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CHEMISTRY · EAPCET (EAMCET)

Biomolecules

Previous Year Questions with answers

198 questions · **147** papers · **2010–2026** · newest paper first

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What is in this PDF: every Biomolecules question we hold from past AP and TS EAPCET (called EAMCET until 2020 in Andhra Pradesh and 2023 in Telangana) papers, with its options and answer. Where an answer comes from a source other than the official final key, it says so next to the answer.

Step-by-step solutions for every question are free in the EdLoop EAPCET app (Google Play) and on app.edloop.in. More chapters: pyq.edloop.in/free-pdfs/

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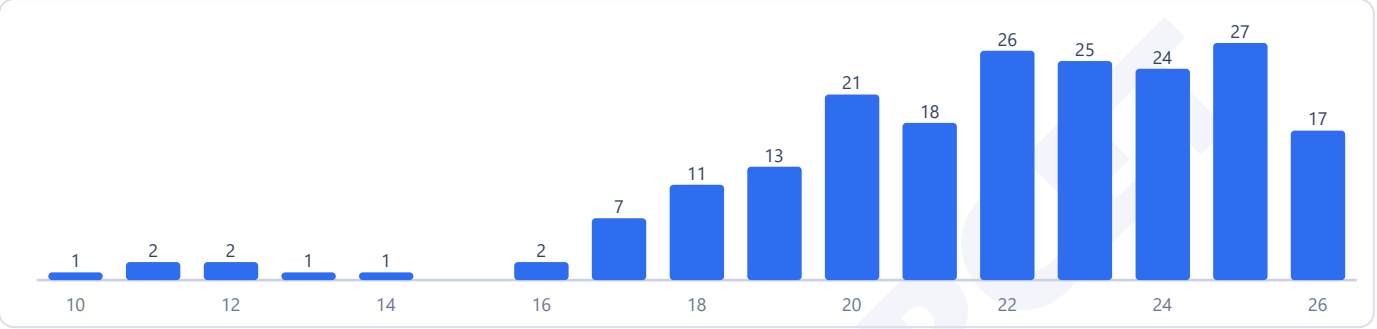
Chapter at a glance

3.9%	198	77 of 77	198 / 0
of Chemistry questions, 2022–2026	questions, 2010–2026	papers asked it, 2022–2026	MCQ / numerical, 2010–2026

Trend. Steady: 1.5 questions per paper in 2024–2026 against 1.6 in 2022–2023.

Questions per year



Counts are the questions we hold: 198 in 147 papers. 2 questions in this chapter came back in more than one paper.

Most-asked topics in this chapter (2010–2026)

Carbohydrates	75
Vitamins, Nucleic Acids & Hormones	66
Amino Acids & Proteins	57

How often it comes up

Biomolecules is one of the most reliable foundational chapters in the entire EAPCET chemistry curriculum. Over the full span from 2010 through 2026, the chapter delivered 198 questions across 149 evaluated exam papers, featuring in 147 of those sittings for an average of 1.3 questions per paper and a 3.3 percent subject share. In the modern timeframe from 2022 to 2026, Biomolecules has appeared in every single paper, contributing 119 questions across 77 sittings (an average of 1.5 questions per paper and a 3.9 percent subject share). This places Biomolecules at rank 9 among all 31 chemistry chapters.

Every recent session includes at least one question from this unit. Looking at the three most recent exam years from 2024 to 2026, students encountered 68 questions across 46 papers, appearing in all 46 sittings to average 1.5 questions per test with a 3.7 percent share. In the older testing period from 2010 to 2021, the chapter accounted for 79 questions across 72 sittings (appearing in 70 papers, averaging 1.1 per paper and a 2.7 percent share). Comparing early testing with the last three years shows the share is up, while comparing recent testing with the last three years shows the share is about the same. Across individual state boards from 2022 to 2026, Andhra Pradesh papers featured 90 questions across 48 sessions (present in all 48, averaging 1.9 per test and a 4.7 percent share), whereas Telangana papers included 29 questions across 29 sittings (present in all 29, averaging 1.0 per test and a 2.5 percent share).

Most-asked topics

Questions from Biomolecules fall into three closely balanced biological chemistry divisions:

- **Carbohydrates** (75 questions overall, 40 recent, last asked in 2026): Haworth cyclic pyranose and furanose forms of D-glucose and D-fructose, anomeric carbons, mutarotation, glycosidic linkages in maltose, lactose, and sucrose, reducing versus non-reducing sugars, and structural features of starch, glycogen, and cellulose.

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- **Amino Acids & Proteins** (57 questions overall, 40 recent, last asked in 2026): Classification of amino acids as essential or non-essential, neutral, acidic, or basic, zwitterion structures, isoelectric points, peptide bond formation, levels of protein structure (primary, secondary alpha-helix and beta-pleated sheets, tertiary, and quaternary), and denaturation mechanisms.
- **Vitamins, Nucleic Acids & Hormones** (66 questions overall, 39 recent, last asked in 2026): Fat-soluble versus water-soluble vitamins with their corresponding deficiency disorders, purine and pyrimidine nitrogenous bases, nucleoside versus nucleotide architecture, phosphodiester backbones, hydrogen bonding base pairs in DNA double helix, and peptide versus steroid hormones.

What the questions look like

Examiners heavily favor direct recognition questions, structure matching, and linkage identification. A widespread question type asks candidates to pinpoint the exact positions linked by an oxygen bridge in disaccharides, such as distinguishing the alpha-one-four linkage of maltose from the beta-one-four linkage of lactose or the alpha-one-beta-two linkage of sucrose.

Other standard formats present table-matching grids connecting specific vitamins with deficiency syndromes (like scurvy, rickets, or cheilosis), or linking amino acids to their distinctive side-chain characteristics (such as aromatic rings in tyrosine or sulfur atoms in cysteine). Questions on nucleic acids frequently ask students to differentiate between ribose and two-deoxyribose, or to identify which nitrogen base is unique to RNA versus DNA.

How to practise it

Start by creating a clean summary chart of all carbohydrates mentioned in the standard textbook. For each sugar, record whether it is a monosaccharide, disaccharide, or polysaccharide; note the constituent monomers; specify the glycosidic linkage carbon numbers; and record whether it reduces Fehling solution and Tollens reagent. Remember that sucrose is a non-reducing sugar because both anomeric carbons participate in the glycosidic bond.

Next, master the twenty standard amino acids by category. Memorize the essential amino acids using standard mnemonics, and note special structural traits such as the only achiral amino acid (glycine), sulfur-containing residues (cysteine and methionine), and aromatic units (phenylalanine, tyrosine, and tryptophan). Finally, tabulate the water-soluble and fat-soluble vitamins along with their biochemical functions and deficiency ailments to secure rapid marks on matching questions.

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Q1 AP EAPCET 2026 · 18 May · Shift 1 MCQ

In addition to $-NH_2$ and $-COOH$ groups, the functional group present in the amino acid, serine is <u>X</u> and the functional group present in the amino acid cysteine is <u>Y</u>. X and Y are respectively

In addition to $-NH_2$ and $-COOH$ groups, the functional group present in the amino acid, serine is $\underline{X}$ and the functional group present in the amino acid cysteine is $\underline{Y}$. X and Y are respectively

$-NH_2$ మరియు $-COOH$ సమూహాలతో పాటు ఎమినో ఆమ్లం, సెరైన్ నందు గల ప్రమేయసమూహం $\underline{X}$ మరియు ఎమినో ఆమ్లం సిస్టీన్ నందుగల ప్రమేయసమూహం $\underline{Y}$. X మరియు Y లు వరుసగా

Options :

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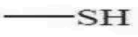
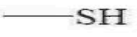
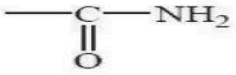
2.  , 

3.  , 

4.  , 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q2 AP EAPCET 2026 · 18 May · Shift 2 MCQ

Which of the following are the correct statements about D-glucose?

I. It forms oxime with hydroxyl amine

II. It forms addition product with $NaHSO_3$

III. It forms cyanohydrin with HCN

IV. It forms saccharic acid with bromine water

The correct answer is

(A) II & III only
(B) I & III only
(C) II & IV only
(D) III & IV only

Answer: (B) I & III only · The council's preliminary key

Q3 AP EAPCET 2026 · 15 May · Shift 1 MCQ

Observe the following reactions

I. D-Glucose $\xrightarrow{NH_2OH}$

II. D-Glucose $\xrightarrow[(ii)\ NH_2OH]{(i)\ (CH_3CO)_2O}$

Correct statement regarding the reactions I and II is

(A) Oxime is formed in both the reactions I, II
(B) Oxime is not formed in both the reactions I, II
(C) Oxime is formed in reaction I but oxime is not formed in reaction II
(D) Oxime is not formed in reaction I but oxime is formed in reaction II

Answer: (C) Oxime is formed in reaction I but oxime is not formed in reaction II · The council's preliminary key

Q4 AP EAPCET 2026 · 15 May · Shift 2 MCQ

Two statements are given below

Statement I: Cane sugar is disaccharide of $\alpha-\mathrm{D}-$ glucose and $\beta-\mathrm{D}-$ fructose

Statement II: Milk sugar is disaccharide of $\beta-\mathrm{D}-$ galactose and $\beta-\mathrm{D}-$ glucose

Correct answer is

(A) Statements I and II both are correct
(B) Statements I and II both are not correct
(C) Statement I is correct, but statement II is not correct
(D) statement I is not correct but statement II is correct

Answer: (A) Statements I and II both are correct · The council's preliminary key

Q5 AP EAPCET 2026 · 14 May · Shift 1 MCQ

Match the following

List – I Name of amino acid	List – II R part of *(see the figure above)*
A Alanine	I $-CH_2-CH(CH_3)_2$
B Leucine	II $-CH_2-OH$
C Serine	III $-CH_3$
D Cysteine	IV $-CH_2SH$

The correct answer is

Match the following
క్రింది వాటిని జతపరుచుము

List – I జాబితా – I Name of amino acid ఎమినో ఆమ్లం పేరు		List – II జాబితా – II *R* part of $H_2N-\underset{\underset{R}{\vert}}{CH}-COOH$	
A	Alanine ఎలనైన్	I	$-CH_2-CH(CH_3)_2$
B	Leucine లూసీన్	II	$-CH_2-OH$
C	Serine సెరైన్	III	$-CH_3$
D	Cysteine సిస్టీన్	IV	$-CH_2SH$

The correct answer is
సరైన సమాధానం

Options :

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

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

Answer: (B) A-III, B-I, C-II, D-IV · The council's preliminary key

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Q6 AP EAPCET 2026 · 14 May · Shift 2 MCQ

The hormone (X) is a derivative of amino acid $p-HO-C_6H_4CH_2CH(NH_2)COOH$ and is produced by the gland (Y). What are X and Y?

(A) Epinephrine, Adrenal
(B) Thyroxine, Thyroid
(C) Insulin, Pancreas
(D) Norepinephrine, Adrenal

Answer: (B) Thyroxine, Thyroid · The council's preliminary key

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Q7 AP EAPCET 2026 · 13 May · Shift 1 MCQ

The incorrect statement in the following is

(A) Amylopectin has $C_1 - C_4$ and $C_1 - C_6$ glycosidic linkages

(B) Cellulose is a straight chain polysaccharide of $\alpha - D$ -glucose units through $C_1 - C_4$ glycosidic linkage

(C) Glycogen is found in Yeast and fungi

(D) Glycogen is also known as animal starch

Answer: (B) Cellulose is a straight chain polysaccharide of $\alpha - D$ -glucose units through $C_1 - C_4$ glycosidic linkage · The council's preliminary key

Q8 AP EAPCET 2026 · 13 May · Shift 2 MCQ

The number of secondary alcoholic groups present in the end product 'Y' of the given reaction sequence is

$$C_6H_{12}O_6 \xrightarrow{HCN} X \xrightarrow{H_2O|H^+} Y$$

(A) 4

(B) 3

(C) 5

(D) 6

Answer: (C) 5 · The council's preliminary key

Q9 AP EAPCET 2026 · 12 May · Shift 1 MCQ

Match the following

List -I Name of the amino acid	List - II Description
A. Tyrosine	I. Basic amino acid
B. Lysine	II. Optically inactive amino acid
C. Glycine	III. Sulphur containing amino acid
D. Cysteine	IV. Aromatic amino acid

The correct answer is

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

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

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

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

Answer: (C) A - IV , B - I, C - II, D - III · The council's preliminary key

Q10 AP EAPCET 2026 · 12 May · Shift 2 MCQ

In which of the following, enzyme and enzyme reaction is not correctly matched?

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(A) Invertase – sucrose → glucose + fructose
(B) Diastase – starch → maltose
(C) Maltase – glucose → maltose
(D) Pepsin – proteins → peptides

Answer: (C) Maltase – glucose → maltose · The council's preliminary key

Q11 AP EAPCET 2026 · 12 May · Shift 2 MCQ

Amino acids containing hetero aromatic ring are

I. Pro

II. His

III. Tyr

IV. Trp

The correct answer is

(A) I, III only
(B) II, IV only
(C) I, II only
(D) III, IV only

Answer: (B) II, IV only · The council's preliminary key

Q12 TS EAPCET 2026 · 11 May · Shift 1 MCQ

The number of amino acids present in insulin is

(A) 21
(B) 30
(C) 51
(D) 41

Answer: (C) 51 · The council's preliminary key

Q13 TS EAPCET 2026 · 11 May · Shift 2 MCQ

Match the following

List-1 (Vitamin)	List-2 (deficiency disease)
A Thiamine	I Cheilosis
B Ascorbic acid	II Convulsions
C Pyridoxine	III Beri beri
D Riboflavin	IV Rickets
	V Scurvy

The correct answer is

(A) A – III, B – IV, C – I, D – II
(B) A – III, B – V, C – II, D – I
(C) A – II, B – V, C – I, D – III
(D) A – III, B – IV, C – II, D – I

Answer: (B) A – III, B – V, C – II, D – I · The council's preliminary key

Q14 TS EAPCET 2026 · 10 May · Shift 1 MCQ

The correct structure of the tripeptide Glycine – Alanine – Glycine is

The correct structure of the tripeptide Glycine – Alanine – Glycine is
గ్లైసీన్ – ఎలనీన్ – గ్లైసీన్ అనే ట్రైపెప్టైడ్ యొక్క సరియైన నిర్మాణం
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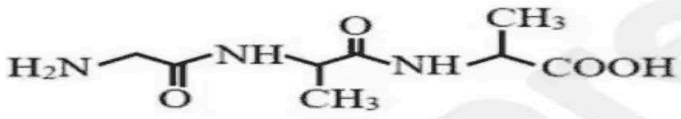
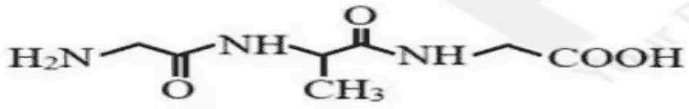
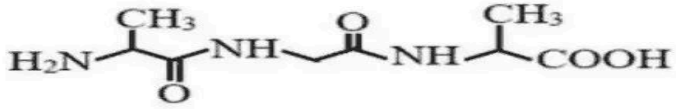
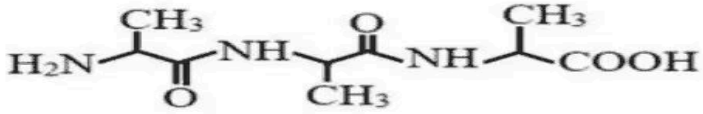
1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q15 TS EAPCET 2026 · 10 May · Shift 2 MCQ

Which of the following represents the correct pyranose structure of $\beta - \mathrm{D} - (+)$ glucose?

Which of the following represents the correct pyranose structure of β – D – (+) glucose?
క్రింది వాటిలో ఏది β – D – (+) గ్లూకోజ్ యొక్క సరైన పైరనోస్ నిర్మాణాన్ని తెలుపుతుంది?

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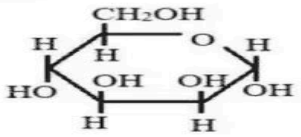
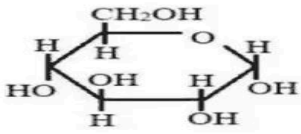
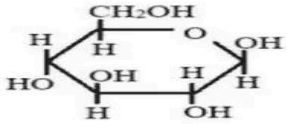
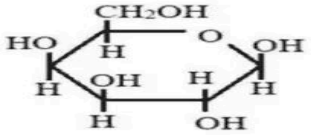
1. 
2. 
3. 
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q16 TS EAPCET 2026 · 9 May · Shift 1 MCQ

Which structure of protein represents its constitution?

(A) Primary structure
(B) Secondary structure
(C) Tertiary structure
(D) Quaternary structure

Answer: (A) Primary structure · The council's preliminary key

Q17 TS EAPCET 2026 · 9 May · Shift 2 MCQ

Glycosidic linkage in maltose is present between

(A) C−1 of α−D−glucose and C−4 of α−D−glucose
(B) C−1 of α−D−glucose and C−4 of β−D−galactose
(C) C−1 of β−D−glucose and C−4 of α−D−glucose
(D) C−1 of β−D−glucose and C−4 of β−D−glucose

Answer: (A) C−1 of α−D−glucose and C−4 of α−D−glucose · The council's preliminary key

Q18 AP EAPCET 2025 · 27 May · Shift 1 MCQ

Which of the following represents the correct structure of $\beta - \mathrm{D} - (-)-$ Fructofuranose ?

Which of the following represents the correct structure of β – D – (–) – Fructofuranose ?

క్రింది వాటిలో ఏది β – D – (–) – ఫ్రక్టోఫ్యూరనోజ్ యొక్క సరైన నిర్మాణాన్ని వ్యక్తం చేస్తుంది ?

Options :

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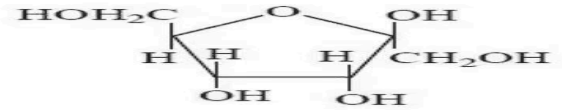

3.



4.



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q19 AP EAPCET 2025 · 27 May · Shift 1 MCQ

Which of the following statement is not correct for glucose ?

(A) Glucose does not give Schiffs test.

(B) Glucose exists in two crystalline forms α- and β-.

(C) The pentaacetate of glucose does not react with $\mathrm{NH_2OH}$.

(D) Glucose forms addition product with $\mathrm{NaHSO_3}$.

Answer: (D) Glucose forms addition product with $\mathrm{NaHSO_3}$. · The council's preliminary key

Q20 AP EAPCET 2025 · 26 May · Shift 1 MCQ

Which of the following do not reduce Tollens' reagent ?

a) Fructose b) Sucrose c) Lactose d) Cellulose

(A) a, b
(B) b, d
(C) a, c
(D) c, d

Answer: (B) b, d · The council's preliminary key

Q21 AP EAPCET 2025 · 26 May · Shift 1 MCQ

Consider the following.

Statement-I : Lysine, arginine are essential and basic amino acids

Statement-II : Leucine, phenyl alanine are non essential and neutral amino acids.

Correct answer is

(A) Both statement-I and statement-II are correct
(B) Both statement-I and statement-II are not correct
(C) Statement-I is correct, but statement-II is not correct
(D) Statement-I is not correct, but statement-II is correct

Answer: (C) Statement-I is correct, but statement-II is not correct · The council's preliminary key

Q22 AP EAPCET 2025 · 26 May · Shift 2 MCQ

Which of the following enzymatic reaction is not correctly matched with enzyme shown against it in brackets ?

(A) Proteins $\longrightarrow$ Peptides (Pepsin)
(B) Starch $\longrightarrow$ Maltose (Zymase)
(C) Sucrose $\longrightarrow$ Glucose and fructose (Invertase)
(D) Maltose $\longrightarrow$ Glucose (Maltase)

Answer: (B) Starch $\longrightarrow$ Maltose (Zymase) · The council's preliminary key

Q23 AP EAPCET 2025 · 26 May · Shift 2 MCQ

Identify the essential amino acids from the following (only)

A) Leucine B) Tyrosine C) Cysteine D) Histidine

(A) A & B only
(B) B & C only
(C) B & D only
(D) A & D only

Answer: (D) A & D only · The council's preliminary key

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Q24 AP EAPCET 2025 · 26 May · Shift 2 MCQ

Which of the following represents nucleoside of RNA ?

Which of the following represents nucleoside of RNA ?
క్రింది వాటిలో ఏది RNA యొక్క న్యూక్లియోసైడ్‌ను సూచిస్తుంది ?

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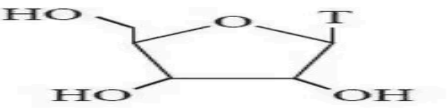

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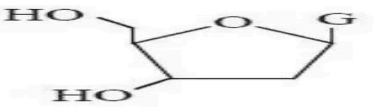

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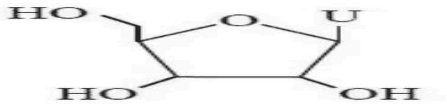


(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q25 AP EAPCET 2025 · 24 May · Shift 1 MCQ

Match the following

List-I (Glycosidic linkage)	List-II (Polysaccharide)
A) $\alpha-1,4$	I) Amylose
B) $\beta-1,4$	II) Amylopectin
C) $\alpha-1,4,\alpha-1,6$	III) Cellulose

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

Answer: (D) A-I, B-III, C-II · The council's preliminary key

Q26 AP EAPCET 2025 · 24 May · Shift 1 MCQ

The list given below contains essential amino acids that are basic (X) and also non essential amino acids that are neutral (Y). X and Y, respectively are

a) Lysine b) Alanine c) Serine d) Arginine e) Tyrosine

(A) X = b, c, e; Y = a, d
(B) X = a, d; Y = b, c, e
(C) X = a, c; Y = b, d, e
(D) X = a, b, c ; Y = d, e

Answer: (B) X = a, d; Y = b, c, e · The council's preliminary key

Q27 AP EAPCET 2025 · 23 May · Shift 1 MCQ

Consider the following.

Statement-I : Primary structure of protein represents its constitution

Statement-II : α-Helix and β-pleated sheet structure of protein represent tertiary structure of it

Correct answer is

(A) Both statement-I and statement-II are correct
(B) Both statement-I and statement-II are not correct
(C) Statement-I is correct, but statement-II is not correct
(D) Statement-I is not correct, but statement-II is correct

Answer: (C) Statement-I is correct, but statement-II is not correct · The council's preliminary key

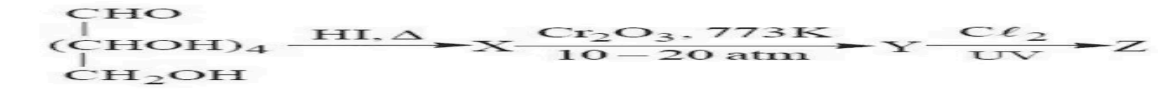
Q28 AP EAPCET 2025 · 23 May · Shift 1 MCQ

The structure of the product 'Z' in the reaction sequence is

(see the figure above)

EdLoop EAPCET

The structure of the product 'Z' in the reaction sequence is
చర్యాక్రమంలో ఉత్పన్నం 'Z' యొక్క నిర్మాణం



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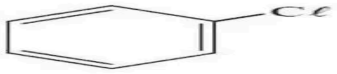
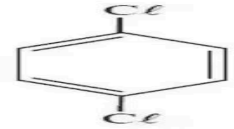
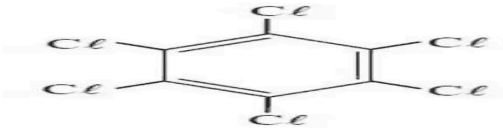
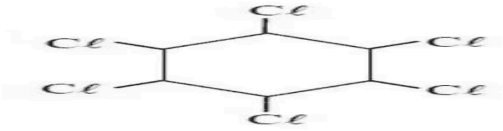
1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q29 AP EAPCET 2025 · 23 May · Shift 2 MCQ

Consider the following

Statement-I : Cane sugar is a disaccharide of α-D-glucose and β-D-fructose

Statement-II : Milk sugar is a diasaccharide of α-D-glucose and β-D-galactose

The correct answer is

(A) Both statement-I and statement-II are correct
(B) Both statement-I and statement-II are not correct
(C) Statement-I is correct, but statement-II is not correct
(D) Statement-I is not correct, but statement-II is correct

Answer: (C) Statement-I is correct, but statement-II is not correct · The council's preliminary key

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Q30 AP EAPCET 2025 · 23 May · Shift 2 MCQ

The deficiency of vitamin (X) causes convulsions. Source of X is Y. What are X and Y ?

(A) Riboflavin, milk
(B) Riboflavin, fish
(C) Pyridoxine, curd
(D) Pyridoxine, cereals

Answer: (D) Pyridoxine, cereals · The council's preliminary key

Q31 AP EAPCET 2025 · 22 May · Shift 1 MCQ

Which of the following contain α -D-glucose units ?

a) cane sugar b) milk sugar c) cellulose d) amylose

(A) a, d
(B) a, b
(C) b, c
(D) c, d

Answer: (A) a, d · The council's preliminary key

Q32 AP EAPCET 2025 · 22 May · Shift 1 MCQ

Identify the set containing purine and pyrimidine base of DNA respectively.

(A) Adenine, Uracil
(B) Cytosine, Guanine
(C) Thymine, Uracil
(D) Adenine, Cytosine

Answer: (D) Adenine, Cytosine · The council's preliminary key

Q33 AP EAPCET 2025 · 22 May · Shift 2 MCQ

Consider the following

Statement-I : Lactose is composed of α-D-glucose and β-D-glucose.

Statement-II : Lactose is a reducing sugar

The correct answer is

(A) Both statement-I and statement-II are not correct
(B) Both statement-I and statement-II are correct
(C) Statement-I is correct, but statement-II is not correct
(D) Statement-I is not correct, but statement-II is correct

Answer: (D) Statement-I is not correct, but statement-II is correct · The council's preliminary key

Q34 AP EAPCET 2025 · 22 May · Shift 2 MCQ

Match the following

List-I (Hormones)	List-II (Functions)
A) Glucocorticoids	I) In the control of menstrual cycle
B) Mineralocorticoids	II) Prepares the uterus for implantation of fertilised egg
C) Progesterone	III) Control the level of excretion of water and salt by the kidneys
D) Estradiol	IV) Control the carbohydrate metabolism

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

Answer: (C) A-IV, B-III, C-II, D-I · The council's preliminary key

Q35 AP EAPCET 2025 · 21 May · Shift 1 MCQ

Observe the following reactions

I) Sucrose (aq) + $H_2O \xrightarrow{x}$ glucose + fructose

II) Glucose (aq) $\xrightarrow{y}$ ethanol + CO_2

What are x and y respectively ?

(A) Invertase, Zymase
(B) Zymase, Diastase
(C) Diastase, Zymase
(D) Diastase, Invertase

Answer: (A) Invertase, Zymase · The council's preliminary key

Q36 AP EAPCET 2025 · 21 May · Shift 1 MCQ

The incorrect statement about amylose is

(A) It is water soluble
(B) In this α-D-(+)-glucose units are held by C-1 to C-4 glycosidic linkages
(C) It is a highly branched polymer of α-D-(+)-glucose units
(D) It is present in starch to an extent of 15-20%

Answer: (C) It is a highly branched polymer of α-D-(+)-glucose units · The council's preliminary key

Q37 AP EAPCET 2025 · 21 May · Shift 1 MCQ

The improper functioning of 'X' results in Addison's disease. Hormone 'Y' is responsible for the development of secondary female characterstics. 'X' and 'Y' are respectively

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(A) Adrenal Cortex, estradiol
(B) Adrenal Cortex, progesterone
(C) Thyroid, progesterone
(D) Thyroid, estradiol

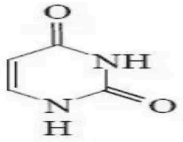
Answer: (A) Adrenal Cortex, estradiol · The council's preliminary key

Q38 AP EAPCET 2025 · 21 May · Shift 2 MCQ

The structure of the nitrogen containing heterocyclic base given below represents

(see the figure above)

The structure of the nitrogen containing heterocyclic base given below represents
క్రింద ఇవ్వబడిన నైట్రోజన్‌లున్న విజాతీ వలయ నిర్మాణము దేనిని సూచిస్తుంది ?



Options :
1. Adenine
ఎడినైన్

2. Thymine
థైమిన్

3. Uracil
యురాసిల్

4. Cytosine
సైటోసిన్

(A) Adenine
(B) Thymine
(C) Uracil
(D) Cytosine

Answer: (C) Uracil · The council's preliminary key

Q39 TS EAPCET 2025 · 4 May · Shift 1 MCQ

The general structure of alpha amino acid can be represented as

$$H_2N - CH - CO_2H$$
$$|$$
$$R$$

Which amino acid is not correctly matched with R-given?

(A) $\mathrm{R} = -\mathrm{CH_2} - \mathrm{C_6H_4} - \mathrm{OH(p)}$ - (Tyrosine)

(B) $\mathrm{R} = -\mathrm{CH_2} - \mathrm{SH}$ - (Cysteine)

(C) $\mathrm{R} = -\mathrm{CH_2} - \mathrm{CH_2} - \mathrm{S} - \mathrm{CH_3}$ - (Serine)

(D) $\mathrm{R} = -\mathrm{CH_2} - \mathrm{C}(=\mathrm{O}) - \mathrm{NH_2}$ - (Asparagine)

Answer: (C) $\mathrm{R} = -\mathrm{CH_2} - \mathrm{CH_2} - \mathrm{S} - \mathrm{CH_3}$ **- (Serine)** · The council's preliminary key

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Q40 TS EAPCET 2025 · 4 May · Shift 2 MCQ

Amino acid 'X' contains phenolic hydroxy group and amino acid 'Y' contains amide group. 'X' and 'Y' respectively are

(A) Ser, Arg

(B) Cys, Lys

(C) Thr, Asn

(D) Tyr, Gln

Answer: (D) Tyr, Gln · The council's preliminary key

Q41 TS EAPCET 2025 · 3 May · Shift 1 MCQ

The source of an enzyme is malt and that enzyme converts X into Y. X and Y respectively are

(A) Starch, maltose

(B) Maltose, glucose

(C) Proteins, peptides

(D) Glucose, fructose

Answer: (A) Starch, maltose · The council's preliminary key

Q42 TS EAPCET 2025 · 3 May · Shift 2 MCQ

Maltose on hydrolysis gives two monosaccharide units. The incorrect statement about the monosaccharides formed is

(A) Both are α-D-glucose units only

(B) One is α-D-glucose and second one is β-D-fructose

(C) Both are reducing sugars

(D) In maltose, they are joined through 1,4-glycosidic linkage

Answer: (B) One is α-D-glucose and second one is β-D-fructose · The council's preliminary key

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Q43 TS EAPCET 2025 · 2 May · Shift 1 MCQ

Which of the following hormones is an example of polypeptide?

(A) Epinephrine
(B) Insulin
(C) Estrogen
(D) Androgen

Answer: (B) Insulin · The council's preliminary key

Q44 TS EAPCET 2025 · 2 May · Shift 2 MCQ

A carbohydrate (A), when treated with dilute HCl in alcoholic solution gives two isomers (B) and (C). B on reaction with bromine water gives a monocarboxylic acid 'Z' and 'C' is a ketohexose. What is A?

(A) Starch
(B) Maltose
(C) Sucrose
(D) Lactose

Answer: (C) Sucrose · The council's preliminary key

Q45 AP EAPCET 2024 · 23 May · Shift 1 MCQ

Which of the following act as intracellular messengers?

(A) Enzymes
(B) Hormones
(C) Receptors
(D) Carrier proteins

Answer: (B) Hormones · The council's preliminary key

Q46 AP EAPCET 2024 · 23 May · Shift 1 MCQ

The deficiency of vitamin (x) causes beri beri and deficiency of vitamin (y) causes convulsions.

What are x and y respectively?

(A) B_2, B_{12}
(B) B_1, B_{12}
(C) B_2, B_6
(D) B_1, B_6

Answer: (D) B_1, B_6 · The council's preliminary key

Q47 AP EAPCET 2024 · 22 May · Shift 1 MCQ

Match List-I with List-II

List-I (Reaction)		List-II (Enzyme)
A Hydrolysis of starch to maltose	I	Diastase

B	Conversion of proteins to peptides	II Pepsin
C	Hydrolysis of sucrose to glucose and fructose	III Invertase
D	Glucose to ethanol	IV Zymase

The correct answer is

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

Answer: (D) A-I, B-II, C-III, D-IV · The council's preliminary key

Q48 AP EAPCET 2024 · 22 May · Shift 1 MCQ

Which of the following is not an essential amino acid?

(A) Lysine
(B) Histidine
(C) Glutamine
(D) Methionine

Answer: (C) Glutamine · The council's preliminary key

Q49 AP EAPCET 2024 · 22 May · Shift 1 MCQ

Which one of the following is NOT a disaccharide?

(A) Sucrose
(B) Fructose
(C) Maltose
(D) Lactose

Answer: (B) Fructose · The council's preliminary key

Q50 AP EAPCET 2024 · 22 May · Shift 2 MCQ

The number of $-\mathrm{OH}$ groups in open chain and ring structures of D-glucose are respectively

(A) 4, 5
(B) 5, 5
(C) 5, 4
(D) 6, 5

Answer: (B) 5, 5 · The council's preliminary key

Q51 AP EAPCET 2024 · 22 May · Shift 2 MCQ

Which of the following is correct statement?

(A) Starch is a polymer of β-D- glucose
(B) Amylose is a component of starch
(C) Proteins are biopolymers of only one type of amino acids
(D) Lactose is a disaccharide of α-D-glucose and β-D-galactose

Answer: (B) Amylose is a component of starch · The council's preliminary key

Q52 AP EAPCET 2024 · 21 May · Shift 1 MCQ

Which of the following structure of proteins represents its constitution?

(A) Secondary structure
(B) Quaternary structure
(C) Primary structure
(D) Tertiary structure

Answer: (C) Primary structure · The council's preliminary key

Q53 AP EAPCET 2024 · 21 May · Shift 1 MCQ

Carrot and curd are sources for the vitamins respectively

(A) A, B_{12}
(B) A, B_1
(C) E, Pyridoxine
(D) E, Riboflavin

Answer: (A) A, B_{12} · The council's preliminary key

Q54 AP EAPCET 2024 · 21 May · Shift 2 MCQ

Identify the correctly matched set from the following

(A) Vitamin A – Water soluble – Xerophthalmia
(B) Vitamin B_6 – Water soluble – Scurvy
(C) Vitamin D – fat soluble - Rickets
(D) Vitamin C – fat soluble - convulsions

Answer: (C) Vitamin D – fat soluble - Rickets · The council's preliminary key

Q55 AP EAPCET 2024 · 21 May · Shift 2 MCQ

Given below are two statements

I. Cytosine and guanine are formed in equal quantities in DNA hydrolysis

II. Adenine and uracil are formed in equal quantities in RNA hydrolysis

The correct answer is

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(A) Statements I , II both are correct
(B) Statements I , II both are incorrect
(C) Statement I is correct but statement II is incorrect
(D) Statement I is incorrect but statement II is correct

Answer: (C) Statement I is correct but statement II is incorrect · The council's preliminary key

Q56 AP EAPCET 2024 · 20 May · Shift 1 MCQ

When glucose is oxidized with nitric acid the compound formed is

(A) Gluconic acid
(B) n-hexanoic acid
(C) Sacharic acid
(D) Cyanohydrin

Answer: (C) Sacharic acid · The council's preliminary key

Q57 AP EAPCET 2024 · 20 May · Shift 1 MCQ

The number of essential and non-essential amino acids from the following list respectively is

Val, Gly, Leu, Lys, Pro, Ser

(A) 5, 1
(B) 4, 2
(C) 2, 4
(D) 3, 3

Answer: (D) 3, 3 · The council's preliminary key

Q58 AP EAPCET 2024 · 20 May · Shift 2 MCQ

Which of the following represents simplified version of nucleoside?

(A) Base- sugar- phosphate
(B) Sugar- base
(C) Sugar- Phosphate
(D) Base- Phosphate

Answer: (B) Sugar- base · The council's preliminary key

Q59 AP EAPCET 2024 · 20 May · Shift 2 MCQ

Which of the following amino acids possess two chiral centres?

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(A) Leucine
(B) Valine
(C) Serine
(D) Threonine

Answer: (D) Threonine · The council's preliminary key

Q60 AP EAPCET 2024 · 19 May · Shift 2 MCQ

The carbohydrate which does not react with ammonical $AgNO_3$ solution is

(A) Sucrose
(B) Maltose
(C) Lactose
(D) Fructose

Answer: (A) Sucrose · The council's preliminary key

Q61 AP EAPCET 2024 · 19 May · Shift 2 MCQ

Identify the amino acid which has

$-NH_2$, $-CO_2H$ and $-\overset{O}{\overset{\|}{C}}-NH_2$ groups

(A) Alanine
(B) Arginine
(C) Asparagine
(D) Aspartic acid

Answer: (C) Asparagine · The council's preliminary key

Q62 AP EAPCET 2024 · 18 May · Shift 1 MCQ

Which of the following is an essential amino acid?

EdLoop EAPCET

Which of the following is an essential amino acid?
కింది వాటిలో ఏది ఒక ఆవశ్యక ఎమినో ఆమ్లం?

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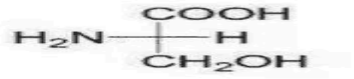
2. 

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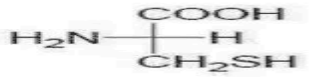
4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q63 AP EAPCET 2024 · 18 May · Shift 1 MCQ

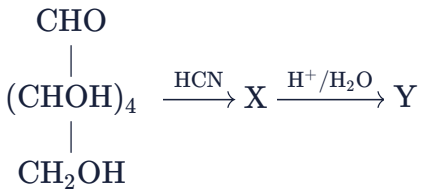
Which of the following hormone is responsible for preparing uterus for implantation of fertilised egg?

(A) Estradiol
(B) Progesterone
(C) Testosterone
(D) Thyroxin

Answer: (B) Progesterone · The council's preliminary key

Q64 TS EAPCET 2024 · 11 May · Shift 1 MCQ

What is the IUPAC name of the product Y in the given reaction sequence?



(A) 2,3,4,5,6,7 – hexahydroxyheptanoic acid
(B) 2,3,4,5,6 – pentahydroxyhexanoic acid
(C) 3,4,5 – trihydroxyheptanoic acid
(D) 3,4,5 – trihydroxyhexanoic acid

Answer: (A) 2,3,4,5,6,7 – hexahydroxyheptanoic acid · The council's preliminary key

Q65 TS EAPCET 2024 · 10 May · Shift 1 MCQ

Which of the following vitamin is also called pyridoxine?

(A) B_6
(B) B_{12}
(C) B_2
(D) B_1

Answer: (A) B_6 · The council's preliminary key

Q66 TS EAPCET 2024 · 10 May · Shift 2 MCQ

Two statements are given below

I Milk sugar is disaccharide of α -D- galactose and β -D-glucose

II Sucrose is disaccharide of α -D- glucose and β -D-fructose

Correct answer is

(A) Both statements I and II are correct
(B) Both statements I and II are incorrect
(C) Statement I is correct but statement II is incorrect
(D) Statement I is incorrect but statement II is correct

Answer: (D) Statement I is incorrect but statement II is correct · The council's preliminary key

Q67 TS EAPCET 2024 · 9 May · Shift 1 MCQ

The functional groups involved in the conversion of glucose to gluconic acid and gluconic acid to saccharic acid respectively are

(A) $-CHO, > CHOH$
(B) $-CHO, -CH_2OH$
(C) $-CH_2OH, -CHO$
(D) $-CH_2OH, > CHOH$

Answer: (B) $-CHO, -CH_2OH$ · The council's preliminary key

Q68 TS EAPCET 2024 · 9 May · Shift 2 MCQ

Cellulose is a polysaccharide and is made of

(A) β-D-glucose units joined through 1,4-glycosidic linkages
(B) α-D-glucose units joined through 1,4-glycosidic linkages
(C) α-D-glucose units joined through 1,6-glycosidic linkages
(D) β-D-glucose units joined through 1,6-glycosidic linkages

Answer: (A) β-D-glucose units joined through 1,4-glycosidic linkages · The council's preliminary key

Q69 AP EAPCET 2023 · 19 May · Shift 1 MCQ

Identify the correct statement related to amino acids

(A) Nonessential amino acids cannot be synthesized in the body
(B) These are soluble in ether
(C) These are low melting solid substances
(D) In aqueous solution they exist as zwitter ion

Answer: (D) In aqueous solution they exist as zwitter ion · The council's preliminary key

Q70 AP EAPCET 2023 · 19 May · Shift 1 MCQ

From the following, number of fat soluble and water soluble vitamins respectively are

A D C B_1 K B_6

(A) 2, 4
(B) 4, 2
(C) 3, 3
(D) 6, 0

Answer: (C) 3, 3 · The council's preliminary key

Q71 AP EAPCET 2023 · 18 May · Shift 1 MCQ

Which of the following correctly represents hydrogen bonded pairs in DNA?

(A) $G = C\ ;\ T \equiv A$
(B) $G = C\ ;\ T = A$
(C) $G \equiv C\ ;\ T \equiv A$
(D) $G \equiv C\ ;\ T = A$

Answer: (D) $G \equiv C\ ;\ T = A$ · The council's preliminary key

Q72 AP EAPCET 2023 · 18 May · Shift 1 MCQ

In D – glucose (X) and D – Fructose (Y), which hydroxyl group participates in hemiacetal formation

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(A) C – 5 in both X and Y
(B) C – 5 in X and C – 6 in Y
(C) C – 6 in X and C – 5 in Y
(D) C – 4 in both X and Y

Answer: (A) C – 5 in both X and Y · The council's preliminary key

Q73 AP EAPCET 2023 · 18 May · Shift 2 MCQ

In which of the following amino acids –OH group is present?

Lysine Serine Tyrosine Valine

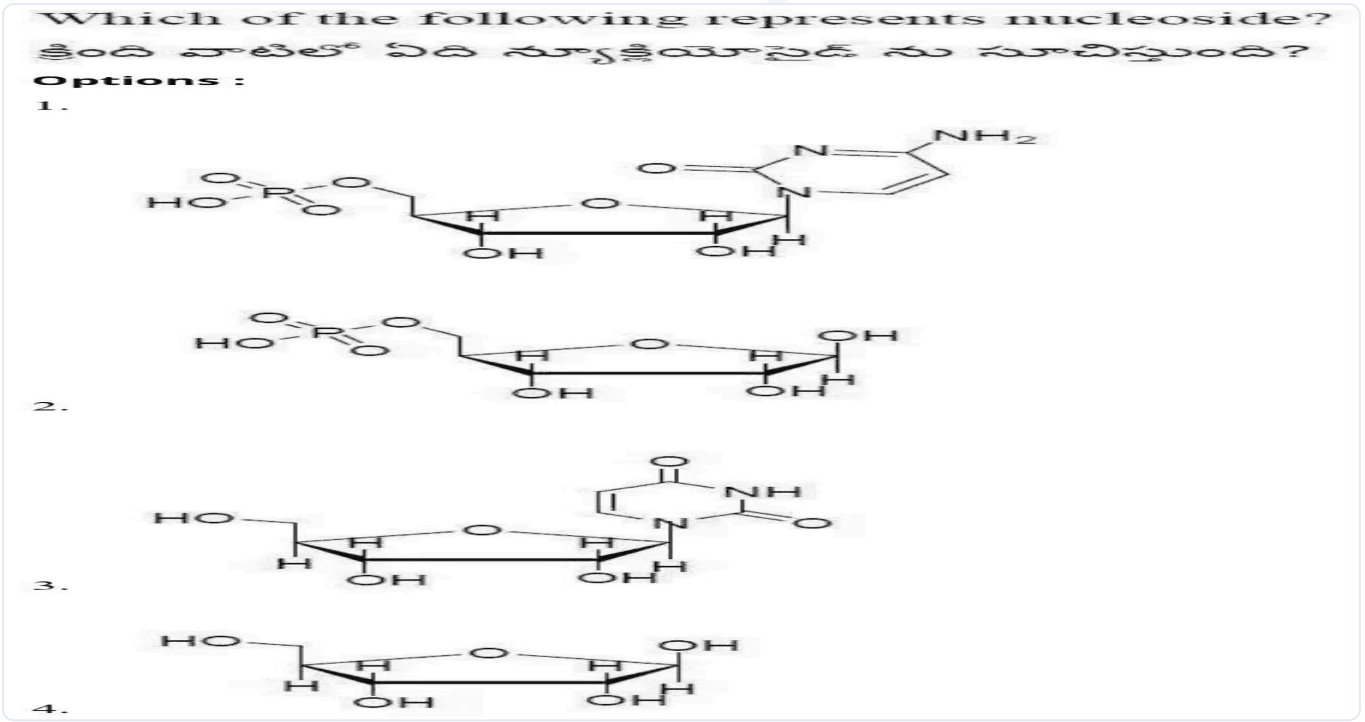
A B C D

(A) A, B
(B) A, C
(C) B, C
(D) B, D

Answer: (C) B, C · The council's preliminary key

Q74 AP EAPCET 2023 · 18 May · Shift 2 MCQ

Which of the following represents nucleoside?



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q75 AP EAPCET 2023 · 17 May · Shift 1 MCQ

Which of the following is not correctly matched for enzymatic reactions?

(A) Proteins → Amino acids ; Trypsin
(B) Starch → Maltose ; Diastase
(C) Sucrose → glucose and fructose; zymase
(D) Maltose → glucose ; Maltase

Answer: (C) Sucrose → glucose and fructose; zymase · The council's preliminary key

Q76 AP EAPCET 2023 · 17 May · Shift 1 MCQ

Match the following

List – I	List – II
A. Beri Beri	I. Riboflavin
B. Scurvy	II. Thiamine
C. Cheilosis	III. Pyridoxine
D. Rickets	IV. Ascorbic acid
	V. Vitamin D

The correct answer is

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

Answer: (B) A – II, B- IV, C – I, D-V · The council's preliminary key

Q77 AP EAPCET 2023 · 17 May · Shift 1 MCQ

The source of vitamin, whose deficiency causes scurvy is

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(A) Amla
(B) Carrot
(C) Egg
(D) Fish

Answer: (A) Amla · The council's preliminary key

Q78 AP EAPCET 2023 · 17 May · Shift 2 MCQ

Which of the following are fibrous proteins?

Keratin Insulin Myosin Albumin

A B C D

(A) A, B
(B) A, C
(C) B, D
(D) C, D

Answer: (B) A, C · The council's preliminary key

Q79 AP EAPCET 2023 · 17 May · Shift 2 MCQ

Which of the following hormones modulate inflammatory reactions?

(A) Mineralocorticoids
(B) Glucocorticoids
(C) Epinephrine
(D) Glucagon

Answer: (B) Glucocorticoids · The council's preliminary key

Q80 AP EAPCET 2023 · 16 May · Shift 1 MCQ

Sulphur containing amino acids of the following are

Serine Cysteine Lysine methionine

A B C D

(A) A, D
(B) A, C
(C) B, C
(D) B, D

Answer: (D) B, D · The council's preliminary key

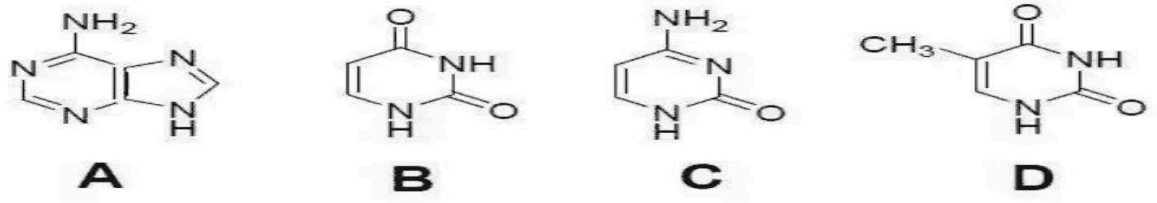
Q81 AP EAPCET 2023 · 16 May · Shift 1 MCQ

Which of the following bases are present both in DNA and RNA?

(see the figure above)

Which of the following bases are present both in DNA and RNA?

క్రింది వాటిలో ఏ క్షారాలు DNA మరియు RNA రెండింటిలో ఉంటాయి?



Options :

1. C, D
2. B, C
3. A, B
4. A,C

(A) C, D
(B) B, C
(C) A, B
(D) A,C

Answer: (D) A,C · The council's preliminary key

Q82 AP EAPCET 2023 · 16 May · Shift 2 MCQ

Deficiency of which vitamin causes convulsions?

(A) Riboflavin
(B) Thiamine
(C) Ascorbic acid
(D) Pyridoxine

Answer: (D) Pyridoxine · The council's preliminary key

Q83 AP EAPCET 2023 · 16 May · Shift 2 MCQ

Addison's disease is characterized by

A. Hyperglycemia

B. Weakness

C. Increased susceptibility to stress

D. Hypertension

(A) A, C
(B) A, D
(C) B, C
(D) B, D

Answer: (C) B, C · The council's preliminary key

Q84 AP EAPCET 2023 · 15 May · Shift 1 MCQ

Given below are two statements

Assertion (A): Hydrolysis of DNA does not form equal number of A and T: G and C

Reason (R): In DNA adenine forms hydrogen bonds with thymine and cytosine forms hydrogen bonds with guanine

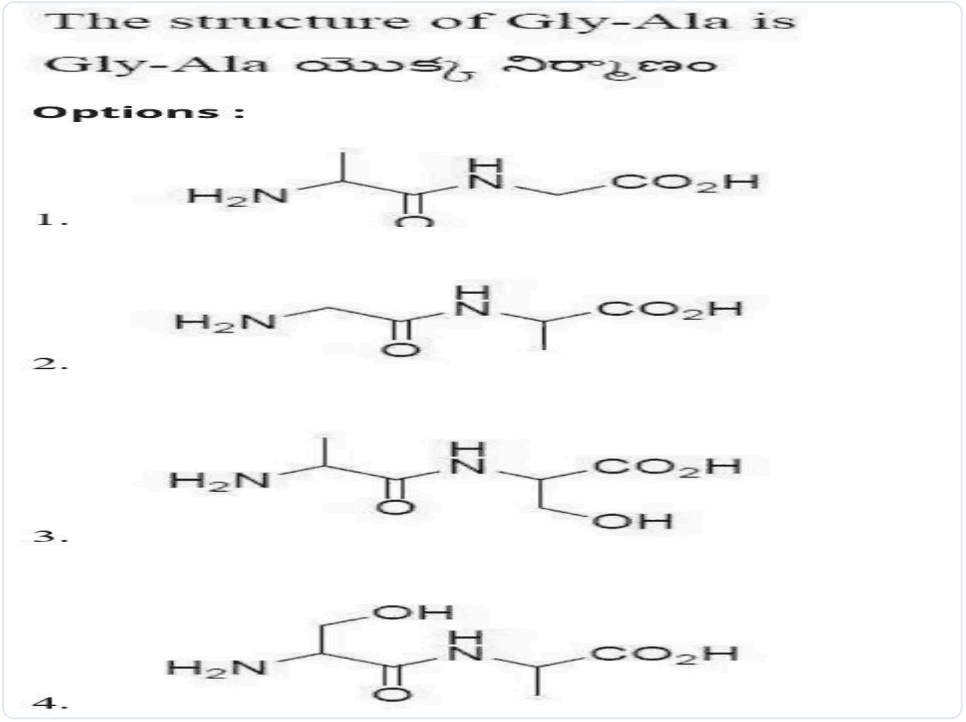
The correct answer is

(A) Both A and R are correct and R is the correct explanation of A
(B) Both A and R are correct but R is not the correct explanation of A
(C) A is correct but R is incorrect
(D) A is incorrect but R is correct

Answer: (D) A is incorrect but R is correct · The council's preliminary key

Q85 AP EAPCET 2023 · 15 May · Shift 1 MCQ

The structure of Gly-Ala is



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q86 AP EAPCET 2023 · 15 May · Shift 2 MCQ

In nucleoside, the base is attached to which position of sugar molecule?

(A) C – 1
(B) C – 2
(C) C – 3
(D) C – 5

Answer: (A) C – 1 · The council's preliminary key

Q87 AP EAPCET 2023 · 15 May · Shift 2 MCQ

Hypothyroidism is due to

A. High level of iodine in the diet

B. Enlargement of thyroid gland

C. Low levels of iodine in the diet

D. Increased levels of thyroxine

(A) A, B
(B) B, C
(C) A, D
(D) C, D

Answer: (B) B, C · The council's preliminary key

Q88 TS EAMCET 2023 · 14 May · Shift 1 MCQ

The deficiency of which vitamin causes pernicious anaemia?

(A) Vitamin B_2
(B) Vitamin B_6
(C) Vitamin E
(D) Vitamin B_{12}

Answer: (D) Vitamin B_{12} · The council's preliminary key

Q89 TS EAMCET 2023 · 14 May · Shift 2 MCQ

From the following, the correct statements about polysaccharides are

I) Starch is a polymer of α-D(+)-glucose

II) Amylose component of starch is not soluble in water.

III) Amylose is a branched chain polymer of α-D(+)- glucose.

IV) Cellulose is a straight chain polymer of β-D(+)- glucose units

(A) I & IV only
(B) II & III only
(C) II & IV only
(D) I & III only

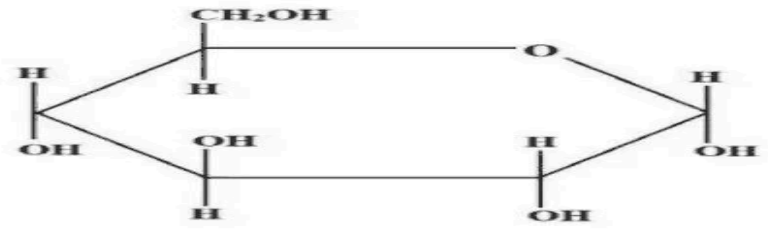
Answer: (A) I & IV only · The council's preliminary key

Q90 TS EAMCET 2023 · 13 May · Shift 1 MCQ

The Haworth projection shown below represents

(see the figure above)

The Haworth projection shown below represents
క్రింద ఇవ్వబడిన హావర్త్ ప్రక్షేపణ దేనిని సూచిస్తుంది



Options :

1. β-D-(-)Fructofuranose
β-D-(-)ఫ్రక్టోఫ్యూరనోజ్

2. β-D-(+)Glucopyranose
β-D-(+)గ్లూకోపైరనోజ్

3. α-D-(-)Fructofuranose
α-D-(-)ఫ్రక్టోఫ్యూరనోజ్

4. α-D-(+)Glucopyranose
α-D-(+)గ్లూకోపైరనోజ్

(A) β-D-(-)Fructofuranose
(B) β-D-(+)Glucopyranose
(C) α-D-(-)Fructofuranose
(D) α-D-(+)Glucopyranose

Answer: (D) α-D-(+)Glucopyranose · The council's preliminary key

Q91 TS EAMCET 2023 · 13 May · Shift 2 MCQ

A vitamin X is soluble in fat and its source is egg yolk. Deficiency of X causes the disease

(A) Scurvy
(B) Convulsions
(C) Xerophthalmia
(D) Rickets

Answer: (D) Rickets · The council's preliminary key

Q92 TS EAMCET 2023 · 12 May · Shift 1 MCQ

Which of the following is the incorrect statement about maltose?

(A) It is a reducing sugar
(B) It is composed of two α-D- glucose units
(C) It is composed of one β-D- glucose and one β-D- galactose unit
(D) It has 1, 4 – glycosidic linkage

Answer: (C) It is composed of one β-D- glucose and one β-D- galactose unit · The council's preliminary key

Q93 TS EAMCET 2023 · 12 May · Shift 2 MCQ

The functional groups present in Asparagine, a non-essential aminoacid, are

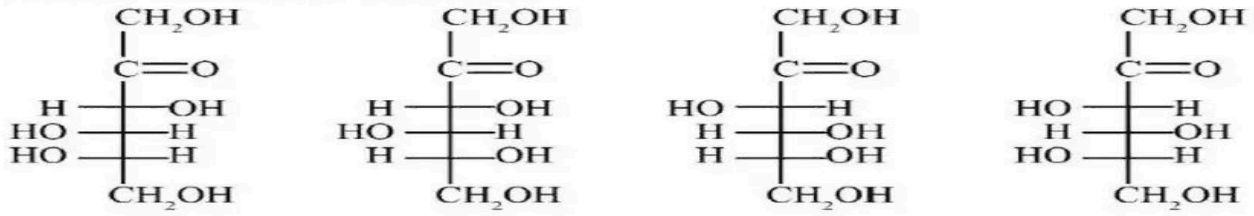
(A) $-\mathrm{NH_2}$, $-\mathrm{COOH}$, $=\mathrm{NH}$
(B) $-\mathrm{NH_2}$, $-\mathrm{COOH}$, $-\overset{\overset{\mathrm{O}}{\|}}{\mathrm{C}}-\mathrm{NH_2}$
(C) $-\mathrm{NH}-\overset{\overset{\mathrm{O}}{\|}}{\mathrm{C}}-$, $-\mathrm{COOH}$, $-\overset{\overset{\mathrm{O}}{\|}}{\mathrm{C}}-\mathrm{Cl}$
(D) $-\mathrm{NH_2}$, $-\mathrm{COOH}$, $-\mathrm{OH}$

Answer: (B) $-\mathrm{NH_2}$, $-\mathrm{COOH}$, $-\overset{\overset{\mathrm{O}}{\|}}{\mathrm{C}}-\mathrm{NH_2}$ · The council's preliminary key

Q94 TS EAMCET 2022 · 20 Jul · Shift 1 MCQ

Consider the following structures
(see the figure above)
Which of the pairs represent D and L-fructose, respectively?

Consider the following structures



I II III IV

Which of the pairs represent D and L-fructose, respectively?

Options :

1. II and I
2. I and III
3. III and IV
4. II and IV

(A) II and I
(B) I and III
(C) III and IV
(D) II and IV

Answer: (C) III and IV · The council's preliminary key

Q95 TS EAMCET 2022 · 20 Jul · Shift 2 MCQ

Assertion (A) : In aqueous solution, amino acids exist in dipolar ion form.
Reason (R) : Most of the naturally occurring amino acids have L-configuration.
The correct option among the following is

(A) (A) is true, (R) is true and (R) is the correct explanation for (A)
(B) (A) is true, (R) is true but (R) is not the correct explanation for (A)
(C) (A) is true but (R) is false
(D) (A) is false but (R) is true

Answer: (B) (A) is true, (R) is true but (R) is not the correct explanation for (A) · The council's preliminary key

Q96 TS EAMCET 2022 · 19 Jul · Shift 1 MCQ

Assertion (A) : Both Glucose and Fructose have the same D-configuration.

Reason (R) : Both Glucose and Fructose are dextrorotatory.

The correct option among the following is

(A) (A) is true, (R) is true and (R) is the correct explanation for (A)
(B) (A) is true, (R) is true but (R) is not the correct explanation for (A)
(C) (A) is true but (R) is false
(D) (A) is false but (R) is true

Answer: (C) (A) is true but (R) is false · The council's preliminary key

Q97 TS EAMCET 2022 · 19 Jul · Shift 2 MCQ

The major product of the following reactions is

Glucose $\xrightarrow[\text{ii) } Mo_2O_3,\ 773\ K,\ 10-20\ atm]{\text{i) } HI,\ \Delta}$

(A) Cyclohexane
(B) Benzene
(C) Cyclohexadiene
(D) Hexane

Answer: (B) Benzene · The council's preliminary key

Q98 TS EAMCET 2022 · 18 Jul · Shift 1 MCQ

Assertion (A) : The denaturation of proteins can destroy all 1°, 2° and 3° protein structures.
Reason (R) : Curdling of milk is due to denaturation of proteins.
The correct option among the following is

(A) (A) is true, (R) is true and (R) is the correct explanation for (A)
(B) (A) is true, (R) is true but (R) is not the correct explanation for (A)
(C) (A) is true but (R) is false
(D) (A) is false but (R) is true

Answer: (D) (A) is false but (R) is true · The council's preliminary key

Q99 TS EAMCET 2022 · 18 Jul · Shift 2 MCQ

The amount of sucrose needed to produce 1 mole of glucose using acid hydrolysis is

(A) 360 g
(B) 180 g
(C) 342 g
(D) 171 g

Answer: (C) 342 g · The council's preliminary key

Q100 AP EAPCET 2022 · 8 Jul · Shift 1 MCQ

If sucrose is boiled with dilute. HCl in alcoholic solution the ratio in which glucose and fructose are formed is

(A) $1:1$
(B) $1:2$
(C) $2:1$
(D) $4:1$

Answer: (A) $1:1$ · The council's preliminary key

Q101 AP EAPCET 2022 · 8 Jul · Shift 1 MCQ

Thiamine is

(A) Nitrogenous base
(B) Amino acid
(C) Hormone
(D) Vitamin

Answer: (D) Vitamin · The council's preliminary key

Q102 AP EAPCET 2022 · 8 Jul · Shift 2 MCQ

Which of the following amino acid is optically inactive?

(A) Glycine
(B) Proline
(C) Tyrosine
(D) Alanine

Answer: (A) Glycine · The council's preliminary key

Q103 AP EAPCET 2022 · 8 Jul · Shift 2 MCQ

Hydrolysis of which of the following nucleic acids does not give equal number of A and T or G and C
a) m - RNA b) single strand DNA c) r - RNA d) double helix DNA

(A) (a), (b), (c)
(B) (b), (c), (d)
(C) (b) only
(D) (a) only

Answer: (A) (a), (b), (c) · The council's preliminary key

Q104 AP EAPCET 2022 · 7 Jul · Shift 1 MCQ

Which of the following is not a RNA?

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(A) m - RNA
(B) d - RNA
(C) t - RNA
(D) r - RNA

Answer: (B) d - RNA · The council's preliminary key

Q105 AP EAPCET 2022 · 7 Jul · Shift 1 MCQ

Hydrolysis of which disaccharide in presence of enzyme maltase give glucose only?

(A) Sucrose
(B) Cellulose
(C) Lactose
(D) Maltose

Answer: (D) Maltose · The council's preliminary key

Q106 AP EAPCET 2022 · 7 Jul · Shift 2 MCQ

Hydrolysis of nucleic acid gives nitrogenous base sugar and _____

(A) Sulphuric acid
(B) Phosphorous acid
(C) Sulphurous acid
(D) Phosphoric acid

Answer: (D) Phosphoric acid · The council's preliminary key

Q107 AP EAPCET 2022 · 7 Jul · Shift 2 MCQ

Sugar present in DNA is

(A) β-D-2-ribose
(B) β-D-2-deoxyribose
(C) α-D-2-ribose
(D) α-D-2-deoxyribose

Answer: (B) β-D-2-deoxyribose · The council's preliminary key

Q108 AP EAPCET 2022 · 6 Jul · Shift 1 MCQ

In which of the following, Keratin, a fibrous protein is absent?

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(A) Hair
(B) Muscles
(C) Silk
(D) Wool

Options (2) or (3) were accepted. More than one answer was accepted. · The council's preliminary key

Q109 AP EAPCET 2022 · 6 Jul · Shift 1 MCQ

The total number by amino acids present in insulin is

(A) 55
(B) 1051
(C) 51
(D) 100

Answer: (C) 51 · The council's preliminary key

Q110 AP EAPCET 2022 · 6 Jul · Shift 2 MCQ

Which of the following is not true about the denaturation of protein?

(A) 2° structure get destroyed
(B) 3° structure get destroyed
(C) 1° structure get destroyed
(D) Bioactivity is lost

Answer: (C) 1° **structure get destroyed** · The council's preliminary key

Q111 AP EAPCET 2022 · 6 Jul · Shift 2 MCQ

Statement-I : Despite having aldehyde group, glucose does not give Schiff test
Statement-II : Glucose exists in α & β crystalline forms

(A) Both statements I and II are incorrect
(B) Both statements I and II are correct
(C) Statement I is correct but statement II is incorrect
(D) Statement I is incorrect but statement II is correct

Answer: (B) Both statements I and II are correct · The council's preliminary key

Q112 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Match the following
List - I (enzyme): A. Invertase; B. Pepsin; C. Diastase
List - II (Reaction): I. Maltose $\rightarrow$ Glucose; II. Sucrose $\rightarrow$ Glucose + Fructose; III. Proteins $\rightarrow$ peptides; IV. Starch $\rightarrow$ Maltose

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

Answer: (C) A - II, B - III, C - IV · The council's preliminary key

Q113 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Carbohydrates are stored in plants and animals in which of the following forms respectively?

(A) Glycogen, Starch
(B) Glycogen, Glycogen
(C) Starch, Starch
(D) Starch, Glycogen

Answer: (D) Starch, Glycogen · The council's preliminary key

Q114 AP EAPCET 2022 · 5 Jul · Shift 1 MCQ

Glycylalanine is a dipeptide of which amino acids?
(see the figure above)

Glycylalanine is a dipeptide of which amino acids?
గ్లైసైల్‌ఎలనైన్ ఏ ఎమినో ఆమ్లాల డైపెప్టైడ్?
Options :
1. H_2NCH_2COOH & $H_2NCH(CH_3)COOH$
2. $(CH_3)_2CHCH(NH_2)COOH$ & H_2NCH_2COOH
3. $(CH_3)_2CHCH_2CH(NH_2)COOH$ & H_2NCH_2COOH
4. $(CH_3)_2CHCH(NH_2)COOH$ & $(CH_3)_2CH(NH_2)COOH$

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q115 AP EAPCET 2022 · 5 Jul · Shift 2 MCQ

What is the functional group present in serine, an aminoacid in addition to $-NH_2$ and $-COOH$ groups?

What is the functional group present in serine, an aminoacid in addition to $-NH_2$ and $-COOH$ groups?

సెరైన్ అను ఎమినో అమ్లంలో $-NH_2$, $-COOH$ సమూహాలతో పాటు ఉన్న ప్రమేయ సమూహం ఏది?

Options :

1. $-OH$
2. $-SH$
3. $-NH-$
4. $-\overset{\overset{O}{\|}}{C}-NH_2$

(A) $-OH$
(B) $-SH$
(C) $-NH-$
(D) *see figure*

Answer: (A) $-OH$ · The council's preliminary key

Q116 AP EAPCET 2022 · 4 Jul · Shift 1 MCQ

Which hormone tends to increase the blood glucose level in human?

(A) Insulin
(B) Glucagon
(C) Epinephrine
(D) Estrogen

Options (2) or (3) were accepted. More than one answer was accepted. · The council's preliminary key

Q117 AP EAPCET 2022 · 4 Jul · Shift 1 MCQ

Which of the following molecules is eliminated during peptide bond formation?

(A) H_2O
(B) NH_3
(C) CH_3OH
(D) CO_2

Answer: (A) H_2O · The council's preliminary key

Q118 AP EAPCET 2022 · 4 Jul · Shift 2 MCQ

Pernicious anemia is caused due to deficiency of which vitamin?

(A) B12
(B) B1
(C) B6
(D) B2

Answer: (A) B12 · The council's preliminary key

Q119 AP EAPCET 2022 · 4 Jul · Shift 2 MCQ

Which of the following vitamins cannot be stored in the body?

(A) A
(B) C
(C) E
(D) K

Answer: (B) C · The council's preliminary key

Q120 AP EAPCET 2021 · 5 Oct · Shift 1 MCQ

The product of the following reaction is:
$C_{12}H_{22}O_{11} \xrightarrow{H_2SO_4}$?

(A) Hexane
(B) Hexanol
(C) CO_2
(D) Carbon

Answer: (D) Carbon · The council's preliminary key

Q121 AP EAPCET 2021 · 5 Oct · Shift 1 MCQ

The amino acid which is optically inactive is _____

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(A) Lysine
(B) Glycine
(C) Leucine
(D) Alanine

Answer: (B) Glycine · The council's preliminary key

Q122 AP EAPCET 2021 · 25 Aug · Shift 2 MCQ

Match the following vitamins with their sources and the corresponding diseases caused by their deficiency?
Vitamins | Sources | Diseases
(a) Vitamin-B_1 | (i) Egg-whites | (p) Convulsions
(b) Vitamin-B_2 | (ii) Fish | (q) Pernicious anemia
(c) Vitamin-B_6 | (iii) Green vegetables | (r) Cheilosis
(d) Vitamin-B_{12} | (iv) Grams | (s) Beri-Beri

(A) (a-ii-r), (b-iv-p), (c-iii-s), (d-i-q)
(B) (a-iv-p), (b-ii-q), (c-i-r), (d-iii-s)
(C) (a-iii-s), (b-i-r), (c-iv-p), (d-ii-q)
(D) (a-i-q), (b-iii-s), (c-ii-r), (d-iv-p)

Answer: (C) (a-iii-s), (b-i-r), (c-iv-p), (d-ii-q) · The council's preliminary key

Q123 AP EAPCET 2021 · 24 Aug · Shift 1 MCQ

In an amino acid, the carboxylic group ionizes at pH = 2.56 (pKa_1) and ammonium ion ionizes at pH = 9.38 (pKa_2). The isoelectric point of the amino acid is at _____

(A) 11.94
(B) 6.82
(C) 5.97
(D) 3.41

Answer: (C) 5.97 · The council's preliminary key

Q124 AP EAPCET 2021 · 24 Aug · Shift 2 MCQ

Vitamin-A is called _____

(A) Ascorbic acid
(B) Retinol
(C) Calciferol
(D) Tocopherol

Answer: (B) Retinol · The council's preliminary key

Q125 AP EAPCET 2021 · 23 Aug · Shift 1 MCQ

Which of the following statements are true about carbohydrates?
(i) Monosaccharides can be hydrolysed.
(ii) The two monosaccharide units obtained on hydrolysis of a disaccharide can either be same or different.
(iii) Polysaccharides are not sweet in taste.
(iv) All monosaccharides are not reducing sugars.

(A) (i) & (ii) only
(B) (ii) & (iii) only
(C) (iii) & (iv) only
(D) (i) & (iv) only

Answer: (B) (ii) & (iii) only · The council's preliminary key

Q126 AP EAPCET 2021 · 23 Aug · Shift 2 MCQ

Match the following
Type of Protein: (a) Fibrous, (b) Globular
Their Properties: (i) Hydrogen bonding, (ii) Water soluble, (iii) Spherical shape, (iv) Disulphide linkage

(A) (a-i), (a-ii), (b-iii), (b-iv)
(B) (a-i), (a-iii), (b-ii), (b-iv)
(C) (a-i), (a-iv), (b-ii), (b-iii)
(D) (a-ii), (a-iv), (b-i), (b-iii)

Answer: (C) (a-i), (a-iv), (b-ii), (b-iii) · The council's preliminary key

Q127 AP EAPCET 2021 · 20 Aug · Shift 1 MCQ

Vitamin B_1 is _____

(A) Riboflavin
(B) Cobalamin
(C) Thiamine
(D) Pyridoxine

Answer: (C) Thiamine · The council's preliminary key

Q128 AP EAPCET 2021 · 20 Aug · Shift 2 MCQ

The human body does not produce _____

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(A) Enzymes
(B) DNA
(C) Vitamins
(D) Hormones

Answer: (C) Vitamins · The council's preliminary key

Q129 AP EAPCET 2021 · 19 Aug · Shift 1 MCQ

Identify the product of the following reaction.
$(C_6H_{10}O_5)_n + n\,H_2O \xrightarrow[393\ K,\ 2\text{-}3\ atm]{H^+} ?$ (Starch)

(A) Fructose
(B) Glucose
(C) Lactose
(D) Maltose

Answer: (B) Glucose · The council's preliminary key

Q130 AP EAPCET 2021 · 19 Aug · Shift 2 MCQ

Assertion (A): An optically active amino acid can exit in three forms depending on the pH of the solution.
Reason (R): Amino acids contain both acidic and basic groups, they exist as zwetter ion in aq. medium, anionic form in acidic medium and cationic form in basic medium

(A) A and R are correct and R is the correct explanation for A
(B) A and R are correct but R is not the correct explanation for A
(C) A is correct, R is wrong
(D) A is wrong, R is correct

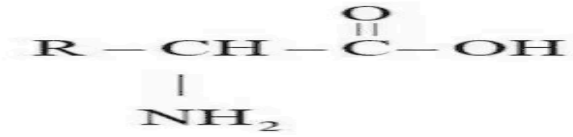
Answer: (C) A is correct, R is wrong · The council's preliminary key

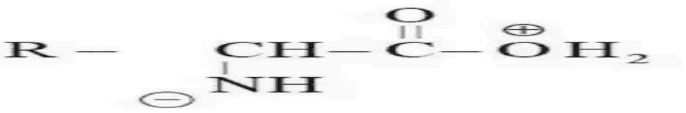
Q131 TS EAMCET 2021 · 6 Aug · Shift 1 MCQ

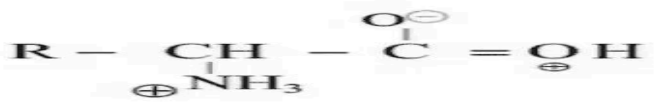
The Zwitter ion among the following is

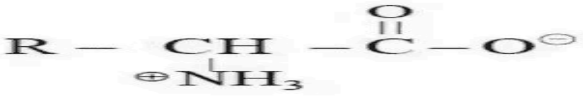
The Zwitter ion among the following is

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (D) · The council's preliminary key

Q132 TS EAMCET 2021 · 6 Aug · Shift 2 MCQ

Assertion (A): Adenine and guanine are present in RNA as purine bases.
Reason (R): The base uracil is present in RNA.
The correct option among the following is

(A) (A) is true, (R) is true and (R) is the correct explanation for (A)

(B) (A) is true, (R) is true but (R) is not the correct explanation for (A)

(C) (A) is true but (R) is false

(D) (A) is false but (R) is true

Answer: (B) (A) is true, (R) is true but (R) is not the correct explanation for (A) · The council's preliminary key

Q133 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

During the process of fermentation, the number of moles of CO_2 liberated from one mole to glucose is

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

Answer: (A) 2 · The council's preliminary key

Q134 TS EAMCET 2021 · 5 Aug · Shift 1 MCQ

Assertion (A) : In aqueous solution, α-amino acids exists as internal salt called as zwitter ion.
Reason (R) : Proline is a natural amino acid having a secondary amino group.
The correct option among the following is

(A) (A) is true, (R) is true and (R) is the correct explanation for (A)
(B) (A) is true, (R) is true but (R) is not the correct explanation for (A)
(C) (A) is true but (R) is false
(D) (A) is false but (R) is true

Answer: (B) (A) is true, (R) is true but (R) is not the correct explanation for (A) · The council's preliminary key

Q135 TS EAMCET 2021 · 5 Aug · Shift 2 MCQ

Glucose on prolonged heating with HI, gives product P. The product P is

(A) $CH_2I-(CHOH)_4-CH_2OH$
(B) $CHO-(CH-I)_4-CH_2I$
(C) $CH_3-(CH_2)_4-CH_3$
(D) $CH_2-I-(CHI)_4-CH_2I$

Answer: (C) $CH_3-(CH_2)_4-CH_3$ · The council's preliminary key

Q136 TS EAMCET 2021 · 4 Aug · Shift 1 MCQ

The structure of α – D – Fructofuranose is
(see the figure above)

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The structure of $\alpha - D -$ Fructofuranose is

Options :

1.



2.



3.



4.



(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q137 TS EAMCET 2021 · 4 Aug · Shift 2 MCQ

A polypeptide can be called as protein when its mass is

(A) $> 10{,}000$ u

(B) $5{,}000$ to $6{,}000$ u

(C) $7{,}000$ to $8{,}000$ u

(D) $4{,}000$ to $5{,}000$ u

Answer: (A) $> 10{,}000$ u · The council's preliminary key

Q138 AP EAMCET 2020 · 7 Oct · Shift 1 MCQ

Glucose on prolonged heating with HI gives:

(A) n-Hexane

(B) 2-Methyl pentane

(C) Hexan-1-one

(D) Hexan-2-one

Answer: (A) n-Hexane · The council's preliminary key

Q139 AP EAMCET 2020 · 23 Sep · Shift 1 MCQ

Total number of hydroxyls($-OH$) groups in saccharic acid are:

(A) 3
(B) 2
(C) 4
(D) 5

Answer: (C) 4 · The council's preliminary key

Q140 AP EAMCET 2020 · 22 Sep · Shift 1 MCQ

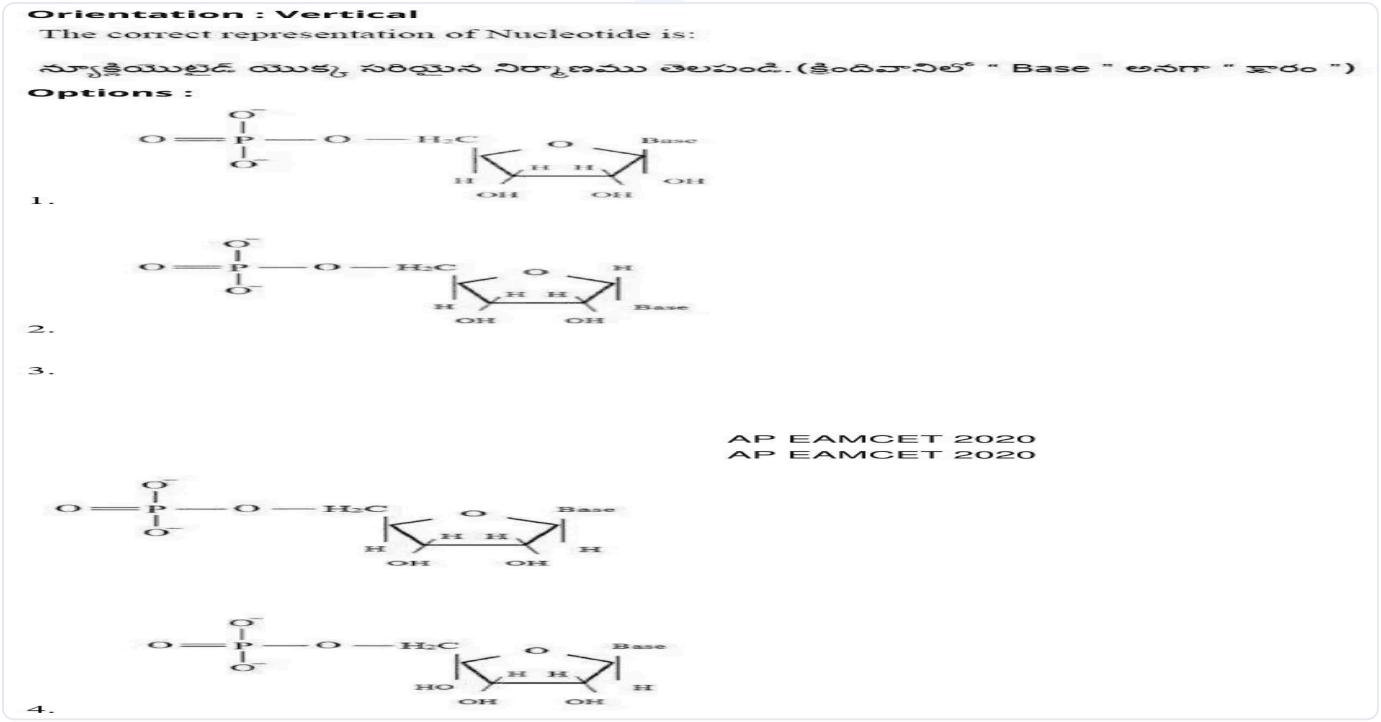
Glycosidic linkage in carbohydrates is called _____

(A) Ester linkage
(B) Ether linkage
(C) Hydrogen bonding
(D) Amide linkage

Answer: (B) Ether linkage · The council's preliminary key

Q141 AP EAMCET 2020 · 22 Sep · Shift 1 MCQ

The correct representation of Nucleotide is:



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q142 AP EAMCET 2020 · 22 Sep · Shift 2 MCQ

Which of the following is not an essential amino acid?

(A) Lysine
(B) Histidine
(C) Valine
(D) Tyrosine

Answer: (D) Tyrosine · The council's preliminary key

Q143 AP EAMCET 2020 · 21 Sep · Shift 1 MCQ

Which among the following acts as a vitamin?

(A) Aspartic acid
(B) Ascorbic acid
(C) Saccharin acid
(D) Adipic acid

Answer: (B) Ascorbic acid · The council's preliminary key

Q144 AP EAMCET 2020 · 21 Sep · Shift 2 MCQ

DNA consists of two polynucleotide chains. Each chain forms a right-handed spiral with how many bases in one turn of spiral?

(A) 4
(B) 6
(C) 8
(D) 10

Answer: (D) 10 · The council's preliminary key

Q145 AP EAMCET 2020 · 21 Sep · Shift 2 MCQ

When glucose reacts with bromine water, the main product is _____

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(A) Acetic acid
(B) Saccharic acid
(C) Glyceraldehyde
(D) Gluconic acid

Answer: (D) Gluconic acid · The council's preliminary key

Q146 AP EAMCET 2020 · 18 Sep · Shift 2 MCQ

Glucose + ? $\longrightarrow$ Sucrose

(A) Glucose
(B) Fructose
(C) Arabinose
(D) Lactase

Answer: (B) Fructose · The council's preliminary key

Q147 AP EAMCET 2020 · 17 Sep · Shift 1 MCQ

Glucose does not react with which of the following

(A) NH_2OH
(B) HCN
(C) Br_2 Water
(D) $NaHSO_3$

Answer: (D) $NaHSO_3$ · The council's preliminary key

Q148 AP EAMCET 2020 · 17 Sep · Shift 2 MCQ

Hydrolysis of proteins gives:

(A) β– Amino acids
(B) γ – Amino acids
(C) δ– Amino acids
(D) α – Amino acids

Answer: (D) α **– Amino acids** · The council's preliminary key

Q149 AP EAMCET 2020 · 17 Sep · Shift 2 MCQ

Fructose reduces tollens reagent due to _____

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(A) Primary alcoholic group
(B) Secondary alcoholic group
(C) Enolization of fructose followed by conversation to aldehyde by base
(D) Asymmetric carbon atoms

Answer: (C) Enolization of fructose followed by conversation to aldehyde by base · The council's preliminary key

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Q150 TS EAMCET 2020 · 14 Sep · Shift 1 MCQ

Considering the facts that
(i) sucrose forms glycosidic linkage between C_1 of glucose and C_2 of fructose, while
(ii) lactose forms glycosidic linkage between C_1 of galactose and C_4 of glucose
Choose the correct statement.

(A) Both sucrose and lactose are reducing sugars
(B) Both sucrose and lactose are non-reducing sugars
(C) Sucrose is reducing sugar and lactose is non-reducing sugar
(D) Lactose is reducing sugar and sucrose is non-reducing sugar

Answer: (D) Lactose is reducing sugar and sucrose is non-reducing sugar · Official TGCHE final key

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Q151 TS EAMCET 2020 · 14 Sep · Shift 2 MCQ

Which of the following statements support the cyclic form for glucose?
(i) It doesn't give Schiff's test
(ii) It is found to exist in two different crystalline forms
(iii) It oxidizes with nitric acid to give saccharic acid
(iv) Pentaacetate of glucose doesn't react with hydroxylamine

(A) (i), (ii) and (iv) only
(B) (i), (iii) and (iv) only
(C) (ii) and (iii) only
(D) (i), (ii) and (iii) only

Answer: (A) (i), (ii) and (iv) only · Official TGCHE final key

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Q152 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

Which of the following are reducing sugars?
I) Sucrose
II) Ribose
III) Lactose
IV) Fructose

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(A) I, II only
(B) II, III, IV only
(C) II, III only
(D) I, II, IV only

Answer: (B) II, III, IV only · Official TGCHE final key

Q153 TS EAMCET 2020 · 11 Sep · Shift 1 MCQ

The number of six and five membered rings present in norethindrone (a synthetic progesterone) are respectively

(A) 2 and 2
(B) 3 and 1
(C) 3 and 3
(D) 3 and 2

Answer: (B) 3 and 1 · Official TGCHE final key

Q154 TS EAMCET 2020 · 11 Sep · Shift 2 MCQ

Xerophthalmia disease is caused by the deficiency of

(A) Vitamin K
(B) Vitamin B2
(C) Vitamin B6
(D) Vitamin A

Answer: (D) Vitamin A · Official TGCHE final key

Q155 TS EAMCET 2020 · 10 Sep · Shift 1 MCQ

Amino acids containing heterocyclic ring are
(i) Histidine (ii) Valine (iii) Arginine (iv) Proline

(A) i, iv
(B) ii, iii
(C) i, iii
(D) ii, iv

Answer: (A) i, iv · Official TGCHE final key

Q156 TS EAMCET 2020 · 10 Sep · Shift 2 MCQ

Choose the correct zwitter ionic form for aspartic acid

Question Number : 154 Question Id : 719650634 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical
Correct Marks : 1 Wrong Marks : 0

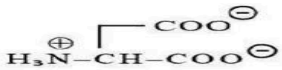
Choose the correct zwitter ionic form for aspartic acid

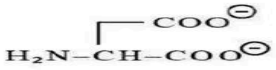
ఎస్పార్టిక్ ఆమ్లమునకు సరియైన జ్వట్టర్ (ద్విస్వభావ) అయానిక్ రూపమును గుర్తింపుము?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · Official TGCHE final key

Q157 TS EAMCET 2020 · 9 Sep · Shift 1 MCQ

Insulin and glucogen, which are responsible to maintain the blood glucose level, fall under

(A) Antibodies
(B) Harmones (sic)
(C) Enzymes
(D) Transport agents

Answer: (B) Harmones (sic) · Official TGCHE final key

Q158 TS EAMCET 2020 · 9 Sep · Shift 2 MCQ

Starch, when boiled with dilute sulphuric acid under high pressure, gives compound A. On prolonged heating with hydroiodic acid, A gives compound B. What is the compound B?

(A) $CH_3 - (CH_2)_4 - CH_3$
(B) $HO - CH_2 - (CHOH)_4 - CHO$
(C) $HOOC - (CHOH)_4 - COOH$
(D) $HO - CH_2 - (CHOH)_4 - COOH$

Answer: (A) $CH_3 - (CH_2)_4 - CH_3$ · Official TGCHE final key

Q159 TS EAMCET 2019 · 6 May · Shift 1 MCQ

Find the reagent that oxidises glucose into saccharic acid?

(A) Br_2, H_2O
(B) HI, Δ
(C) HNO_3, H_2O
(D) HCN

Answer: (C) HNO_3, H_2O · Official TGCHE final key

Q160 TS EAMCET 2019 · 4 May · Shift 1 MCQ

Among the following B group vitamins, the deficiency of which one results in convulsions

(A) B_6
(B) B_{12}
(C) B_1
(D) B_2

Answer: (A) B_6 · Official TGCHE final key

Q161 TS EAMCET 2019 · 4 May · Shift 2 MCQ

The product(s) formed when glucose reacts with a strong oxidising agent like HNO_3 is/are

(A) $COOH(CHOH)_4COOH$
(B) CO_2, H_2O
(C) $COOH(CHOH)_4CHO$
(D) CO, CO_2, H_2O

Answer: (A) $COOH(CHOH)_4COOH$ · Official TGCHE final key

Q162 TS EAMCET 2019 · 3 May · Shift 1 MCQ

Which of the following are reducing sugars?
(A) Sucrose (B) Maltose (C) Lactose (D) Fructose

(A) A, B, C
(B) A, B, D
(C) A, C, D
(D) B, C, D

Answer: (D) B, C, D · Official TGCHE final key

Q163 TS EAMCET 2019 · 3 May · Shift 2 MCQ

The enzyme responsible for the convension of proteins to α-amino acids is

(A) Pepsin
(B) Trypsin
(C) Maltase
(D) Amylase

Answer: (B) Trypsin · Official TGCHE final key

Q164 AP EAMCET 2019 · 23 Apr · Shift 1 MCQ

Which of the following statements are correct?
(A) A tripeptide has two peptide bonds
(B) A pentapeptide contains five amino acids
(C) Nucleotide is a product of base and sugar
(D) In cellulose, β-glycosidic linkages are present

(A) B, C, D
(B) C, D only
(C) A, B, D
(D) A, C only

Answer: (C) A, B, D · Official APSCHE final key

Q165 AP EAMCET 2019 · 22 Apr · Shift 1 MCQ

Which one of the following enzymes converts proteins into aminoacids?

(A) Maltase
(B) Pepsin
(C) Trypsin
(D) Zymase

Answer: (C) Trypsin · Official APSCHE final key

Q166 AP EAMCET 2019 · 22 Apr · Shift 1 MCQ

The general structural formula of α-Amino acid is *(see the figure above)*. The group R in tryptophan (X) and histidine (Y) are respectively

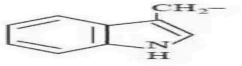
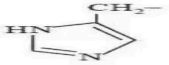
EdLoop EAPCET

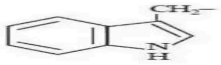
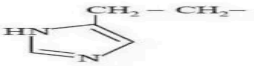
Question Number : 152 Question Id : 1874634472 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

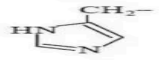
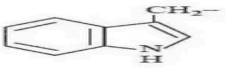
The general structural formula of α-Amino acid is $H_2N-\underset{R}{\overset{COOH}{|}}-H$. The group R in tryptophan (X) and histidine (Y) are respectively

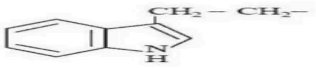
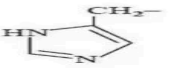
α-ఎమినో ఆమ్లం యొక్క సాధారణ నిర్మాణాత్మక ఫార్ములా $H_2N-\underset{R}{\overset{COOH}{|}}-H$ ట్రిప్టోఫాన్ (X). హిస్టిడిన్ (Y) లలో R సమూహాలు వరుసగా

Options :

1. X  Y 

2. X  Y 

3. X  Y 

4. X  Y 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · Official APSCHE final key

Q167 AP EAMCET 2019 · 22 Apr · Shift 2 MCQ

Match the following.

List - I

A) Ascorbic acid

B) Vitamin D

C) Vitamin B_1

D) Vitamin E

List - II

I) Rickets

II) Muscular weakness

III) Convulsions

IV) Amla

V) Beri beri

The correct answer is

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

Answer: (D) A-IV, B-I, C-V, D-II · Official APSCHE final key

Q168 AP EAMCET 2019 · 21 Apr · Shift 1 MCQ

Identify the correct set from the following.
Each option is a row under the column headings: Vitamin | Source | deficiency disease

(A) B_6 | Milk | convulsions
(B) K | Leaf vegetables | anaemia
(C) C | Fish | scurvy
(D) D | Citrus fruits | ricket (sic)

Answer: (A) B_6 | Milk | convulsions · Official APSCHE final key

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Q169 AP EAMCET 2019 · 21 Apr · Shift 2 MCQ

Identify the correct statements from the following.
I) When DNA is hydrolysed adenine and thymine are obtained in equal quantities.
II) When RNA is hydrolysed adenine and uracil are obtained in equal quantities.
III) Amylose is branched polymer with $\alpha 1 \rightarrow 4$ and $\alpha 1 \rightarrow 6$ glycosidic linkages.
IV) Addison disease is due to the abnormal functioning of adrenal cortex.

(A) I, II, III only
(B) I, II, III, IV
(C) I, II, IV only
(D) I, IV only

Answer: (D) I, IV only · Official APSCHE final key

Q170 AP EAMCET 2019 · 20 Apr · Shift 1 MCQ

Identify the correct set of monosaccharides present in sucrose (X), lactose (Y) and maltose (Z).

(A) X: glucose, fructose; Y: galactose, glucose; Z: glucose, fructose
(B) X: glucose, fructose; Y: galactose, glucose; Z: glucose, glucose
(C) X: glucose, glucose; Y: galactose, glucose; Z: glucose, glucose
(D) X: galactose, glucose; Y: glucose, fructose; Z: glucose, glucose

Answer: (B) X: glucose, fructose; Y: galactose, glucose; Z: glucose, glucose · Official APSCHE final key

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Q171 AP EAMCET 2019 · 20 Apr · Shift 2 MCQ

Which of the following statements about DNA is **not** correct?

(A) It has a double helix structure
(B) Adenine forms hydrogen bonds with thymine and cytosine forms hydrogen bonds with guanine
(C) The two strands in a DNA molecule are not complementary to each other
(D) It contains the pentose sugar, 2-deoxy ribose

Answer: (C) The two strands in a DNA molecule are not complementary to each other · Official APSCHE final key

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Q172 TS EAMCET 2018 · 7 May · Shift 1 MCQ

Which one of the following statements is correct?

(A) Starch on complete hydrolysis gives Fructose
(B) Lactose on hydrolysis gives Glucose and Fructose
(C) Glucose on slow oxidation to CO_2 and H_2O by enzyme does not liberate energy
(D) Cellulose is not digestible in the human body

Answer: (D) Cellulose is not digestible in the human body · The council's preliminary key

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Q173 TS EAMCET 2018 · 5 May · Shift 1 MCQ

Identify the non-reducing sugar from the following

(A) Maltose
(B) Sucrose
(C) Lactose
(D) Glucose

Answer: (B) Sucrose · The council's preliminary key

Q174 TS EAMCET 2018 · 5 May · Shift 2 MCQ

Which one of the following structures represent amylose?
(see the figure above)

EdLoop EAPCET

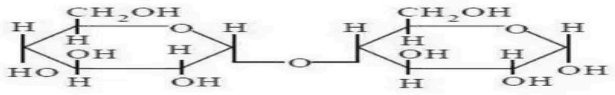
Question Number : 154 Question Id : 4928632394 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

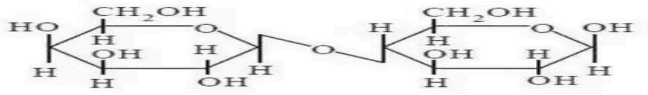
Which one of the following structures represent amylose?

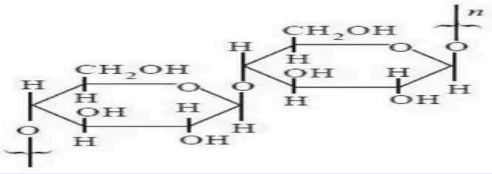
క్రింది నిర్మాణాలలో ఎమైలోజ్‌ను సూచించునది ఏది?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (A) · The council's preliminary key

Q175 TS EAMCET 2018 · 4 May · Shift 1 MCQ

Which of the following carbohydrates has a glycosidic linkage?

(A) Fructofuranose

(B) Glucopyranose

(C) Maltose

(D) β - D - Fructose

Answer: (C) Maltose · The council's preliminary key

Q176 TS EAMCET 2018 · 4 May · Shift 2 MCQ

Which of the following is present in RNA only?

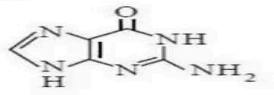
(see the figure above)

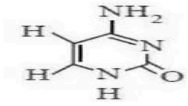
Question Number : 154 Question Id : 4928631914 Question Type : MCQ Option Shuffling : Yes Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical
Correct : 1 Wrong : 0

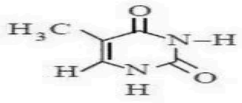
Which of the following is present in RNA only?

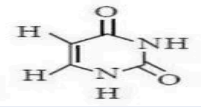
క్రింది వాటిలో RNA లో మాత్రమే ఉండునది ఏది?

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (D) · The council's preliminary key

Q177 AP EAMCET 2018 · 24 Apr · Shift 1 MCQ

Fisher projection formula of L - (--) - glucose is

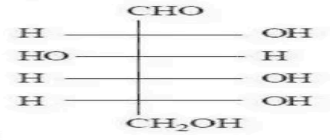
(see the figure above)

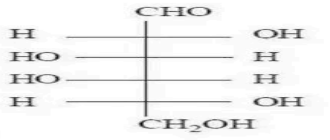
Question Number : 152 Question Id : 4557344472 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

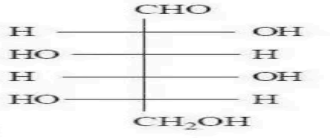
Fisher projection formula of L - (—) - glucose is

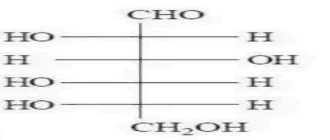
L - (—) - గ్లూకోజ్ ఫిషర్ ప్రక్షేపక ఫార్ములా

Options :

1. 

2. 

3. 

4. 

(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (D) · The council's preliminary key

Q178 AP EAMCET 2018 · 24 Apr · Shift 2 MCQ

Fischer projection formula of D - (-) - fructose is
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (B) · The council's preliminary key

Q179 AP EAMCET 2018 · 23 Apr · Shift 1 MCQ

The type of bond connecting two nucleotides is

(A) Peptide bond
(B) Hydrogen bond
(C) Phosphodiester bond
(D) Glycosidic bond

Answer: (C) Phosphodiester bond · The council's preliminary key

Q180 AP EAMCET 2018 · 23 Apr · Shift 2 MCQ

Reducing saccharides among the following are
Sucrose (1), Ribose (2), Maltose (3), Lactose (4), Cellulose (5)

(A) 2, 4, 5
(B) 1, 3, 4
(C) 2, 3, 5
(D) 2, 3, 4

Answer: (D) 2, 3, 4 · The council's preliminary key

Q181 AP EAMCET 2018 · 22 Apr · Shift 1 MCQ

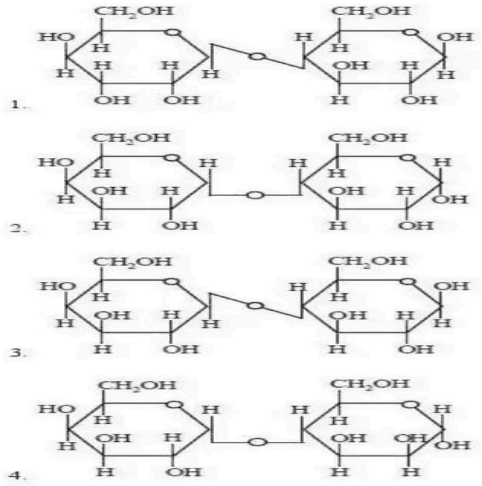
Which one of the following is the structure of lactose ?

Question Number : 152 Question Id : 4557343832 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which one of the following is the structure of lactose ?

క్రింది వాటిలో ఏది లాక్టోజ్ నిర్మాణాన్ని తెలుపుతుంది?

Options :



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (C) · The council's preliminary key

Q182 AP EAMCET 2018 · 22 Apr · Shift 2 MCQ

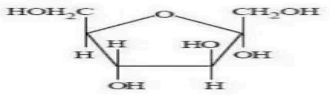
β-D-(-)-Fructofuranose is
(see the figure above)

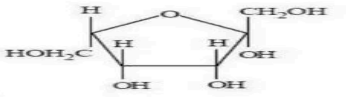
Question Number : 152 Question Id : 4557343992 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

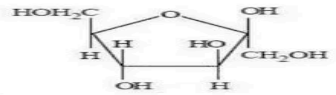
β – D – (–) – Fructofuranose is

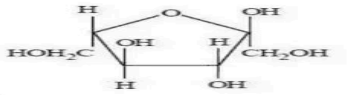
β – D – (–) – ఫ్రక్టోఫ్యూరనోజ్ అనునది

Options :

1. 

2. 

3. 

4. 

(A) *see figure*

(B) *see figure*

(C) *see figure*

(D) *see figure*

Answer: (C) · The council's preliminary key

Q183 TS EAMCET 2017 · 12 May · Offline MCQ

The number of complementary Hydrogen bond(s) between a guanine and cytosine pair is

(A) 2

(B) 1

(C) 4

(D) 3

Answer: (D) 3 · The council's preliminary key

Q184 AP EAMCET 2017 · 26 Apr · Shift 1 MCQ

Identify the statements which are **not** correct from the following

a) Carbohydrates are stored as glycogen in animals

b) In glycylalanine, $-\overset{\overset{O}{\|}}{C}-$ of peptide bond belongs to alanine

c) Base - Sugar - phosphate unit is known as nucleoside

d) Obesity is due to hypothyroidism

The correct answer is

(A) a, c, d
(B) a, d
(C) b, c
(D) b, c, d

Answer: (C) b, c · The council's preliminary key

Q185 AP EAMCET 2017 · 26 Apr · Shift 2 MCQ

Which of the following statements are correct ?
a. Deficiency of vitamin K results in increased blood clotting time.
b. The sources of vitamin B_2 are milk and liver
c. Hexapeptide has six peptide bonds
d. Improper functioning of adrenal cortex results in hypoglycemia.

(A) b, c
(B) a, c
(C) b, d
(D) a, b, d

Answer: (D) a, b, d · The council's preliminary key

Q186 AP EAMCET 2017 · 25 Apr · Shift 1 MCQ

Which of the following statements are correct?
a) In maltose, C-1 of one α-D-glucose is linked to C-4 of second α-D-glucose
b) Quaternary structure of protein represents spatial arrangement of two or more polypeptide chains with respect to each other
c) Nucleotide units in a nucleic acid are joined to each other through a phosphodiester linkage
d) Abnormally low level of thyroxine leads to hypothyroidism

(A) a, b, c
(B) a, b, c, d
(C) b, c
(D) a, c, d

Answer: (B) a, b, c, d · The council's preliminary key

Q187 AP EAMCET 2017 · 25 Apr · Shift 2 MCQ

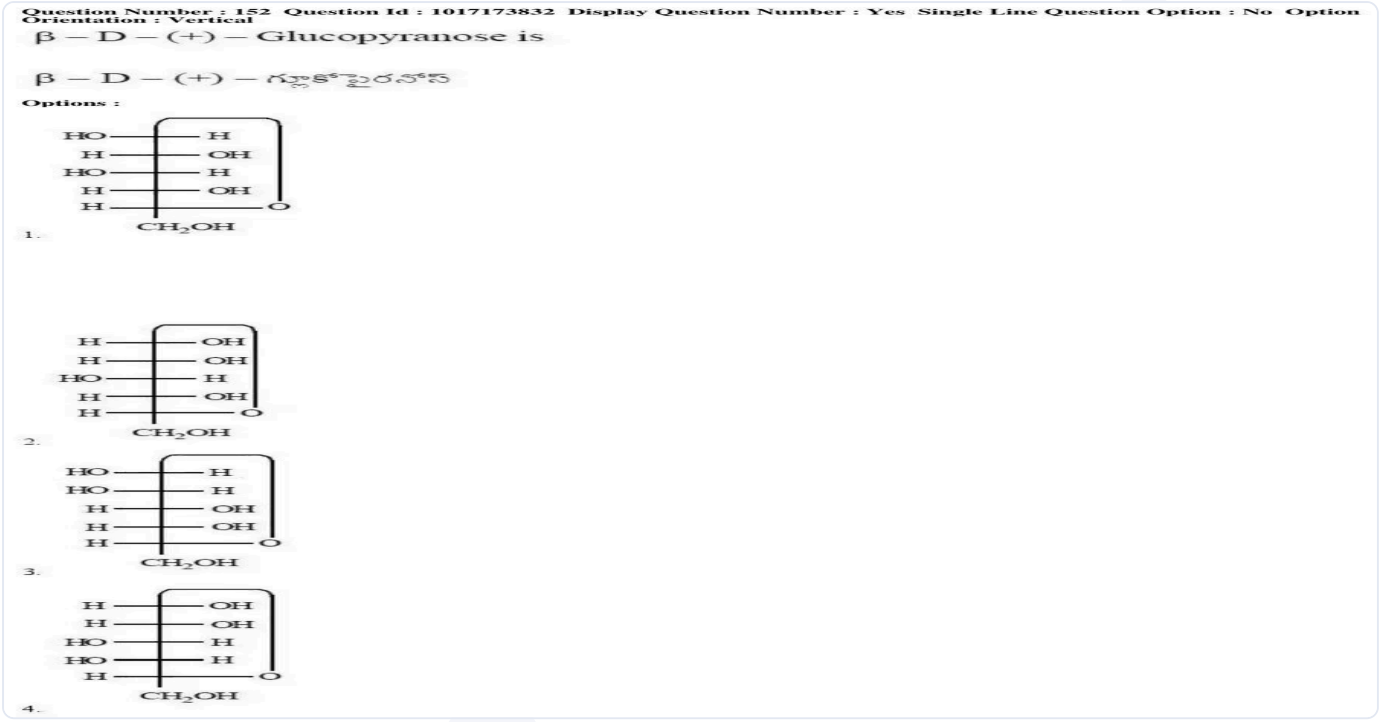
Match the following
List - I: a) Vitamin E b) Vitamin K c) Vitamin B_{12} d) Vitamin B_2
List - II: i) Meat ii) Sunflower oil iii) Egg white iv) Exposure to sunlight v) Green leafy vegetables
The correct answer is

(A) a-iii, b-ii, c-iv, d-i
(B) a-ii, b-v, c-i, d-iii
(C) a-i, b-iii, c-ii, d-v
(D) a-iv, b-i, c-v, d-ii

Answer: (B) a-ii, b-v, c-i, d-iii · The council's preliminary key

Q188 AP EAMCET 2017 · 24 Apr · Shift 1 MCQ

β-D-(+)-Glucopyranose is
(see the figure above)



(A) *see figure*
(B) *see figure*
(C) *see figure*
(D) *see figure*

Answer: (A) · The council's preliminary key

Q189 AP EAMCET 2017 · 24 Apr · Shift 2 MCQ

The general formula of a α - amino acid is
$H_2N - CH - COOH$ with R on the CH
(see the figure above)
Identify $-$R in serine

Question Number : 152 Question Id : 1017173992 Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The general formula of a α - amino acid is

α - ఎమినో ఆమ్లం సాధారణ ఫార్ములా

$$H_2N-\underset{\displaystyle R}{\underset{|}{CH}}-COOH$$

Identify –R in serine

సెరైన్‌లో –R ను గుర్తించుము

Options :

1. $-CH_2SH$
2. $-CH_2OH$
3. $-\underset{\displaystyle OH}{\underset{|}{CH}}-CH_3$
4. $-CH_2-\underset{\displaystyle O}{\underset{\|}{C}}-NH_2$

(A) $-CH_2SH$

(B) $-CH_2OH$

(C) $-CH(OH)-CH_3$

(D) $-CH_2-C(=O)-NH_2$

Answer: (B) $-CH_2OH$ · The council's preliminary key

Q190 TS EAMCET 2016 · 15 May · Offline MCQ

Hormone that maintains the blood glucose level within the limit is :

(A) Thyroxine

(B) Insulin

(C) Testosterone

(D) Epinephrine

Answer: (B) Insulin · Official TGCHE final key

Q191 AP EAMCET 2016 · 29 Apr · Offline MCQ

Observe the following statements

i) Sucrose has glycosidic linkage

ii) Cellulose is present in both plants and animals

iii) Lactose contains D-galactose and D-glucose units

The correct statements are

(A) (i), (ii), (iii)
(B) (i), (ii)
(C) (ii), (iii)
(D) (i), (iii)

Answer: (D) (i), (iii) · The council's preliminary key

Q192 AP EAMCET 2014 · 22 May · Offline MCQ

Lactose is a disaccharide of _____.

(A) α-D-Glucose and α-D-Fructose
(B) β-D-Glucose and β-D-Galactose
(C) α-D-Glucose and β-D-Ribose
(D) α-D-Glucose and β-D-Galactose

Answer: (B) β-D-Glucose and β-D-Galactose · The council's preliminary key

Q193 AP EAMCET 2013 · 10 May · Offline MCQ

The number of hydrogen bonds between Guanine & Cytosine; and between Adenine & Thymine in DNA is :

(A) 1, 2
(B) 3, 2
(C) 3, 1
(D) 2, 1

Answer: (B) 3, 2 · The council's preliminary key

Q194 AP EAMCET 2012 · 12 May · Offline MCQ

Which one of the following is used in the preparation of cellulose nitrate ?

(A) KNO_3
(B) HNO_3
(C) KNO_2
(D) HNO_2

Answer: (B) HNO_3 · Official APSCHE final key

Q195 AP EAMCET 2012 · 12 May · Offline MCQ

The site of action of insulin is

(A) Mitochondria
(B) Nucleus
(C) Plasma membrane
(D) DNA

Answer: (C) Plasma membrane · Official APSCHE final key

Q196 AP EAMCET 2011 · 8 May · Offline MCQ

Proteins are :

(A) Polysaccharides
(B) Polynucleotides
(C) Polypeptides
(D) Triglycerides

Answer: (C) Polypeptides · The council's preliminary key

Q197 AP EAMCET 2011 · 8 May · Offline MCQ

Scurvy is caused by the deficiency of which vitamin ?

(A) C
(B) B_1
(C) D
(D) B_2

Answer: (A) C · The council's preliminary key

Q198 AP EAMCET 2010 · 30 May · Offline MCQ

The AT/GC ratio in human beings is :
(where A = adenine, T = thymine, G = Guanine, C = Cytosine)

(A) 1
(B) 1.52
(C) 9.3
(D) 2

Answer: (B) 1.52 · Official APSCHE final key

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