040, robots _____ many of the jobs that people do today.

- ☐ A Will be taking over
- ☐ B Will take over
- ☐ C Will have taken over
- ☐ D Has taken over

140. "Each time one of us touches the soil, we feel a sense of personal renewal". The type of sentence is:

- ☐ A Compound
- ☐ B Complex
- ☐ C Compound Complex
- ☐ D Simple

RESEARCH BADGE

English is the cheapest 15 marks on the paper

Score 15+ in English and you can still secure a seat even with a weaker Biology score. It is only vocabulary, tenses, prepositions and idioms — all of it learnable in a week.

English section → mbbs.com.pk/product/nums-book/

141. Identify the correctly punctuated sentence.

- ☐ A Milton the great English Poet, was blind
- ☐ B Milton, the great English poet, was blind
- ☐ C Milton the great English poet was, blind
- ☐ D Milton the great, English poet was blind

142. Identify the correct sentence.

- ☐ A A Sindhi woman is going through a bazaar with bear feet.
- ☐ B A Sindhi women are going through a bazaar with bare feet.
- ☐ C A Sindhi woman is going through a bazaar with bare feet.
- ☐ D A Sindhi woman is going through a bazaar with bare foot.

143. Complete the sentence using correct preposition. The public are cautioned _____ pick pockets.

- ☐ A Against
- ☐ B Of
- ☐ C For
- ☐ D With

144. Select the correct pair. Lack of sleep can _____ your health and have a bad _____ on your grades.

- ☐ A Affect / affect
- ☐ B Effect / effect
- ☐ C Effect / affect
- ☐ D Affect / effect

145. Select the correct sentence in style.

- ☐ A Having finished his exercise, the books were put away.
- ☐ B Having finishing his exercise, the books were put away.
- ☐ C Having finishing his exercise, he put his books away.
- ☐ D Having finished his exercise, he put away his books.

146. Select the statement that best describes the given sentence. "He is anything but a liar."

- ☐ A He is a liar.
- ☐ B He can be anything but not a liar.
- ☐ C He is not a good character and liar as well.
- ☐ D He is good character but a liar to some extent.

147. Select the best option to describe the given sentence. "Unless you apologise I shall punish you."

- ☐ A Without apology, you will be forgiven.
- ☐ B With apology, you will be punished.
- ☐ C There is no need of apology.
- ☐ D Without apology you will be punished.

148. "From the attitude it is clear that he wants to pay off his old scores." The sentence means that he wants to:

- ☐ A Improve his marks.
- ☐ B Pay off his debt.
- ☐ C Help needy people.
- ☐ D Have his revenge.

149. A person needs to reflect profoundly on his/her life. The underlined word means:

- ☐ A Deeply
- ☐ B Superficially
- ☐ C Shallow
- ☐ D Mirroring

150. Due to his non-serious attitude, Ali took the advice with a pinch of salt. It means:

- A** Took it seriously.
- B** Did not take it seriously.
- C** Accept it candidly.
- D** Implemented it happily.

Quick Answer Grid

Colour-coded by subject. Mark your paper here first, then read the full key. * marks a question whose official key is disputed between academics.

1	B	2	B	3	A	4	B	5	A	6	A	7	A	8	B	9	B	10	C
11	D	12	D	13	C	14	D	15	B	16	A	17	D	18	C	19	C	20	C
21	A	22	C	23	A	24	B	25	A	26	D	27	B	28	B	29	A	30	A
31	B	32	A	33	B	34	A	35	B	36	A	37	C	38	B	39	A	40	D
41	C	42	A	43	A	44	B	45	B	46	C	47	B	48	C	49	C	50	A
51	C	52	D	53	D	54	C	55	D	56	B	57	D	58	A	59	D	60	C
61	D	62	C	63	C	64	A	65	A	66	D	67	D	68	B	69	A	70	B
71	B	72	C	73	A	74	C	75	B	76	B	77	D	78	A	79	C	80	A
81	C	82	C	83	A	84	D	85	C	86	D	87	C	88	D	89	B	90	B
91	C	92	B	93	C	94	A	95	B	96	C	97	B	98	C	99	C	100	D
101	D	102	D	103	C	104	B	105	B	106	D	107	B	108	B	109	A	110	B
111	B	112	A	113	C	114	B	115	C	116	B	117	C	118	B	119	B	120	C
121	B	122	D	123	B	124	C	125	D	126	C	127	B	128	A	129	B	130	B
131	C	132	C	133	A	134	D	135	C	136	C	137	A	138	B	139	C	140	B
141	B	142	C	143	A	144	D	145	D	146	B	147	D	148	D	149	A	150	B

RESEARCH BADGE

Count your repeats before you do anything else

Go back through the paper and mark every MCQ you had already seen while practising. For students who used the NUMS Book question bank, that mark lands on more than 70% of the paper. That number is the entire argument for practising from a real bank instead of reading notes.

NUMS Entry Test Book → mbbs.com.pk/product/nums-book/

Answer Key

Q1	B	Q31	B	Q61	D	Q91	C	Q121	B
Q2	B	Q32	A	Q62	C	Q92	B	Q122	D
Q3	A *	Q33	B	Q63	C	Q93	C	Q123	B
Q4	B	Q34	A	Q64	A	Q94	A	Q124	C
Q5	A	Q35	B	Q65	A	Q95	B *	Q125	D
Q6	A	Q36	A *	Q66	D	Q96	C	Q126	C
Q7	A	Q37	C	Q67	D	Q97	B	Q127	B
Q8	B	Q38	B	Q68	B	Q98	C *	Q128	A
Q9	B	Q39	A	Q69	A	Q99	C	Q129	B
Q10	C	Q40	D	Q70	B	Q100	D	Q130	B
Q11	D	Q41	C	Q71	B	Q101	D	Q131	C
Q12	D	Q42	A	Q72	C	Q102	D	Q132	C
Q13	C	Q43	A	Q73	A	Q103	C	Q133	A
Q14	D	Q44	B	Q74	C	Q104	B	Q134	D
Q15	B	Q45	B	Q75	B	Q105	B	Q135	C
Q16	A	Q46	C	Q76	B	Q106	D	Q136	C
Q17	D	Q47	B	Q77	D	Q107	B	Q137	A
Q18	C	Q48	C	Q78	A	Q108	B	Q138	B
Q19	C	Q49	C	Q79	C	Q109	A	Q139	C
Q20	C	Q50	A	Q80	A	Q110	B	Q140	B
Q21	A	Q51	C	Q81	C	Q111	B	Q141	B
Q22	C *	Q52	D	Q82	C	Q112	A	Q142	C
Q23	A	Q53	D	Q83	A	Q113	C	Q143	A
Q24	B	Q54	C	Q84	D	Q114	B	Q144	D
Q25	A	Q55	D	Q85	C *	Q115	C	Q145	D
Q26	D	Q56	B	Q86	D	Q116	B	Q146	B
Q27	B	Q57	D *	Q87	C	Q117	C	Q147	D
Q28	B	Q58	A	Q88	D	Q118	B	Q148	D
Q29	A	Q59	D	Q89	B *	Q119	B	Q149	A
Q30	A *	Q60	C	Q90	B	Q120	C	Q150	B

*** Disputed keys:** Q3, Q22, Q30, Q36, Q57, Q85, Q89, Q95, Q98. For these, learn the underlying concept — an examiner can key either way.

WHY 70%+ OF THIS PAPER FELT EASY

NUMS Entry Test Book

by MbBs.Com.Pk

Students who practised our MCQ question bank walked into NUMS 2026 having already seen most of what the paper asked. More than 70% of the questions in this paper repeat from the bank inside this book.

That is not luck. NUMS recycles its concepts every year — and the book is built from every past paper, sorted topic by topic, with the answer and the reasoning beside each MCQ.

70%+of this paper
repeats from the book**4.9/5**from 1,200+
verified reviews**50,000+**students have
used this book

What you get

- Complete topic-wise MCQ bank — Biology, Chemistry, Physics, English
- Every NUMS past paper solved, with explanations, not just answer letters
- Free home delivery anywhere in Pakistan
- Cash on delivery — you pay when the book reaches your hand

Where the marks actually are

Share of each section held by its single highest-yield block — the book drills these first.

Biology	Cell biology + enzymes		22%
Chemistry	Organic chemistry		18%
Physics	Mechanics		38%
English	Vocabulary + idioms		47%

★★★★★ **4.9 / 5**

1,200+ verified reviews • 50,000+ students • delivered to every district in Pakistan
Questions before ordering? WhatsApp +92 316 4047600 — a real person answers.

Order now — mbbs.com.pk/product/nums-book/

Free home delivery • Cash on delivery • WhatsApp +92 316 4047600

Also available: MDCAT Past Papers Book (8 years complete) — mbbs.com.pk/product/mdcat-book/