



Atal Medical & Research University, H.P.

(A State Govt. University)

(SLBS Govt. Medical College & Hospital Campus, Ner Chowk, Mandi, H.P.)

Website:- www.amruhp.ac.in , Email: coemedicaluniv.mandi@gmail.com, Phone No. 01905-243967

Answer Keys

**Common Entrance Test (CET) for Allied Healthcare
Programmes and B. Pharmacy (Ayurveda) Course**

Paper Code- 2604

Series-A

held on 12th July, 2026

Morning Shift (11:00 AM to 01:00 PM)

If a candidate does not satisfy with the key answers, he/she can make representation with documentary proof to the COE, Atal Medical and Research University, HP, at Nerchowk, Distt. Mandi, HP-175008 through email on coemedicaluniv.mandi@gmail.com up to 15.07.2026 by 05:00 PM and thereafter, no representation will be entertained under any circumstances.

-Sd/-

(Dr. Rajesh Kumar)

Controller of Examinations

**Atal Medical & Research University, HP,
Ner Chowk, Distt. Mandi.**

(To be filled by the candidate)

Booklet S. No. _____

Roll No. (In figures) _____

Roll No. (In words) _____

Name of the Candidate : _____

Center of Examination : _____

Total No. of Questions : 100

**Common Entrance Test (CET) for Allied Healthcare Programmes and B.
Pharmacy (Ayurveda) Course
Paper Code- 2604
Series-A**

Time Allowed : 2 Hours

Maximum Marks : 100

IMPORTANT NOTE:

- (i) OMR Answer Sheet will be supplied by the Examination Centre Superintendent for answering the questions.
- (ii) Use **Blue/Black Ink/ Ball Pen only**, to darken the appropriate circle in the OMR Answer Sheet.
- (iii) Darken one circle deeply for each question in the OMR Answer Sheet, as faintly darkened circle might be rejected by the Optical Scanner.
- (iv) Darkening of more than one circle shall be rejected by the scanner. **Over-writing, cutting, erasing or use of White Fluid is not allowed.**
- (v) Before dealing with the question paper, fill-up the required information with Blue/Black Ball Pen correctly both in the Question Booklet and in the OMR Answer Sheet.
- (vi) Do not fold the OMR Answer Sheet nor put any mark here and there to avoid rejection by the Optical Scanner.
- (vii) Write Roll. No. carefully on the OMR Answer Sheet and darken the appropriate circle properly.
- (viii) **Each question carries One Mark. There will be No Negative Marking.**
- (ix) **Use of Calculator is not allowed.**
- (x) **No over-writing, cutting, erasing or use of white fluid is allowed.**
- (xi) Rough work be done on the sheet(s) at the end.
- (xii) **Mobile telephones (even on switch-off mode) and such other electronic devices are not allowed inside the examination hall.**
- (xiii) The **question paper-booklet** will be retained by the candidate after the entrance test is over.
- (xiv) The **Carbon Copy of the OMR Answer Sheet** may be retained by the candidate **only after permission is granted by the Invigilator.**

Rough Page

AMRU, HP

Physics

Q1. Number of joules in one erg?

- (A) 10^{-8} J
- (B) 10^7 J
- (C) 10^{-7} J
- (D) 10^8 J

Ans (c) 10^{-7} J

Q2. The coefficient of restitution 'e' for perfectly inelastic collision is

- (A) 1
- (B) 0
- (C) ∞
- (D) -1

Ans (b) 0

Q3. A scooter goes round a circular track of radius 10 m with a speed of 30 ms^{-1} . The angular speed of the scooter is

- (A) 3 rad s^{-1}
- (B) 6 rad s^{-1}
- (C) 500 rad s^{-1}
- (D) 30 rad s^{-1}

Ans (a) 3 rad s^{-1}

Q4. If the velocity of the body becomes double, its kinetic energy will become

- (A) Twice
- (B) Half
- (C) Four times
- (D) One fourth

Ans (c) Four times

Q5. A man weighing 50 kg climbs 10 m, calculate the work done by gravity?

- (A) 4700 J
- (B) 4800 J
- (C) 4900 J
- (D) 5000 J

Ans (c) 4900 J

Q6. The point where total mass of a body is supposed to be concentrated is known as

- (A) Dead centre
- (B) Centre of mass
- (C) Centre of gravity
- (D) Centre of power

Ans (b) Centre of mass

Q7. A planet which is twin sister of Earth is...

- (A) Mercury
- (B) Venus
- (C) Mars
- (D) Jupiter

Ans (b) Venus

Q8. For a liquid which does not wet the glass, the angle of contact is...

- (A) Less than 90°
- (B) More than 90°
- (C) 180°
- (D) Remain constant

Ans (b) More than 90°

Q9. The raindrops are spherical in shape due to

- (A) Residual pressure
- (B) Thrust on drop
- (C) Surface tension
- (D) Viscosity

Ans (c) Surface tension

Q10. In adiabatic expansion of gas:

- (A) Heat neither lost nor gained
- (B) Heat is gained or lost

(C) Temperature is kept constant

(D) Volume is kept constant

Ans (a) Heat neither lost nor gained

Q11. Number of degrees of freedom of a triatomic non-linear molecule is.....

- (A) 4
- (B) 5
- (C) 6
- (D) 7

Ans (c) 6

Q12. Sound waves can not pass through

- (A) Solid
- (B) Liquid
- (C) Gas
- (D) Vacuum

Ans (d) Vacuum

Q13. If the length of a simple pendulum is increased by 2%, then the time period:

- (A) Increases by 2%
- (B) Decreases by 2%
- (C) Increases by 1%
- (D) Decreases by 1%

Ans (c) Increases by 1%

Q14. With the rise in temperature, the viscosity of a gas

- (A) Increases
- (B) Remains same
- (C) Decreases
- (D) May increase or decrease

Ans (c) Decreases

Q15. When a body is taken to the moon from earth then

- (A) Its mass and weight both decrease
- (B) Its mass increases but weight decreases
- (C) Its mass decreases but weight increases
- (D) Its mass remain same but its weight decreases

Ans (d) Its mass remain same but its weight decreases

Q16. Electric field E and electric potential V are related as:

- (A) $E = -dV/dr$
- (B) $E = -dr/dV$
- (C) $E = dV/dr$
- (D) $E = dr/dV$

Ans (a) $E = -dV/dr$

Q17. Electric field strength E due to a short dipole at a distance r from it are related as:

- (A) $E \propto r^{-1}$
- (B) $E \propto r^{-2}$
- (C) $E \propto r^{-3}$
- (D) $E \propto r^{-4}$

Ans (c) $E \propto r^{-3}$

Q18. The dielectric constant of an insulator cannot be:

- (A) 1.5
- (B) 2.5
- (C) 4.5
- (D) ∞

Ans (d) ∞

Q19. Dimensional formula for Electrical Resistance is:

- (A) $M^1L^2T^{-3}A^{-2}$
- (B) $M^2LT^{-3}A^{-1}$
- (C) $M^{-1}LT^{-3}A^{-2}$
- (D) $M^2L^{-1}T^{-3}A^{-1}$

Ans (a) $M^1L^2T^{-3}A^{-2}$

Q20. If a wire of resistivity (ρ) is stretched to double its length, then its new resistivity will

- (A) Be half
- (B) Be double
- (C) Be four times
- (D) Does not change

Ans (d) Does not change

Q21. A carbon resistance used in a bridge is having a coding Green, Orange, Black, Gold. The resistance is

- (A) $53 \times 10^0 \pm 5\% \Omega$
- (B) $53 \times 10^0 \pm 10\% \Omega$
- (C) $53 \times 10^1 \pm 5\% \Omega$
- (D) $53 \times 10^2 \pm 10\% \Omega$

Ans (a) $53 \times 10^0 \pm 5\% \Omega$

Q22. Wheatstone Bridge is used to measure:

- (A) E.M.F.
- (B) Potential
- (C) Resistance
- (D) Current

Ans (c) Resistance

Q23. Curie point is the temperature above which a ferromagnetic substance behaves as:

- (A) Paramagnetic

- (B) Ferromagnetic
- (C) Diamagnetic
- (D) None of These

Ans (a) Paramagnetic

Q24. What is the frequency of d.c.?

- (A) 50 Hz
- (B) 100 Hz
- (C) Zero Hz
- (D) ∞

Ans (c) Zero Hz

Q25. The ac cannot be used for:

- (A) Heating
- (B) Lighting
- (C) Electrolysis
- (D) Generate mechanical energy

Ans (c) Electrolysis

Q26. Working of optical fibres is based on the phenomenon of

- (A) Reflection
- (B) Refraction
- (C) Diffraction
- (D) Total internal reflection

Ans (d) Total internal reflection

Q27. The minimum energy required to remove an electron is called:

- (A) Work function
- (B) Kinetic energy
- (C) Stopping potential
- (D) Potential energy

Ans (a) Work function

Q28. What is the de-Broglie wavelength of a bullet of mass 0.040 kg travelling at the speed of 1.0 km/s?

- (A) 1.66×10^{-32} m
- (B) 1.66×10^{-34} m
- (C) 1.66×10^{-35} m
- (D) 2.68×10^{-40} m

Ans (c) 1.66×10^{-35} m

Q29. A certain radioactive substance has a half-life period of 30 days. What is the disintegration constant?

- (A) 0.032 per day
- (B) 0.023 per day
- (C) 0.32 per day
- (D) 0.23 per day

Ans (b) 0.023 per day

Q30. Which of the following is NOT the inverse square law force?

- (A) Electric force between two charges
- (B) Nuclear force
- (C) Gravitational force
- (D) Magnetic force between two poles

Ans (b) Nuclear force

Chemistry

Q31. The number of significant figures in 6.022×10^{23} are:

- (A) 3
- (B) 4
- (C) 2
- (D) None of these

Ans: B

Q32. The total number of orbitals present in third shell of an atom will be:

- (A) 2
- (B) 4
- (C) 9
- (D) 3

ANS: C

Q33. If $n = 1$, $l = 0$, then orbital notation is:

- (A) 1p
- (B) 1s
- (C) 2s
- (D) 2p

Ans: B

Q34. Which of the following is the correct order of atomic/ionic size of the given species?

- (A) $I > I^- > I^+$
- (B) $I^+ > I^- > I$
- (C) $I > I^+ > I^-$
- (D) $I^- > I > I^+$

Ans: D

Q35. Which of the following bond angle corresponds to sp^2 hybridisation?

- (A) 90°
- (B) 120°
- (C) 180°
- (D) 109°

Ans: B

Q36. On the basis of Molecular Orbital Theory (MOT), the bond order of F_2 molecule is:

- (A) 2
- (B) 1
- (C) 3
- (D) 4

Ans: B

Q37. For a thermodynamic process, $\Delta H = 280 \text{ kJ}$ and $\Delta S = 140 \text{ J K}^{-1} \text{ mol}^{-1}$. At what temperature the process will be at equilibrium?

- (A) 2000 K
- (B) 200 K
- (C) 140 K
- (D) 420 K

Ans: A

Q38. The state of equilibrium refers to:

- (A) State of rest
- (B) Dynamic state
- (C) Stationary state
- (D) State of inertness

Ans: B

Q39. For the reaction: $2\text{HI}(\text{g}) \rightleftharpoons \text{H}_2(\text{g}) + \text{I}_2(\text{g})$

- (A) $K_p > K_c$
- (B) $K_c > K_p$
- (C) $K_c = K_p$
- (D) None of these

Ans: C

Q40. A Buffer solution:

- (A) Has $\text{pH} = 0$
- (B) Is acidic
- (C) Is basic
- (D) Is either acidic or basic

Ans: D

Q41. In the reaction - $\text{H}_2\text{S}(\text{g}) + \text{Cl}_2(\text{g}) \rightarrow 2\text{HCl}(\text{g}) + \text{S}(\text{s})$, the species undergoing oxidation and reduction respectively are:

- (A) H_2S , Cl_2
- (B) Cl_2 , H_2S
- (C) HCl , S
- (D) H_2S , S

Ans: A

Q42. The oxidation number of S in $\text{S}_2\text{O}_7^{2-}$ is:

- (A) +2
- (B) +5
- (C) +6
- (D) +7

Ans: C

Q43. Kjeldahl's method cannot be used for the estimation of nitrogen in:

- (A) Pyridine
- (B) Nitro compounds
- (C) Azo compounds
- (D) All of these

Ans: D

Q44. Anthracene is:

- (A) An Acyclic hydrocarbon
- (B) A cycloalkane
- (C) A benzenoid compound
- (D) A non-benzenoid compound

Ans: C

Q45. Chlorination of methane does not occur in dark because:

- (A) Methane can form free radicals in presence of sunlight only.
- (B) Sunlight is required to get chlorine free radicals from Cl_2 molecules.
- (C) Substitution reaction takes place only in sunlight and not in dark.
- (D) None of these

Ans: B

Q46. Aqua regia contains concentrated HCl and concentrated HNO_3 in the ratio:

- (A) 1 : 3
- (B) 3 : 1
- (C) 1 : 2
- (D) 2 : 1

Ans: B

Q47. Which of the following is a colligative property?

- (A) Boiling point
- (B) Melting point
- (C) Freezing point
- (D) Osmotic pressure

Ans: D

Q48. The substances which conduct electricity in molten & aqueous state are called:

- (A) Electrolytes
- (B) Acids
- (C) Buffers
- (D) Catalysts

Ans: A

Q49. The order of reaction is determined by:

- (A) Temperature of reaction
- (B) Mechanism of the reaction

(C) Molecularity of the reaction

(D) Pressure of the reaction

Ans: B

Q50. The Arrhenius equation is:

- (A) $k = Ae^{E_a/RT}$
- (B) $k = Ae^{-E_a/RT}$
- (C) $k = -Ae^{+E_a/RT}$
- (D) $k = Ae^{RT/E_a}$

Ans: B

Q51. Which of the following d-block element has half-filled penultimate as well as valence subshell?

- (A) Cu
- (B) Au
- (C) Ag
- (D) Cr

Ans: D

Q52. The colours of transition metal ions are due to absorption of some wavelengths from Sunlight. This results in:

- (A) d-s transition
- (B) s-s transition
- (C) s-d transition
- (D) d-d transition

Ans: D

Q53. Which of the following is not expected to be a ligand?

- (A) NO
- (B) NH^{4+}
- (C) $\text{NH}_2\text{CH}_2\text{CH}_2\text{NH}_2$
- (D) CO

Ans: B

Q54. Which of the following reaction follows Markovnikov's rule?

- (A) $\text{C}_2\text{H}_4 + \text{HBr}$
- (B) $\text{C}_3\text{H}_6 + \text{HBr}$
- (C) $\text{C}_3\text{H}_6 + \text{Cl}_2$
- (D) $\text{C}_3\text{H}_6 + \text{Br}_2$

Ans: B

Q55. A 40% solution of formaldehyde is known as:

- (A) Vanillin
- (B) Formalin
- (C) Formic acid
- (D) Paraffin

Ans: B

Q56. Aldehydes and ketones cannot be distinguished by:

- (A) Molisch's test
- (B) Tollen's test

(C) Benedict's test

(D) Schiff's test

Ans: A

Q57. Tertiary amines have lowest boiling points amongst isomeric amines because:

- (A) They have highest molecular mass
- (B) They do not form hydrogen bonds
- (C) They are more polar in nature
- (D) They are most basic in nature

Ans: B

Q58. How many carbon atoms are there in a pyranose ring?

- (A) 3
- (B) 5
- (C) 6
- (D) 7

Ans: B

Q59. The basic unit not present in DNA is:

- (A) Uracil
- (B) Adenine
- (C) Cytosine
- (D) Guanine

Ans: A

Q60. The conversion of maltose into glucose is possible by the enzyme:

- (A) Zymase
- (B) Lactase
- (C) Maltase
- (D) Diastase

Ans: C

(C) SSA

(D) SSS

Answer= (C)

Q64. The curved surface area of a right circular cylinder of height 14 cm is 88 cm^2 .

The diameter of the base is

- (A) 2 cm
- (B) 3 cm
- (C) 4 cm
- (D) 6 cm

Answer= (A)

Q61. A quadrant in which both X and Y values are negative is

- (A) First quadrant
- (B) Second quadrant
- (C) Third quadrant
- (D) Fourth quadrant

Answer= (C)

Q65. A card is drawn from a well shuffled deck of 52 cards. What is the probability of getting a king of the red suits ?

- (A) $3/36$
- (B) $1/26$
- (C) $3/26$
- (D) $1/16$

Answer= (B)

Q62. Reflex angle is

- (A) More than 90 degrees
- (B) Equal to 90 degrees
- (C) More than 180 degrees and less than 360 degree
- (D) Equal to 180 degrees

Answer= (C)

Q66. If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weight 2500 grams?

- (A) 750
- (B) 800
- (C) 850
- (D) 950

Answer= (A)

Q63. Which of the following is not a criterion for congruence of triangles

- (A) SAS
- (B) ASA

Mathematics

Q67. If a polyhedron has 6 vertices and 12 edges. What is the number of faces it has?

- (A) 6
- (B) 8
- (C) 12
- (D) 18

Answer= (B)

Q68. The quadrilateral whose diagonals are perpendicular to each other is

- (A) Parallelogram
- (B) Rectangle
- (C) Trapezium
- (D) Rhombus

Answer= (D)

Q69. If the length of the shed of a tree is decreasing then the angle of elevation is

- (A) Increasing
- (B) Decreasing
- (C) Remains the same
- (D) None of the above

Answer= (A)

Q70. The sum of first 16 terms of the AP: 10, 6, 2,..... is

- (A) - 320

- (B) 320
- (C) - 352
- (D) - 400

Answer= (A)

Q71. The shape of a filled ice cream cone is combination of :

- (A) Sphere + cylinder
- (B) Sphere + cone
- (C) Hemisphere+ cylinder
- (D) Hemisphere + cone.

Answer= (D)

Q72. A fraction in which the numerator is smaller than the denominator is called a:

- (A) Improper fraction
- (B) Mixed fraction
- (C) Unit fraction
- (D) Proper fraction

Answer= (D)

Q73. Axioms are assumed

- (A) Theorems
- (B) Definitions
- (C) Universal truth specific to geometry
- (D) Universal truths in all branches of mathematic without proof.

Answer= (D)

Q74. Ordinate of all points on the x-axis is

- (A) -1
- (B) 0
- (C) 1
- (D) Any number

Answer= (B)

Q75. Multiplicative inverse of $1/3^2$ is :

- (A) $3-2$
- (B) 32
- (C) 3
- (D) $\frac{1}{3}$

Answer= (B)

Q76. An item marked at rupees 840 is sold for rupees 714. The discount % is :

- (A) 10%
- (B) 15%
- (C) 20 %
- (D) 25 %

Answer = (B)

Q77. The smallest number by which the number 200 must be multiplied to obtain a perfect cube is

- (A) 2
- (B) 10
- (C) 5
- (D) 100

Answer= (B)

Q78. There are 2401 students in a school. P.T. teacher wants them to stand in rows and columns such that the number of rows is equal to the number of columns. Then the number of rows will be

- (A) 49
- (B) 59
- (C) 39
- (D) 93

Answer= (A)

Q79. The angle subtended by the diameter of a semicircle at any point on the circumference is always:-

- (A) 90°
- (B) 45°
- (C) 180°
- (D) 60°

Answer= (A)

Q80. Construction of a cumulative frequency table is useful in determining the

- (A) Mean
- (B) Median
- (C) Mode
- (D) All of the above

Answer= (B)

Biology

Q81. Which cell organelle is the site of photosynthesis:-

- (A) Chloroplast
- (B) Mitochondrion
- (C) Ribosome
- (D) Golgi apparatus

Ans. (A) CHLOROPLAST

Q82. The largest gland in the human body is

- (A) Pancreas
- (B) Liver
- (C) Thyroid
- (D) Pituitary

Ans. (B) LIVER

Q83. Which part of the brain is mainly responsible for maintaining balance and coordination?

- (A) Cerebrum
- (B) Medulla oblongata
- (C) Cerebellum
- (D) Hypothalamus

Ans (C) CEREBELLUM

Q84. The oxygen carrying pigment present in our blood is

- (A) Chlorophyll
- (B) Myoglobin
- (C) Haemoglobin
- (D) Melanin

ANS:- (C) HAEMOGLOBIN

Q85. DNA is mainly located in which part of cell?

- (A) Cytoplasm
- (B) Nucleus
- (C) Cell wall
- (D) Ribosome

ANS:(B) NUCLEUS

Q86. Which of the following vitamin is responsible for blood clotting in human?

- (A) Vitamin A
- (B) Vitamin C
- (C) Vitamin k
- (D) Vitamin D

ANS.(C) VITAMIN K

Q87. The study of heredity and variation is called?

- (A) Taxonomy
- (B) Ecology
- (C) Genetics
- (D) Physiology

ANS:- (C) GENETICS

Q88. Which of the following is mammal?

- (A) Cow
- (B) Pigeon
- (C) Grasshopper
- (D) Hen

ANS. (A) COW

Q89. Which is largest muscle of human body?

- (A) Cardiac muscle
- (B) Striated muscle
- (C) Sartorius muscle
- (D) Non striated muscle

ANS:- (C) SARTORIUS MUSCLE

Q90. In human female reproductive cell is called :

- (A) Zygote
- (B) Ovum

- (C) Embryo
- (D) Sperm

ANS:- (B) OVUM

Q91. Which of the following is autotroph ?

- (A) Mushroom
- (B) Human
- (C) Amoeba
- (D) Green plant

ANS:- (D) GREEN PLANT

Q92. The process of losing water from leaves is called:

- (A) Respiration
- (B) Transpiration
- (C) Germination
- (D) Digestion

Answer: (B) Transpiration

Q93. Which of the following is the site of complete digestion of carbohydrates, proteins, and fats?

- (A) Stomach
- (B) Small intestine
- (C) Large intestine
- (D) Mouth

Answer = (B) Small intestine

Q94. Which plant hormone acts as a growth inhibitor and is responsible for the wilting of leaves?

- (A) Auxin
- (B) Gibberellin
- (C) Cytokinin
- (D) Absciscic acid

Answer = (D) Absciscic acid

Q95. Which of the following determines the genetic sex of a child in human beings?

- (A) The X chromosome from the mother
- (B) The Y chromosome from the father
- (C) The environmental temperature during gestation
- (D) The blood group of the parents

Answer = (B) The Y chromosome from the father

Q96. Which of the following pairs represents homologous organs?

- (A) Wings of a bird and wings of an insect
- (B) Forelimbs of a human and forelimbs of a bird
- (C) Eyes of an octopus and eyes of a mammal
- (D) Tuber of a potato and root of a sweet potato

Answer = (B) Forelimbs of a human and forelimbs of a bird

Q97. What is the primary function of the nephrons in the human excretory system?

- (A) Digestion of proteins
- (B) Transport of oxygenated blood
- (C) Filtration of blood and urine formation
- (D) Production of digestive enzymes

Answer = (C) Filtration of blood and urine formation

Q98. Chromosomes are located inside the nucleus of a cell. They are chemically composed of:

- (A) DNA only
- (B) Proteins only
- (C) RNA and Carbohydrates
- (D) DNA and Proteins

Answer = (D) DNA and Proteins

Q99. Which cell organelle is responsible for releasing energy in the form of ATP molecules for cellular activities?

- (A) Golgi apparatus
- (B) Lysosome
- (C) Mitochondria
- (D) Plastid

Answer = (C) Mitochondria

Q100. Identify the only living cellular element present within the complex permanent tissue Xylem:

- (A) Tracheids
- (B) Xylem vessels
- (C) Xylem fibers
- (D) Xylem parenchyma

Answer = (D) Xylem parenchyma