



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: coomedicaluniv.mandi@gmail.com, Phone No. 01905-243967

Answer Keys

B. Sc. Nursing Course

Paper Code- 2601

Series-A

held on 2nd August, 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 coomedicaluniv.mandi@gmail.com up to 06.08.2026 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

B. Sc. Nursing Entrance Test
Paper Code- 2601
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

Biology

Q1. The basic unit of biological classification is the:

- (a) Genus
- (b) Species
- (c) Family
- (d) Order

Answer = (b) Species

Q2. Coralloid roots containing N_2 fixing cyanobacteria are found in

- (a) Sequoia
- (b) Picea
- (c) Cycas
- (d) pinus

Answer = (c) Cycas

Q3. Active cell division is primary characteristic of which tissue

- (a) Parenchyma
- (b) Meristematic
- (c) Sclerenchyma
- (d) Collenchyma

Answer = (b) Meristematic

Q4. Which is the important site of formation of glycoprotein and glycolipid in eukaryotic cell

- (a) Peroxisomes

(b) Golgi bodies

(c) Polysome

(d) Endoplasmic reticulum

Answer = (b) Golgi bodies

Q5. Amino acids are linked together by which bond to form proteins?

- (a) Glycosidic bond
- (b) Phosphodiester bond
- (c) Peptide bond
- (d) Hydrogen bond

Answer = (c) Peptide bond

Q6. Meiosis results in

- (a) Production of gametes
- (b) Reduction in the number of chromosomes
- (c) Introduction of variation
- (d) All the above

Answer = (d) All the above

Q7. Blackman's Law of limiting factor states that if a chemical process is affected by more than one factor then one factor, its will be determined by the factor which is

- (a) Most abundant in the environment
- (b) Nearest to minimal value
- (c) maintain at an optimal value

(d) Totally absent in environment.

Answer = (b) Nearest to minimal value

Q8. When Proteins are used as respiratory substrates the Respiratory Quotient would be about:

- (a) 0.9
- (b) 0.7
- (c) 1
- (d) 1.7

Answer = (a) 0.9

Q9. Respiratory Rhythm centre of breathing is located in

- (a) Pons
- (b) Crura cerebri
- (c) Medulla oblongata
- (d) Cerebellum

Answer = (c) Medulla oblongata

Q10. A mineral element playing important role in clotting of blood

- (a) Calcium
- (b) Magnesium
- (c) Zinc
- (d) Sodium

Answer = (a) Calcium

Q11. The following substances are the excretory product in animals. Choose the least toxic among them

- (a) Urea
- (b) Uric acid
- (c) Ammonia
- (d) Carbon dioxide

Answer = (b) Uric acid

Q12. Which of the following was proved helpful in preserving pollens as fossils

- (a) Pollen Tube
- (b) Cellulosic intine
- (c) Pollen Kitt
- (d) Sporopollenin.

Answer = (d) Sporopollenin

Q13. Fertilisation of sperm and Ovum take place in:

- (a) Uterus
- (b) Ampullary region
- (c) Cervix
- (d) Ovary

Answer = (b) Ampullary region

Q14. In IUT embryo with more than 8 blastomeres formed by *In vitro* fertilisation is transferred into

- (a) Cervix

- (b) Uterus
- (c) Fallopian tube
- (d) Fimbriae

Answer = (b) Uterus

Q15. Possibility of the blood groups of the children in a family where the father is heterozygous for blood group A and mother is heterozygous for blood group B would be:

- (a) Blood groups A, B
- (b) Blood groups A, B, O
- (c) Blood groups AB, O
- (d) Blood groups A, B, AB, O

Answer = (d) Blood groups A, B, AB, O

Q16. Which among the following was the first genetic material :

- (a) DNA
- (b) RNA
- (c) Lipid
- (d) cellulose

Answer = (b) RNA

Q17. The concept of “saltation” was proposed by Hugo de Vries to explain evolution. It refers to:

- (a) Single-step large mutation

- (b) Gradual accommodation of small variation
- (c) Environment impact on phenotype
- (d) Non-random mating patterns.

Answer = (a) Single-step large mutation

Q18. The primary lymphoid organ is/are:

- (a) Bone marrow
- (b) Thymus
- (c) Both (a) and (b)
- (d) None of the above

Answer = (c) Both a and b

Q19. Which of the following microorganisms is used for production of a commercial blood cholesterol-lowering agent?

- (a) *Trichoderma polysporum*
- (b) *Monascus purpureus*
- (c) *Aspergillus niger*
- (d) *Saccharomyces cerevisiae*

Answer = (b) *Monascus purpureus*

Q20. A foreign DNA and plasmid cut by same restriction endonuclease can be joined to form recombinant plasmid using

- (a) Ligase

- (b) *Eco* RI
(c) Taq polymerase
(d) Polymerase II

Answer = (a) Ligase

Chemistry

Q21. 1 amu is equal to

- (a) 1/12 of C-12
(b) 1/14 of O-16
(c) 1 g of H₂
(d) 1.66×10^{-24} kg

Answer (a) 1/12 of C-12

Q22. The numbers of electrons present in the orbitals for which $n = 3$ and $l = 1$ are

- (a) 2
(b) 6
(c) 10
(d) 14

Answer (b) 6

Q23. Which of the following has largest size?

- (a) Na
(b) Na⁺
(c) Na⁻
(d) Can't be predicted

Answer (c) Na⁻

Q24. Identify a molecule which does not exist

- (a) He₂
(b) Li₂
(c) C₂
(d) O₂

Answer (a) He₂

Q25. Unit of entropy is

- (a) J K⁻¹ mol⁻¹
(b) J mol⁻¹
(c) J⁻¹ K⁻¹ mol⁻¹
(d) J K mol⁻¹

Answer (a) J K⁻¹ mol⁻¹

Q26. Calculate the pH of a solution at 25°C that contains 1×10^{-4} M of H₃O⁺ ?

- (a) 4.000
(b) 10.000
(c) 7.000
(d) 2.000

Answer (a) 4.000

Q27. The oxidation state of Cr in Cr₂O₇²⁻ is

- (a) +4
(b) +5
(c) +7

(d) +6

Answer (d) +6

Q28. The number of σ and π bonds in ethene (C_2H_4) are respectively:

- A) 4σ , 1π
- B) 5σ , 1π
- C) 5σ , 2π
- D) 6σ , 1π

Answer B) 5σ , 1π

Q29. Which of the following is used as an anti-knocking material?

- (a) Glyoxal
- (b) Freon
- (c) T.E.L.(Tetra ethyl lead)
- (d) Ethyl alcohol

Answer (c) T.E.L.(Tetra ethyl lead)

Q30. Geometrical isomers differ in

- (a) Position of functional group
- (b) Position of atoms
- (c) Spatial arrangement of atoms
- (d) Length of carbon chain

Answer (c) Spatial arrangement of atoms

Q31. According to Raoult's law, the relative lowering in vapour pressure for a solution is equal to

- (a) Mole fraction of solute

(b) Mole fraction of solvent

(c) Moles of solute

(d) Moles of solvent

Answer (a) Mole fraction of solute

Q32. The standard electrode potential for Hydrogen electrode is

- (a) -0.76 V
- (b) +0.34 V
- (c) 0.0 V
- (d) 1.10 V

Answer (c) 0.0 V

Q33. The given reaction $2FeCl_3 + SnCl_2 \rightarrow 2FeCl_2 + SnCl_4$ is an example of

- (a) Third order reaction
- (b) First order reaction
- (c) Second order reaction
- (d) None of these

Answer (a) Third order reaction

Q34. Ethylene diamine tetraacetate (EDTA) ion is

- (a) Tridentate ligand
- (b) Hexadentate ligand
- (c) Unidentate ligand
- (d) Bidentate ligand

Answer (b) Hexadentate ligand

Q35. Which ion is colourless?

- (a) Cu^{4+}
- (b) Sc^{3+}
- (c) Ti^{3+}
- (d) V^{3+}

Answer (b) Sc^{3+}

Q36. The alkyl halide is converted into an alcohol by

- (a) Elimination reaction
- (b) Dehydrohalogenation reaction
- (c) Addition reaction
- (d) Substitution reaction

Answer (d) Substitution reaction

Q37. Lucas reagent is

- (a) Conc. HCl and anhydrous ZnCl_2
- (b) Conc. HNO_3 and hydrous ZnCl_2
- (c) Conc. HNO_3 and anhydrous ZnCl_2
- (d) Conc. HCl and hydrous ZnCl_2

Answer (a) Conc. HCl and anhydrous ZnCl_2

Q38. Carboxylic acids have higher boiling points than aldehydes, ketones and even alcohols of comparable mass. It is due to

- (a) Formation of intramolecular H-bonding

(b) Formation of carboxylate ion

(c) Formation of intermolecular H-bonding

(d) None of these

Answer (c) Formation of intermolecular H-bonding

Q39. Which of the following is non-reducing sugar?

- (a) Glucose
- (b) Sucrose
- (c) Maltose
- (d) Lactose

Answer (b) Sucrose

Q40. Which of the following vitamin is water soluble?

- (a) Vitamin E
- (b) Vitamin K
- (c) Vitamin A
- (d) Vitamin B

Answer (d) Vitamin B

Physics

Q41. Which of the following measurement is the most precise?

- (a) 7.00 m
- (b) 7.0 km
- (c) 7.4 cm
- (d) 7.00 mm

Answer: (d) 7.00 mm

Q42. What does the speedometer of a vehicle read?

- (a) Average speed
- (b) Average velocity
- (c) Instantaneous speed
- (d) Instantaneous velocity

Answer: (c) Instantaneous speed

Q43. When a bus suddenly stops, the passengers fall forward due to:

- (a) Inertia of motion
- (b) Inertia of direction
- (c) Gravitational pull by earth
- (d) Momentum of bus

Answer: (a) Inertia of motion

Q44. A force does maximum work on an object when the angle between force and displacement is:

- (a) 0°
- (b) 30°
- (c) 90°
- (d) 60°

Answer: (a) 0°

Q45. The Torque of a force $\vec{F} = -3\hat{i} + \hat{j} + 5\hat{k}$ acting at the point $\vec{r} = 7\hat{i} + 3\hat{j} + \hat{k}$ is-

- (a) $14\hat{i} - 38\hat{j} + 16\hat{k}$
- (b) $4\hat{i} + 4\hat{j} + 6\hat{k}$
- (c) $-21\hat{i} + 4\hat{j} + 4\hat{k}$
- (d) $-14\hat{i} + 38\hat{j} - 16\hat{k}$

Answer: (a) $14\hat{i} - 38\hat{j} + 16\hat{k}$

Q46. If we move from equator to pole, the value of acceleration due to gravity:

- (a) First increases then decreases
- (b) Remains same

- (c) Increases
- (d) Decreases

Answer: (c) Increases

Q47. Which of the following has the highest elasticity?

- (a) Plastic
- (b) Steel
- (c) Copper
- (d) Rubber

Answer: (b) Steel

Q48. A gas performs minimum work when it expands:

- (a) Adiabatically
- (b) Isothermally
- (c) Isobarically
- (d) Isochoric ally

Answer: (d) Isochoric ally

Q49. The number of degrees of freedom of a rigid diatomic gas is:

- (a) 5
- (b) 4
- (c) 6
- (d) 7

Answer: (a) 5

Q50. Distance between two consecutive nodes is:

- (a) $\lambda/2$
- (b) $\lambda/4$
- (c) λ
- (d) 2λ

Answer: (a) $\lambda/2$

Q51. The angle between dipole moment and net electric field due to an electric dipole on equatorial line is:

- (a) 0°
- (b) 90°
- (c) 180°
- (d) 120°

Answer: (c) 180°

Q52. If the radius of copper wire is doubled, what will be the effect on its specific resistance?

- (a) Remains same
- (b) Becomes two times
- (c) Decreases
- (d) Decreases four times

Answer: (a) Remains same

Q53. One Tesla is equal to:

- (a) 10^7 gauss
- (b) 10^{-4} gauss
- (c) 10^4 gauss
- (d) 10^{-6} gauss

Answer: (c) 10^4 gauss

Q54. Lenz law is a consequence of the law of conservation of:

- (a) Charge
- (b) Mass
- (c) Energy
- (d) Momentum

Answer: (c) Energy

Q55. Which of the following is most penetrating radiation?

- (a) Alpha rays
- (b) Gamma rays
- (c) Beta rays

(d) X-rays

Answer: (b) Gamma rays

Q56. How are resolving power (RP) and limit of resolution (LR) of an optical instrument is related?

- (a) $LR = RP$
- (b) $LR^2 = RP$
- (c) $RP = 1/LR$
- (d) $LR = \sqrt{RP}$

Answer: (c) $RP = 1/LR$

Q57. The time taken by light to travel a distance of 3 cm is:

- (a) 10^{-8} s
- (b) 10^{-9} s
- (c) 10^{-10} s
- (d) 10^{10} s

Answer: (c) 10^{-10} s

Q58. Electron volt (eV) is a unit of:

- (a) Potential
- (b) Energy
- (c) Charge
- (d) Current

Answer: (b) Energy

Q59. The energy equivalent of one atomic mass unit (amu) is:

- (a) 1.6×10^{-19} J
- (b) 6.02×10^{-23} J
- (c) 9.1×10^{-31} J
- (d) 931 MeV

Answer: (d) 931 MeV

Q60. Which of the following elements is a semiconductor?

- (a) Na
- (b) Ba
- (c) Sr
- (d) Ge

Answer: (d) Ge

- (b) on
- (c) for
- (d) with

Answer = B

English

Q61. He is _____ honest man.

- (a) a
- (b) an
- (c) the
- (d) none

Answer = B

Q62. She is _____ university professor.

- (a) a
- (b) an
- (c) the
- (d) none

Answer = A

Q63. He has _____ European car.

- (a) a
- (b) an
- (c) the
- (d) none

Answer = A

Q64. She insisted _____ going there.

- (a) at

Q65. He was accused _____ theft.

- (a) for
- (b) with
- (c) of
- (d) from

Answer = C

Q66. She sat _____ me and my sister.

- (a) among
- (b) between
- (c) beside
- (d) besides

Answer = B

Q67. He jumped _____ the river.

- (a) into
- (b) in
- (c) over
- (d) onto

Answer = A

Q68. She kept the flowers in a _____.

- (a) basket

- (b) bottle
- (c) vase
- (d) plate

Answer = C

Q69. "He is poor but _____."

- (a) greedy
- (b) coward
- (c) honest
- (d) Rude

Answer = C

Q70. The _____ was investigating the matter.

- (a) doctor
- (b) police
- (c) driver
- (d) soldier

Answer = B

Q71. Keep the milk in the _____ so it stays cold.

- (a) oven
- (b) cupboard
- (c) refrigerator
- (d) basket

Answer = C

Q72. "He spoke softly."

Identify the name of the part of speech used in the word 'softly'.

- (a) noun
- (b) adverb
- (c) verb
- (d) interjection

Answer = B

Q73. Identify the part of speech in the underlined word:

The brave soldier fought fearlessly.

- (a) pronoun
- (b) adverb
- (c) adjective
- (d) interjection

Answer = C

Q74. Identify the part of speech in the underlined word:

Alas! The old man is dead.

- (a) pronoun
- (b) adverb
- (c) adjective
- (d) interjection

Answer = D

Q75. Identify the type of noun in the underlined word:

The team played brilliantly.

- (a) abstract noun
- (b) proper noun
- (c) collective noun
- (d) material noun

Answer = C

Q76. Identify the type of pronoun in the sentence:

Someone is knocking at the door.

- (a) Personal
- (b) Relative
- (c) Indefinite
- (d) Demonstrative

Answer = C

Q77. Identify the type of verb in the sentence:

She is writing a letter.

- (a) Linking verb
- (b) Non-finite verb
- (c) Intransitive verb
- (d) Verb phrase

Answer = D

Q78. Choose the correct sentence:

- (a) The sceneries of Kashmir are beautiful.
- (b) The scenery of Kashmir is beautiful.
- (c) The scenery of Kashmir are beautiful.
- (d) The sceneries of Kashmir is beautiful.

Answer = B

Q79. Choose the correctly spelt words:

- (a) Embarrasment
- (b) Embarrassment
- (c) Embarrasment
- (d) Embarresment

Answer = B

Q80. Choose the synonym of 'Rapid':

- (a) slow
- (b) fast
- (c) lazy
- (d) quiet

Answer = B

NURSING APTITUDE

Q81. A nurse is assigned to multiple patients at the same time. Best action:

- a) Ignore documentation
- b) Prioritize care based on patient

condition

- c) Leave duty early
- d) Delay medication

Answer: b) Prioritize care based on patient condition

Q82. A child is anxious before injection. Nurse should:

- a) Forcefully give injection
- b) Explain calmly and use distraction technique
- c) Avoid procedure
- d) Call parents only

Answer: b) Explain calmly and use distraction technique

Q83. A nurse sees a medication error made by another nurse. First action:

- a) Inform senior nurse
- b) Hide the mistake
- c) Tell other patients
- d) Ignore it

Answer: a) Inform senior nurse

Q84. Most effective method to prevent infection:

- a) Mask only
- b) Hand hygiene
- c) Gloves only
- d) Antibiotics

Answer: b) Hand hygiene

Q85. A patient has airway obstruction. First priority:

- a) Oxygen
- b) Airway clearance

- c) IV fluids
- d) Medication

Answer: b) Airway clearance

Q86. Before giving insulin, nurse should:

- a) Check blood glucose level
- b) Give immediately
- c) Skip documentation
- d) Ask relatives

Answer: a) Check blood glucose level

Q87. A confused patient is trying to get out of bed. Nurse should:

- a) Leave patient alone
- b) Apply restraints without order
- c) Ensure safety and supervision
- d) Ignore behavior

Answer: c) Ensure safety and supervision

Q88. Which patient is attended first?

- a) Stable post-op patient
- b) Child with breathing difficulty
- c) Patient asking water
- d) Patient waiting for discharge

Answer: b) Child with breathing difficulty

Q89. Sharing patient reports on social media is:

- a) Acceptable
- b) Ethical
- c) Breach of confidentiality
- d) Required

Answer: c) Breach of confidentiality

Q90. Nursing records should be:

- a) Delayed
- b) Accurate and timely
- c) Written at end of week
- d) Optional

Answer: b) Accurate and timely

Q95. Best nursing quality:

- a) Strictness
- b) Empathy
- c) Ignorance
- d) Delay

Answer: b) Empathy

Q91. A good nurse leader should:

- a) Avoid decisions
- b) Guide and support team
- c) Work alone only
- d) Ignore staff issues

Answer: b) Guide and support team

Q96. Task delegation should be based on:

- a) Friendship
- b) Staff competency
- c) Seniority only
- d) Random selection

Answer: b) Staff competency

Q92. Best way to manage workload:

- a) Do easy tasks first
- b) Prioritize critical patients
- c) Delay care
- d) Skip reporting

Answer: b) Prioritize critical patients

Q97. Patient does not understand language. Nurse should:

- a) Shout
- b) Use interpreter or visual aids
- c) Ignore
- d) Stop care

Answer: b) Use interpreter or visual aids

Q93. Patient has right to:

- a) Refuse treatment
- b) Ignore advice
- c) Leave without information
- d) Avoid consent

Answer: a) Refuse treatment

Q98. Nurse should maintain:

- a) Personal bias
- b) Professional boundaries
- c) Emotional reaction
- d) Partiality

Answer: b) Professional boundaries

Q94. In cardiac arrest, first action:

- a) Call doctor
- b) Start CPR
- c) Give fluids
- d) Wait

Answer: b) Start CPR

Q99. Best practice to prevent falls:

- a) No supervision
- b) Bed rails and monitoring
- c) Remove call bell

d) Leave patient alone

Answer: b) Bed rails and monitoring

Q100. In emergency, nurse should first:

a) Wait for doctor

b) Act based on priority ABC (Airway, Breathing, Circulation)

c) Document first

d) Call relatives

Answer: b) Act based on ABC priority (Airway, Breathing, Circulation)