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

Paper Code- 2605

held on 20th September, 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 21.09.2026 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

Combined Entrance Test for Allied Healthcare Programmes

Paper Code- 2605

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) **Over-writing, cutting, erasing or use of white fluid is not 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

Physics

1. To obtain a p-type Germanium semiconductor, it should be doped with:
   (a) Arsenic
   (b) Antimony
   (c) Indium
   (d) Phosphorous

Answer: (c) Indium

2. In the nuclear reactors the moderators are used to:
   (a) Slow down the neutrons
   (b) Generate neutrons
   (c) Accelerate neutrons
   (d) Absorb the neutrons

Answer: (a) Slow down the neutrons

3. Give the relation between a.m.u. and MeV.
   (a) 1 MeV = 391 a.m.u.
   (b) 1 MeV = 931 a.m.u.
   (c) 1 a.m.u = 391 MeV
   (d) 1 a.m.u = 931 MeV

Answer: (d)1 a.m.u = 931 MeV

4. Dimensional formula of potential gradient?
   (a) $M^1L^1T^{-3}A^{-1}$
   (b) $M^{-1}L^{-1}T^3A^1$
   (c) $M^1L^1T^2A^{-1}$
   (d) $M^2L^2T^{-3}A^{-2}$

Answer: (a) $M^1L^1T^{-3}A^{-1}$

5. The resistance of a conductor is halved, its conductivity will:
   (a) Remain same
   (b) Change
   (c) Become half
   (d) Become double

Answer: (a) Remain same

6. The electrostatic potential energy of a charge of 5C at a point in the electrostatic field is 50 J. The potential at that point is:
   (a) 0.1 V
   (b) 5 V
   (c) 10 V
   (d) 50 V

Answer: (c) 10 V

7. Three bulbs 40W, 60W and 100W are connected to 220V mains. Which bulb shall glow brightly? If they are joined in series?
   (a) 40W
   (b) 60W
   (c) 100W
   (d) All glow brightly

Answer: (a) 40W

8. Galvanometers can be converted into an ammeter by using:
   (a) High resistance in series
   (b) High resistance in parallel
   (c) Low resistance in parallel
   (d) Low resistance in series

Answer: (c) Low resistance in parallel

9. A transformer works on the principle of:
(a) Total internal reflection
(b) Self induction
(c) Mutual induction
(d) Joule's law of heating
Answer: (c) Mutual induction

10. The unit of magnetic flux in SI is:
(a) Weber
(b) Gauss
(c) Oersted
(d) Tesla
Answer: (a) Weber

11. Ozone layer acts as a protective blanket for earth's life because it blocks:
(a) X-rays
(b) IR-rays
(c) UV-rays
(d) Radio waves
Answer: (c) UV-rays

12. Which part of EM spectrum is used in operating a Radar?
(a) Radio waves
(b) UV rays
(c) X-rays
(d) Microwaves
Answer: (d) Microwaves

13. Sky appears blue in clear atmosphere due to:
(a) Diffraction
(b) Scattering
(c) Dispersion
(d) Total internal reflection
Answer: (b) Scattering

14. In vacuum, speed of light depends upon:
(a) Wavelength
(b) Frequency
(c) Colour
(d) None of the above
Answer: (d) None of the above

15. Energy of photon having frequency 10^{24} hertz is:
(a) 6.6×10^{-10} J
(b) 6.6×10^{-12} J
(c) 6.6×10^{10} J
(d) 6.6×10^{-13} J
Answer: (a) 6.6×10^{-10} J

16. How many significant digits are in 0.7 m^2?
(a) 1
(b) 2
(c) 3
(d) 4
Answer: (a) 1

17. Angle between two equal vectors is:
(a) 0°
(b) 30°
(c) 90°
(d) 180°
Answer: (a) 0°

18. The working of a rocket is based on the principle of:
(a) Newton's III law
(b) Newton's law of gravitation
(c) Law of conservation of momentum
(d) Law of conservation of angular momentum
Answer: (c) Law of conservation of momentum

19. A man pushes a wall and fails to displace it. He does:
(a) No work at all
(b) Negative work
(c) Maximum positive work
(d) Positive work but not maximum
Answer: (a) No work at all

20. When milk is churned, cream separates out because of:
(a) Cohesive force
(b) Gravitational force
(c) Frictional force
(d) Centrifugal force
Answer: (d) Centrifugal force

21. If we remove the atmosphere of earth then the duration of the day will:
(a) Increase
(b) Decrease
(c) Will remain same
(d) Depends upon season
Answer: (b) Decrease

22. Viscosity is closely related to:
(a) Inertia
(b) Shearing strain
(c) Friction
(d) None of these
Answer: (c) Friction

23. Which of the following phenomena is reversible?
(a) Waterfall
(b) Rusting of iron
(c) Charging of battery
(d) Electrolysis of water
Answer: (c) Charging of battery

24. The first law of thermodynamics is based on conservation of:
(a) Mass
(b) Momentum
(c) Energy
(d) Angular momentum
Answer: (c) Energy

25. The pressure P of a gas and its mean kinetic energy per unit volume (E) are related as:
(a) $P = 1/2\ E$
(b) $P = 2/3\ E$
(c) $P = 3/2\ E$
(d) $P = E$
Answer: (b) $P = 2/3\ E$

26. Echo is:
(a) Reflection of sound
(b) Interference of sound
(c) Refraction of sound
(d) Polarisation of sound
Answer: (a)Reflection of sound

27. Displacement is given by y = 0.2 sin 50πt. Its angular frequency is:
(a) 0.2π
(b) 50π
(c) 50πt
(d) 50
Answer: (b)50π

28. When area of cross-section of a pipe decreases, the velocity of flow of liquid:
(a) Increases
(b) Decreases
(c) Becomes zero
(d) Remain same
Answer: (a) Increases

29. If the mass of a body is 'M' on the earth, then mass of the same body on the moon is:
(a) M/6
(b) Zero
(c) M
(d) None of these
Answer: (c) M

30. How much energy is released when 1 mg of uranium is completely destroyed in an atom bomb?
(a) 9×10^{9} J
(b) 9×10^{10} J
(c) 8×10^{12} J
(d) 8×10^{9} J
Answer: (b)9×10^{10} J

Chemistry

Q.31Which of the following equations does not obey the law of conservation of mass?
(a) $4H + O_2 \rightarrow 2H_2O$
(b) $H_2 + O \rightarrow 2H_2O$
(c) $2H + O_2 \rightarrow H_2O$
(d) Both (b) and (c)
Answer-D

Q.32 The pair of ions having same electronic configuration is:
(a) Cr^{3+}, Fe^{3+}
(b) Fe^{3+}, Mn^{2+}
(c) Fe^{3+}, Co^{3+}
(d) Sc^{3+}, Cr^{3+}
Answer-B

Q.33 Which of the following set of quantum numbers is not possible?
(a) $n = 1, l = 0, m_l = 0, m_s = -½$
(b) $n = 0, l = 0, m_l = 0, m_s = -½$
(c) $n = 2, l = 1, m_l = 0, m_s = +½$
(d) None of these
Answer-B

Q.34 Which of the following is the most electronegative atom?
(a) F
(b) Cl
(c) O
(d) N
Answer-A

Q.35 The molecule which does not have π-bond is:
(a) N_2
(b) Cl_2
(c) O_2
(d) CO_2
Answer-B

Q.36 As per Molecular Orbital Theory, which cannot exist in stable state?
(a) H_2^-
(b) H_2^+
(c) H_2
(d) He_2
Answer-D

Q.37 The enthalpies of all elements in their standard states are:
(a) Unity
(b) Zero
(c) < 0
(d) Different for each element
Answer-B

Q.38 For the system:
$3A + 2B \rightleftharpoons C$
The expression for equilibrium constant K is:
(a) $\frac{[3A]\times[2B]}{[C]}$
(b) $\frac{[A]^3+[B]}{[C]}$
(c) $\frac{[C]}{[A]^3[B]^2}$
(d) $\frac{[C]}{[3A]\times[2B]}$
Answer-C

Q.39 Acidity of BF_3 can be explained on the basis of which of following concept?
(a) Arrhenius concept
(b) Bronsted-Lowry concept
(c) Lewis concept
(d) Both (b) and (c)
Answer-C

Q.40 The solubility product of lead iodide (PbI_2) is 3.2×10^{-8}. Its solubility will be:
(a) 2×10^{-3}M
(b) 4×10^{-4}M
(c) 1.6×10^{-5}M
(d) 1.8×10^{-5}M
Answer-A

Q.41 The number of electrons required to balance the following equation:
$NO_3^- + 4H^+ + e^- \rightarrow 2H_2O + NO$
is:
(a) 5
(b) 4
(c) 3
(d) 2
Answer-C

Q.42 The principle involved in paper chromatography is:
(a) Adsorption
(b) Partition
(c) Solubility
(d) Volatility
Answer-B

Q.43 In Duma's method of nitrogen estimation, nitrogen is:
(a) Absorbed in KOH
(b) Collected in upper part of graduated tube
(c) Converted to ammonium sulphate
(d) All of these
Answer-B

Q.44 Propene on hydroboration and oxidation produces:
(a) $CH_3CH_2CH_2OH$
(b) $CH_3CHOHCH_3$
(c) $CH_3CHOHCH_2OH$
(d) CH_3CH_2CHO
Answer-A

Q.45 The metal used in Wurtz reaction is:
(a) Na
(b) Li
(c) Cu
(d) Mg
Answer-A

Q.46 The partial pressure of a solution component is directly proportional to its mole fraction. This is known as:
(a) Henry's law
(b) Raoult's law
(c) Ostwald's dilution law
(d) None of these
Answer-B

Q.47 A plant cell shrinks or swells due to:
(a) Diffusion
(b) Vapourisation
(c) Osmosis
(d) Reverse osmosis
Answer-C

Q.48 What is conductance?
(a) Inverse of resistance
(b) Proportional to resistance
(c) Equal to resistivity
(d) Equal to resistance
Answer-A

Q.49 The unit of second order rate constant is:
(a) L^{-1} mol s^{-1}
(b) L^2 mol^{-2} s^{-1}
(c) L mol^{-1} s^{-1}
(d) s^{-1}
Answer-C

Q.50 The rate constant of a reaction depends upon:
(a) Temperature of the reaction
(b) Extent of the reaction
(c) Initial concentration of the reaction
(d) Time of completion of reaction
Answer-A

Q.51 The general electronic configuration of outer orbitals of d-block elements is:
(a) $(n-1)d^{1-10}\ ns^{0-2}$
(b) $(n-1)d^{1-10}\ ns^{1-2}$
(c) $(n-1)d^{10}\ ns^{1-2}$
(d) $nd^{1-10}\ ns^{0-2}$
Answer-B

Q.52 The lanthanoid contraction is due to increase in:
(a) Atomic number
(b) Effective nuclear charge
(c) Atomic radius
(d) Valence electrons
Answer-B

Q.53 Which of the following ligand can give linkage isomerism?
(a) CO_3^{2-}
(b) NO_3^-
(c) NH_3
(d) SCN^-
Answer-D

Q.54 Which of the following is a primary halide?
(a) Iso-propyl iodide
(b) Sec-butyl iodide
(c) Tert-butyl bromide
(d) Neo-hexyl chloride
Answer-D

Q.55 Carboxylic acids dimerise due to:
(a) High molecular weight
(b) Coordination bonding
(c) Intermolecular hydrogen bonding
(d) Covalent bonding
Answer-C

Q.56 Reaction between benzaldehyde and acetophenone in presence of dilute NaOH is known as:
(a) Aldol condensation
(b) Cannizzaro's reaction
(c) Cross-Cannizzaro's reaction
(d) Cross-Aldol condensation
Answer-D

Q.57 Primary, secondary and tertiary amines can be distinguished by:
(a) Schiff's test
(b) Fehling's test
(c) Tollen's test
(d) Hinsberg's test
Answer-D

Q.58 Starch is composed of two polysaccharides which are:
(a) Amylopectin and glycogen
(b) Amylose and glycogen
(c) Amylose and amylopectin
(d) Cellulose and glycogen
Answer-C

Q.59 Hereditary characters are passed from parents to children through:
(a) Gametes
(b) Genes
(c) Mutants
(d) Enzymes
Answer-B

Q.60 Which of the following statements is true for proteins?
(a) They act as antibodies
(b) They act as hormones
(c) They act as catalysts in biochemical reactions
(d) All of these
Answer-D

Mathematics

Q61. HCF of 17, 23 and 29 is:
a) 17
b) 23
c) 1
d) 19
Answer: c) 1

Q62. Sum of roots of quadratic polynomial $y^2+7y+10$ is
a)-10
b) 7
c) - 7
d) 1
Answer : c)- 7

Q63) What will be the volume of hemisphere of radius 3 cm
a)396/7 cm^3
b)390/7 cm^3
c) 300/7 cm^3
d) 290/7 cm^3
Answer : a) 396/7 cm^3

Q64) If first term a = 3 and common difference d = 2 what is the 10th term of A.P
a)19
b) 21
c) 23
d) 25
Answer : b)21

Q65) Which will be the 20th term of an A.P: 10,7,4……
a)77
b)-77
c)-47
d)47
Answer : c)-47

Q66) Find the distance between two points (4, 3) and (4,1)
a)2 unit
b) 6 unit
c) 4 unit
d) 8 unit
Answer: a) 2 unit

Q67) If a line touches a circle at exactly one point it is called
a) second
b) chord
c) tangent
d) diameter
Answer: c) tangent

Q68) value of $(2^0 + 3^0 + 4^0)$ is
a)2
b)3
c)1
d)4
Answer: b)3

Q69) Number of median in a triangle is
a)3
b)2
C)0
d)1
Answer a) 3

Q70) If curved surface area of the cylinder is 440 cm^2 and height is 10 cm find the radius
a)7cm.
b)3.5cm.
c)14cm.
d)21cm
Answer: a)7cm.

Q71) If a cylinder and a cone have the same base and height. The ratio of their volume is
a)1:2
b)2:1
c)3:1
d)1:3
Answer: c)3:1

Q72) A die is thrown once what is the probability of getting the number less than 3
a)⅙
b)⅓
C)½
d)⅔
Answer: b)⅓

Q73) A card is drawn from a well shuffled deck of 52 cards. What is the probability of getting a king
a)1/13
b)4/13
c)1/52
d)2/52
Answer: a)1/13

Q 74) Two angles are complementary if one angle is 35º the other angle is
a)145º
b)55º
C)65º
d)75º
Answer: b)55º

Q75) If two angles are complementary then their sum is
a)180º
b)360º
c)90º
d)270º
Answer: c)90º

Q76) If a trader sells two article at ₹ 1000 each, on one he gains 20% and on the other he loses 20% what is his overall result
a) No profit No loss
b) 4% loss
c) 4% profit
d) 2% loss
Answer: b) 4% loss

Q77) if selling price of an article is ₹ 1200 and profit is 20% what is the cost price
a)₹800
b)₹900
c)₹1000
d)₹1100
Answer: c)₹1000

Q78) Mean of first five natural numbers
a)2
b)3
c)4
d)5
Answer: b)3

Q79) Identity Sin^2A+Cos^2A=.....
a)0
b)1
c)2
d)-1
Answer: b)1

Q80) value of $Sin30^º$=.....
a)1
b)½
c)3/2
d)0
Answer: b)1/2

Biology

81. Which cell organelle is called powerhouse of the cell ?

a) Chloroplast

b) Mitochondria

c) Ribosome

d) Nucleus

Ans:- b) Mitochondria

82. The human eye form image of an object at which part?

a) Cornea

b) Lens

c) Retina

d) Ciliary muscle

Ans:- c) Retina

83. Who propose five kingdom system?

a) R.H.Whittaker

b) Aristotle
c) Carolus Linnaeus

d) Ernst Haeckel

Ans:-a) R.H.Whittaker

84. Single celled eukaryotes without cell wall or with cell wall made up of cellulose are grouped under which following Kingdoms?

a) Protista.

b) Fungi

c) Plantae.

d) animalia

Ans:- a) Protista

85. The basic structural and functional filtering unit present in the human kidney is called as-

a) Ureter

b) Nephron

c) Neuron.

d) None of these

Ans:- b) Nephron

86. Which hormone is produced by pancreas to regulate blood sugar level?

a) Insulin

b) Thyroxin

c) Adrenaline

d) Estrogen

Ans:- a) Insulin

87. In human the fertilization occur in which part of reproductive system?

a) Uterus

b) Vagina

c) Fallopian tube.

d) Ovary

Ans:- c)Fallopian tube

88. The complex permanent plant tissue which is responsible for transport of water and minerals is-

a) Phloem.

b) Parenchyma

c) Collenchyma

d) Xylem

Ans:-d) Xylem

89. Which acid is found in human stomach?

a) Nitric acid

b) Ascorbic acid

c) Hydrochloric acid

d) sulphuric acid

Ans:- c) Hydrochloric acid

90. Which plant is chosen by Mendel for his experiments?

a) Beans

b) Peas.

c) Primrose

d) Capsicum

Ans:-b) Peas

91. How many number of chambers are found in the heart of fishes?

a) 3

b) 4

c) 2

d) 1

Ans:- c)2

92. Binomial nomenclature is proposed by

a) Aristotle.

b) Carolus Linnaeus

c) Ernst Haeckel.

d) Mendel

Ans:-b) Carolus Linnaeus

93. In this scientific name *Panthera tigress*, the *tigress* is the name of -

a) Genus.

b) Species.

c) Phylum

d) Class

Ans:-b) Species.

94. Transfer of pollen grains from anther to the stigma of a flower is called

a) Transportation

b) Movement

c) Fertilization

d) Pollination

Ans:-d) Pollination

95. Which kind of meristem is present in the terminal /subterminal parts of root and stem?

a) Intercalary meristem.

b) Apical meristem.

c) Lateral meristem.

d) none of these

Ans:- b) Apical meristem.

96. How many number of ribs are found in our skeletal system?

a)12 pair

b)10 pair

c)8 pair

d)7 pair

Ans:-a)12 pair

97. The movement of particle from high concentration to low concentration is known as -

a) Osmosis

b) Filtration

c) Dialysis

d) Diffusion

Ans :- d) Diffusion

98. The four limbs of a human, the wings of birds and the flippers of whale are example of.

a) Analogous organ

b) Homologous organs

c) Vestigial organ

d) Fossils

Ans:- b) Homologous organs

99. Which of the following pair of cell organelles contains DNA?

a) Chloroplast,Ribosome

b) Mitochondria,Nucleus

c) Golgi body,ribosome

d) Nucleus,lysosomes

Ans:- b)Mitochondria,Nucleus

100. Hydra reproduce by which of the following method?

a) Budding

b) Binary fission

c) Multiple fission

d) None of these

Ans:-a) Budding