DATE : 03/05/2026

Test Booklet Code

14

KAILASH

Aakash
Medical | IIT-JEE | Foundations

Corporate Office : 3rd Floor, Incuspaze Campus-2, Plot No. 13,
Sector-18, Udyog Vihar, Gurugram, Haryana - 122015.

Questions & Answers for NEET (UG)-2026

Time : 3 hrs. **M.M. : 720**

Important Instructions:

1. The test is of **3 hours** duration and the Test Booklet contains **180** multiple choice questions (Four options with a single correct answer) from **Physics, Chemistry and Biology (Botany and Zoology).**
2. Each question carries **4 marks**. For each correct response, the candidate will get **4 marks**. For every wrong response, **1 mark** shall be deducted from the total scores. The maximum marks are **720**.
3. Use **Blue / Black Ball Point Pen only** for writing particulars on this page / marking responses on Answer Sheet.
4. Rough work is to be done in the space provided for this purpose in the Test Booklet only.
5. On completion of the test, the candidate must handover the Answer Sheet to the Invigilator before leaving the Room / Hall. The candidates are allowed to take away this Test Booklet with them.
6. The CODE for this Booklet is **14**.
7. The candidates should ensure that the Answer Sheet is not folded. Do not make any stray marks on the Answer Sheet. Do not write your Roll No. anywhere else except in the specified space in the Test Booklet/Answer Sheet. Use of white fluid for correction is **NOT** permissible on the Answer Sheet.
8. Each candidate must show on demand his/her Admission Card to the Invigilator.
9. No candidate, without special permission of the Centre Superintendent or Invigilator, would leave his/her seat.
10. Use of Electronic/Manual Calculator is prohibited.
11. The candidates are governed by all Rules and Regulations of the examination with regard to their conduct in the Examination Hall. All cases of unfair means will be dealt with as per Rules and Regulations of this examination.
12. No part of the **Test Booklet** and **Answer Sheet** shall be detached under any circumstances.
13. The candidates will write the Correct Test Booklet Code as given in the Test Booklet / Answer Sheet in the Attendance Sheet.

CHEMISTRY

46. The correct statement with regard to the secondary structure of DNA/RNA is

(1) DNA possesses a single strand helix structure and contains uracil as one of the four bases

(2) DNA possesses a double strand helix structure and contains thymine as one of the four bases

(3) RNA possesses a double strand helix structure and contains uracil as one of the four bases

(4) RNA possesses a single strand helix structure and contains thymine as one of the four bases

Answer (2)

47. Match List I with List II :

	List I (Quantum Numbers)			List II (Orbital)
	'n'	'l'		
A.	2	1	I.	3d
B.	4	0	II.	2p
C.	5	3	III.	4s
D.	3	2	IV.	5f

Choose the **correct** answer from the options given below.

(1) A-II, B-III, C-I, D-IV (2) A-II, B-III, C-IV, D-I

(3) A-IV, B-II, C-III, D-I (4) A-I, B-II, C-III, D-IV

Answer (2)

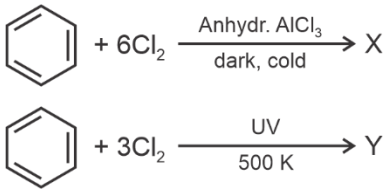
48. During Lassaigne's test, the elements present in an organic compound are converted from :

(1) Covalent form to ionic form (2) Covalent form to covalent form

(3) Ionic form to ionic form (4) Ionic form to covalent form

Answer (1)

49. The number of chlorine atoms present in the organic products X and Y of the following reactions, respectively, are :

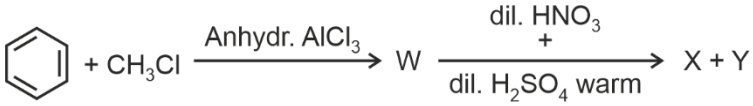


(1) 3 and 6 (2) 6 and 3

(3) 3 and 3 (4) 6 and 6

Answer (4)

50. Two products X and Y are formed in the following reaction sequence.



The suitable method that can be used for the separation of products X and Y is :

(1) Sublimation
(2) Differential extraction
(3) Continuous extraction
(4) Fractional distillation

Answer (4)

51. Identify the correct statement about ClF_3 from the following options :

(1) It has T-shaped geometry with three lone pairs on Cl atom.
(2) It has a planar trigonal geometry with two lone pairs on Cl atom.
(3) It has T-shaped geometry with two lone pairs on Cl atom.
(4) It has a trigonal pyramidal geometry with two lone pairs on Cl atom.

Answer (3)

52. The functional group that can be identified through phthalein dye test is :

(1) Alcohol
(2) Aldehyde
(3) Phenolic
(4) Carboxylic acid

Answer (3)

53. A solution of copper sulphate is electrolysed for 10 minutes with a current of 1.5 amperes. The mass of copper deposited at cathode is :

(Given : Molar mass of Cu = 63 g mol^{-1};

1 F = 96487 C mol^{-1})

(1) 0.2938 g
(2) 1.7018 g
(3) 2.4036 g
(4) 0.5876 g

Answer (1)

54. Match List I with List II :

	List I (Transition metal/compound/ complex)		**List II (Catalytic Role)**
A.	V_2O_5	I.	Preparation of ammonia from N_2/H_2 mixture
B.	Fe	II.	Polymerisation of alkynes
C.	$PdCl_2$	III.	Preparation of H_2SO_4 and SO_2
D.	Ni complex	IV.	Oxidation of ethyne to ethanal

Choose the **correct** answer from the options given below.

(1) A-III, B-I, C-IV, D-II
(2) A-III, B-IV, C-I, D-II
(3) A-IV, B-I, C-III, D-II
(4) A-II, B-I, C-IV, D-III

Answer (1)

55. Match **List I** with **List II** :

	List I (Complex/ion)		List II (Shape/geometry)
A.	$[Pt(Cl_2)(NH_3)_2]$	(I)	Octahedral
B.	$[Co(NH_3)_6]Cl_3$	(II)	Trigonal bipyramidal
C.	$[NiCl_4]^{2-}$	(III)	Square planar
D	$[Fe(CO)_5]$	(IV)	Tetrahedral

Choose the **correct** answer from the options given below :

(1) A-IV, B-I, C-III, D-II

(2) A-III, B-I, C-IV, D-II

(3) A-I, B-III, C-IV, D-II

(4) A-III, B-IV, C-I, D-II

Answer (2)

56. Identify the **incorrect** statement from the following :

(1) The IUPAC name of the element with atomic number 107 is Unnilseptium.

(2) The oxidation state and covalency of Al in $[AlCl(H_2O)_5]^{2+}$ are 3 and 6, respectively.

(3) The largest and the smallest species among Mg, Mg^{2+}, Al and Al^{3+} are Al and Mg^{2+} respectively.

(4) The similarity in behaviour of Li with Mg is referred to as 'diagonal relationship'

Answer (3)

57. Given below is an expression for the rate constant of a first-order reaction occurring at a certain temperature, T (K).

$$\ln k = 14.34 - \frac{1.25 \times 10^4}{T}$$

The energy of activation in kcal mol^{-1} for the reaction is :

(Given: k in s^{-1}, R = 1.987 cal mol^{-1} K^{-1})

(1) 14.34

(2) 18.63

(3) 24.84

(4) 12.42

Answer (3)

58. Phenolphthalein is used as an indicator for the titration of sodium hydroxide solution against a standard solution of oxalic acid. The colour change that is observed at an alkaline pH close to the equivalence point during this titration is:

(1) colourless to pink

(2) pinkish red to yellow

(3) pink to colourless

(4) yellow to pinkish red

Answer (1)

59. Methane reacts with steam at 1273 K in the presence of nickel catalyst to form :

(1) CO and H_2

(2) CO_2 and H_2

(3) CO and H_2O

(4) CO_2 and H_2O

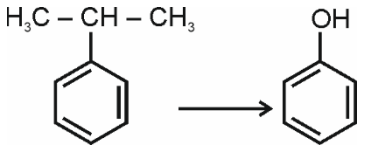
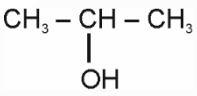
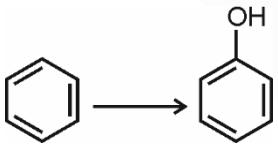
Answer (1)

Sol.

$$CH_4(g) + H_2O(g) \xrightarrow[(1273\,K)]{Ni,\ \Delta} CO + 3H_2$$

(Used for industrial preparation of dihydrogen gas)

60. Match List I with List II:

	List I		List II
A.		(I)	(i) Oleum; (ii) NaOH, Δ; (iii) H^+
B.	$CH_3COOH \longrightarrow CH_3CH_2OH$	(II)	(i) O_2; (ii) H_2O/H^+
C.	$CH_3CH_2CH_2OH \longrightarrow$ 	(III)	(i) CH_3OH, H^+; (ii) H_2, catalyst
D		(IV)	(i) conc. H_2SO_4, Δ; (ii) H^+/H_2O

Choose the **correct** answer from the options given below :

(1) A-I, B-III, C-IV, D-II

(2) A-II, B-III, C-I, D-IV

(3) A-II, B-III, C-IV, D-I

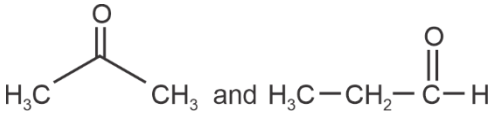
(4) A-II, B-IV, C-III, D-I

Answer (3)

61. The pair of molecules that are metamers among the following is :

(1) $CH_3OCH_2CH_2CH_3$ and $CH_3CH_2OCH_2CH_3$

(2) $CH_3CH_2CH_2CH_2CH_3$ and $(CH_3)_2CHCH_2CH_3$

(3)  and

(4) $CH_3CH_2CH_2OH$ and $CH_3 - CH(OH) - CH_3$

Answer (1)

62. Match List I with List II :

	List-I (Complex)		List-II (Type of isomerism)
A.	$[Pt(NH_3)_2Cl_2]$	I.	Optical
B.	$[Co(en)_3]^{3+}$	II.	Solvate
C.	$[Co(NH_3)_5NO_2]Cl_2$	III.	Geometrical
D.	$[Cr(H_2O)_6]Cl_3$	IV.	Linkage

Choose the **correct** answer from the options given below :

(1) A-II, B-IV, C-III, D-I

(2) A-III, B-I, C-II, D-IV

(3) A-I, B-III, C-II, D-IV

(4) A-III, B-I, C-IV, D-II

Answer (4)

63. The number of hydrogen atoms present in 5.4 g of urea is:

(Given: Molar mass of urea : 60 g mol^{-1},

N_A : 6.022×10^{23} particles mol^{-1})

(1) 2.168×10^{22}

(2) 2.168×10^{23}

(3) 1.084×10^{22}

(4) 1.084×10^{23}

Answer (2)

64. The calculated 'spin-only' magnetic moment of Ti^{2+} ($3d^2$) is :

(1) 3.87 BM

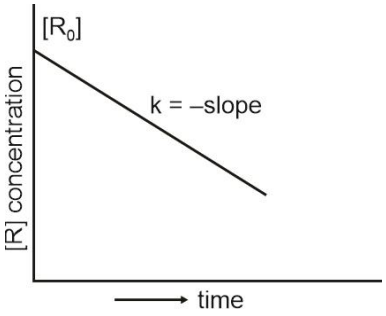
(2) 5.92 BM

(3) 4.90 BM

(4) 2.84 BM

Answer (4)

65. For a certain reaction R $\rightarrow$ Product, the plot of concentration [R] vs time has a negative slope as shown. The order of reaction is :



(1) 1

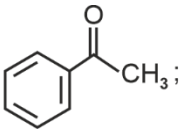
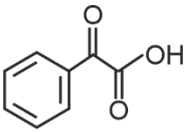
(2) 2

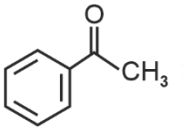
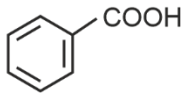
(3) 2.5

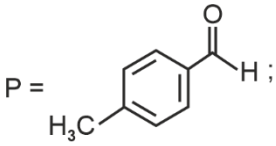
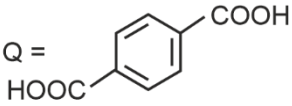
(4) 0

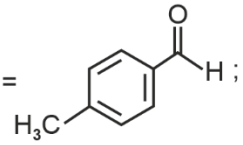
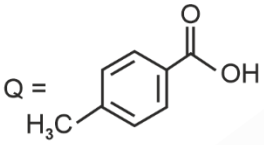
Answer (4)

66. Compound P(C_8H_8O) gives a red orange precipitate with 2,4-DNP reagent and it does not reduce Fehling's reagent. On drastic oxidation with chromic acid, P gives an aromatic product Q that produces effervescence on treating with aq. $NaHCO_3$. Compounds P and Q, respectively, are :

(1) P =  ; Q = 

(2) P =  ; Q = 

(3) P =  ; Q = 

(4) P =  ; Q = 

Answer (2 or 3)

67. Match List I with List II :

	List-I (Order of reaction)		**List-II (Unit of rate constant)**
A.	Zero order	I.	$mol^{-1} L s^{-1}$
B.	First order	II.	$mol^{-2} L^2 s^{-1}$
C.	Second order	III.	s^{-1}
D.	Third order	IV.	$mol L^{-1} s^{-1}$

Choose the **correct** answer from the options given below :

(1) A-IV, B-III, C-II, D-I

(2) A-IV, B-III, C-I, D-II

(3) A-IV, B-II, C-I, D-III

(4) A-I, B-II, C-III, D-IV

Answer (2)

68. Although +3 oxidation state is most common in lanthanoids, cerium still shows +4 oxidation state because:

(1) After losing one more electron, it acquires $4f^{14}$ electronic configuration.

(2) Its atomic number is 61.

(3) After losing one more electron, it acquires $4f^0$ electronic configuration.

(4) Its nearest inert gas is Radon.

Answer (3)

69. In a test tube containing a salt, a few drops of dilute H_2SO_4 was added, which gave colourless vapours having the smell of vinegar. The vapours turned the blue litmus paper red.

Identify the **correct** anion from the following :

(1) Carbonate, CO_3^{2-}

(2) Sulphate, SO_4^{2-}

(3) Acetate, CH_3COO^-

(4) Sulphide, S^{2-}

Answer (3)

70. Calculate emf of the half cell given below :

Pt (s) | H_2(g, 2 atm) | HCl (aq, 0.02 M)

$E^{\circ}_{H_2/H^+} = 0$ V

(Given: $\frac{2.303\,RT}{F} = 0.059$, log 2 = 0.3010)

(1) 0.035 V

(2) –0.035 V

(3) –0.109 V

(4) 0.109 V

Answer (4)

71. At 298 K, a certain buffer solution contains equal concentrations of X^- and HX, K_b for X^- is 10^{-10}.

What is the pH of this buffer solution?

(1) 4

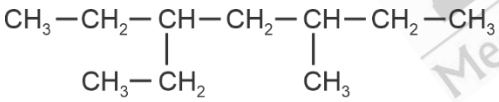
(2) 6

(3) 2

(4) 10

Answer (1)

72. The correct IUPAC name of the following compound is :



(1) 3-methyl-5-ethylheptane

(2) 3-ethyl-5-methylheptane

(3) 3,5-diethylhexane

(4) 2,4-diethylhexane

Answer (2)

73. The following two reactions give the same foul smelling product Z.

$C_2H_5Cl \xrightarrow{X} Z$

$C_2H_5\overset{\overset{O}{\|}}{C}NH_2 \xrightarrow{Br_2,\ NaOH} Y \xrightarrow[\Delta]{CHCl_3/\text{ethanolic KOH}} Z$

X and Z, respectively, are :

(1) X = AgCN; Z = C_2H_5CN

(2) X = KCN; Z = C_2H_5CN

(3) X = KCN; Z = C_2H_5NC

(4) X = AgCN; Z = C_2H_5NC

Answer (4)

74. Mixture of chloroform and acetone forms a solution with negative deviation from Raoult's law due to :

(1) Increase in escaping tendency of molecules of each component.

(2) Repulsive forces.

(3) Stronger intermolecular forces between chloroform molecules than those between chloroform and acetone molecules.

(4) Formation of hydrogen bonding between acetone and chloroform

Answer (4)

75. Identify the correct statements :

(A) The molality of 2.5 g of ethanoic acid (Molar mass : 60 g mol^{-1}) in 75 g of benzene solution is 0.556 m.

(B) The molarity of a solution containing 5 g of NaOH (molar mass : 40 g mol^{-1}) in 450 mL of solution is 0.278 M at 298 K.

(C) Aquatic species are more comfortable in cold water.

(D) The solubility of gas increases with decrease in pressure.

(E) For a binary mixture of A and B, the number of moles of A and B are n_A and n_B respectively. The mole fraction of B will be $x_B = \frac{n_A}{n_A + n_B}$.

Choose the **correct** answer from the options given below :

(1) A and B only

(2) A, D and E only

(3) A, B and C only

(4) A and C only

Answer (3)

76. Identify the **incorrect** statement from the following:

(1) ECl_3 (E = B and Al) is a monomer when E = B and a dimer when E = Al.

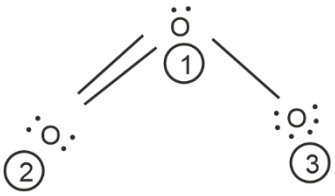
(2) The order of catenation property of Group 14 elements is C >> Si > Ge $\approx$ Sn.

(3) Oxygen exhibits only –2 oxidation state.

(4) Carbon has the ability to form pπ-pπ multiple bond with itself.

Answer (3)

77. The correct formal charges on oxygen atoms numbered 2, 1 and 3 respectively are :



(1) –1, 0, +1

(2) 0, 0, 0

(3) 0, +1, –1

(4) +1, 0, –1

Answer (3)

78. At a certain temperature, T (K), during a process, 500 J is absorbed by the system and work of 200 J is done by the system. Then change in internal energy of the system is :

(1) 500 J

(2) 400 J

(3) 300 J

(4) 700 J

Answer (3)

79. Consider the following reaction :

$2A(g) + B(g) \rightarrow 2D(g)$

$\Delta U^{\ominus} = -10\ kJ\ mol^{-1}$ and $\Delta S^{\ominus} = -44\ JK^{-1}$ at 298 K.

Identify the **correct** option with $\Delta G^{\ominus}$ for the reaction and spontaneity of the reaction at 298 K.

(Given : R = 8.31 J mol^{-1} K^{-1})

(1) –0.63568 kJ mol^{-1}, spontaneous

(2) +0.63568 kJ mol^{-1}, non-spontaneous

(3) –1.635 kJ mol^{-1}, spontaneous

(4) +1.635 kJ mol^{-1}, non-spontaneous

Answer (2)

80. Select the reagents that reduce nitriles to primary amines.

A. (i) $LiAlH_4$; (ii) H_2O

B. Sn + HCl

C. H_2/Ni

D. Na(Hg)/C_2H_5OH

E. Br_2/aq. NaOH

Choose the **correct** answer from the options given below.

(1) A, C and D only

(2) A, B and C only

(3) B, D and E only

(4) A, D and E only

Answer (1)

81. Which one of the following is an ambidentate ligand?

(1) Oxalate

(2) Ethylenediaminetetraacetate ion

(3) Thiocyanate

(4) Ethane-1,2-diamine

Answer (3)

82. A bulb is rated at 150 watt, converting 8% energy into light. If energy of one photon is 4.42×10^{-19} J, how many photons are emitted by the bulb per second?

(1) 1.35×10^{19}

(2) 2.71×10^{19}

(3) 27.2×10^{19}

(4) 4.06×10^{19}

Answer (2)

83. Identify the ***incorrect*** statement from the following:

(1) Nitrogen can form $p\pi$-$p\pi$ multiple bonds with itself.

(2) $P(C_2H_5)_3$ and $As(C_6H_5)_3$ form $d\pi$-$d\pi$ bond with transition metals.

(3) Nitrogen can form $d\pi$-$p\pi$ bond with oxygen.

(4) Phosphorus, arsenic and antimony show catenation property.

Answer (3)

84. The correct order of increasing metallic character of Na, Be, P, Mg and Si is

(1) P < Si < Be < Mg < Na

(2) Be < Si < P < Mg < Na

(3) P < Si < Na < Mg < Be

(4) P < Mg < Be < Si < Na

Answer (1)

85. In a qualitative analysis, Bi^{3+} is detected by appearance of precipitate of BiO(OH)(s). Calculate pH when the following equilibrium exists at 298 K.

$BiO(OH)(s) \rightleftharpoons BiO^{+}(aq) + OH^{-}(aq)$, $K = 4 \times 10^{-10}$

(Given : log2 = 0.3010)

(1) 4.699

(2) 9.301

(3) 5.286

(4) 8.714

Answer (2)

86. Match List I with List II :

	List I		**List II**
A.	C_2H_4	I.	3 σ bonds, 2 π bonds
B.	C_2H_2	II.	3 σ bonds, one lone pair
C.	CH_4	III.	4 σ bonds
D.	NH_3	IV.	5 σ bonds, 1 π bond

Choose the **correct** answer from the options given below :

(1) A-I, B-II, C-IV, D-III

(2) A-II, B-III, C-I, D-IV

(3) A-III, B-IV, C-II, D-I

(4) A-IV, B-I, C-III, D-II

Answer (4)

87. Given below are certain reactions. Identify the reaction for which $K_P \neq K_C$.

(1) $N_2(g) + O_2(g) \rightleftharpoons 2NO(g)$

(2) $H_2O(g) + CO(g) \rightleftharpoons H_2(g) + CO_2(g)$

(3) $H_2(g) + I_2(g) \rightleftharpoons 2HI(g)$

(4) $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$

Answer (4)

88. In the following reaction sequence, X and Z respectively are :

$$CH_3CH_2CH_2 - OH + PCl_5 \longrightarrow CH_3CH_2CH_2Cl + X + HCl$$

$$\xrightarrow[\Delta]{\text{alc. KOH}} Y \xrightarrow[(C_6H_5CO)_2O_2]{HBr} Z$$

(1) $X = H_3PO_3$; $Z = CH_3 - \underset{\underset{Br}{|}}{CH} - CH_3$

(2) $X = POCl_3$; $Z = CH_3 - \underset{\underset{Br}{|}}{CH} - CH_3$

(3) $X = H_3PO_3$; $Z = CH_3CH_2CH_2 - Br$

(4) $X = POCl_3$; $Z = CH_3CH_2CH_2 - Br$

Answer (4)

89. The major product Z formed in the following sequence of reactions is

$$C_2H_6 \xrightarrow[\text{UV light}]{Cl_2} \underset{\text{(monochlorinated product)}}{X} \xrightarrow{NH_3} Y \xrightarrow[(ii)\,H_2O]{(i)\,NaNO_2,\ HCl} Z$$

(1) $C_2H_5NO_2$

(2) $C_2H_5 - N = N - OH$

(3) $C_2H_5NH_2$

(4) C_2H_5OH

Answer (4)

90. When 1 dm^3 of CO_2 gas is passed over hot coke, the volume of gaseous mixture after complete reaction at STP becomes 1.4 dm^3. The composition of the gaseous mixture at STP is:

(1) 0.6 dm^3 of CO, 0.8 dm^3 of CO_2

(2) 0.6 dm^3 of CO, 0.4 dm^3 of CO_2

(3) 0.8 dm^3 of CO, 0.8 dm^3 of CO_2

(4) 0.8 dm^3 of CO, 0.6 dm^3 of CO_2

Answer (4)