



Atal Medical & Research University, H.P.

(A State Govt. University)

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

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Answer Keys

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

Paper Code- 2604

Series-B

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
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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

Chemistry

Q1. The number of significant figures in 6.022×10^{23} are:

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

Ans: B

Q2. The total number of orbitals present in third shell of an atom will be:

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

ANS: C

Q3. If $n = 1$, $l = 0$, then orbital notation is:

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

Ans: B

Q4. 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

Q5. Which of the following bond angle corresponds to sp^2 hybridisation?

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

Ans: B

Q6. 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

Q7. 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

Q8. The state of equilibrium refers to:

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

Ans: B

Q9. For the reaction: $2\text{HI(g)} \rightleftharpoons \text{H}_2\text{(g)} + \text{I}_2\text{(g)}$

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

Ans: C

Q10. A Buffer solution:

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

Ans: D

Q11. In the reaction - $\text{H}_2\text{S(g)} + \text{Cl}_2\text{(g)} \rightarrow 2\text{HCl(g)} + \text{S(s)}$, 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

Q12. The oxidation number of S in $\text{S}_2\text{O}_7^{2-}$ is:

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

Ans: C

Q13. 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

Q14. Anthracene is:

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

Ans: C

Q15. 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

Q16. 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

Q17. Which of the following is a colligative property?

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

Ans: D

Q18. The substances which conduct electricity in molten & aqueous state are called:

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

Ans: A

Q19. 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

Q20. 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

Q21. 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

Q22. 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

Q23. 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

Q24. 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

Q25. A 40% solution of formaldehyde is known as:

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

Ans: B

Q26. 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

Q27. 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

Q28. How many carbon atoms are there in a pyranose ring?

- (A) 3
- (B) 5

(C) 6

(D) 7

Ans: B

Q29. The basic unit not present in DNA is:

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

Ans: A

Q30. The conversion of maltose into glucose is possible by the enzyme:

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

Ans: C

Mathematics

Q31. 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)

Q32. 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)

Q33. Which of the following is not a criterion for congruence of triangles

- (A) SAS
- (B) ASA
- (C) SSA
- (D) SSS

Answer= (C)

Q34. 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)

Q35. 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)

Q36. 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)

Q37. 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)

Q38. The quadrilateral whose diagonals are perpendicular to each other is

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

Answer= (D)

Q39. If the length of the shadow 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)

Q40. The sum of first 16 terms of the AP: 10, 6, 2,..... is

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

Answer= (A)

Q41. 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)

Q42. 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)

Q43. 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)

Q44. Ordinate of all points on the x-axis is

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

Answer= (B)

Q45. Multiplicative inverse of $1/3^2$ is :

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

Answer= (B)

Q46. An item marked at rupees 840 is sold for rupees 714. The discount % is :

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

Answer = (B)

Q47. 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)

Q48. 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)

Q49. 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)

Q50. 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

Q51. Which cell organelle is the site of photosynthesis:-

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

Ans. (A) CHLOROPLAST

Q52. The largest gland in the human body is

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

Ans. (B) LIVER

Q53. 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

Q54. The oxygen carrying pigment present in our blood is

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

ANS:- (C) HAEMOGLOBIN

Q55. DNA is mainly located in which part of cell?

- (A) Cytoplasm

(B) Nucleus

(C) Cell wall

(D) Ribosome

ANS:(B) NUCLEUS

Q56. 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

Q57. The study of heredity and variation is called?

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

ANS:- (C) GENETICS

Q58. Which of the following is mammal?

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

ANS. (A) COW

Q59. Which is largest muscle of human body?

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

ANS:- (C) SARTORIUS MUSCLE

Q60. In human female reproductive cell is called :

- (A) Zygote
- (B) Ovum
- (C) Embryo
- (D) Sperm

ANS:- (B) OVUM

Q61. Which of the following is autotroph ?

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

ANS:- (D) GREEN PLANT

Q62. The process of losing water from leaves is called:

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

Answer: (B) Transpiration

Q63. 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

Q64. 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

Q65. 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

Q66. 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

Q67. 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

Q68. 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

Q69. 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

Q70. 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

Physics

Q71. 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

Q72. The coefficient of restitution 'e' for perfectly inelastic collision is

- (A) 1
- (B) 0
- (C) ∞
- (D) -1

Ans (b) 0

Q73. 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}

Q74. 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

Q75. 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

Q76. 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

Q77. A planet which is twin sister of Earth is...

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

Ans (b) Venus

Q78. 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°

Q79. The raindrops are spherical in shape due to

- (A) Residual pressure

(B) Thrust on drop

(C) Surface tension

(D) Viscosity

Ans (c) Surface tension

Q80. 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

Q81. Number of degrees of freedom of a triatomic non-linear molecule is.....

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

Ans (c) 6

Q82. Sound waves can not pass through

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

Ans (d) Vacuum

Q83. 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%

Q84. 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

Q85. 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

Q86. 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) $E = -dV/dr$

Q87. 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) $E \propto r^{-3}$

Q88. The dielectric constant of an insulator cannot be:

- (A) 1.5
- (B) 2.5
- (C) 4.5
- (D) ∞

Ans (d) ∞

Q89. 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) $M^1L^2T^{-3}A^{-2}$

Q90. 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

Q91. 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) $53 \times 10^0 \pm 5\% \Omega$

Q92. Wheatstone Bridge is used to measure:

(A) E.M.F.

(B) Potential

(C) Resistance

(D) Current

Ans (c) Resistance

Q93. 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

Q94. What is the frequency of d.c.?

(A) 50 Hz

(B) 100 Hz

(C) Zero Hz

(D) ∞

Ans (c) Zero Hz

Q95. The ac cannot be used for:

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

Ans (c) Electrolysis

Q96. 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

Q97. 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

Q98. 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

Q99. 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

Q100. 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