Part A

Question 1 (Select the Correct Option)

Questions	2nd PUC Chemistry Answer Key 2025 Karnataka
1. Incorrect statements regarding vitamins.	(b) Most of the groups contain amino groups
2. Camphor in nitrogen gas, is an example of	(c) gaseous solution
3. Which of the following is not a subdivision of structural isomerism?	(d) Geometrical isomerism
4. Cumene hydroperoxide on hydrolysis with dilute acid gives	(c) phenol and acetone
5. An example for pseudo-first-order reaction is	(c) inversion of cane sugar
6. The TUPAC name of	(a) sp 3
7. The hytridisation of Nato in trimethyl amines	(c) 3-bromobutanal
8. Select non-semiconductor from the following	(c) gallium arsenid

9. Given below are two stalements: Statement : Ammonolysis of alkyl halides has the disadvantage of yielding a midure of primary, secondary, tertiary amines and quaternary ammonium salt. Statement II: Tertiary amine is obtained as a major product by taking Large excess of ammonia in ammonolysis of alkyl halides. In the light of the above statements, choose the appropriate answer from the options given below:	(b) Both Statement I and Statement II are correct
10. The structure of pentacarbonyliron(0) is.	(d) square pyramidal

11. Two compounds 'A' and 'B' were being tested for their boiling points. It was observed that 'A' started boiling after 'B', when both were subjected to same conditions. If the compound 'B' is acetone, which of the following can be compound 'A'?	(b) Propan-1-ol
12. Select the correct order of melting points of isomeric dichlorobenzenes.	(c) p-dichlorobenzene > o-dichlorobenzene >m-dichlorobenzene
13. Match the following with correct options	(d) i (C) ii (A) iii (D) iv (B)
14. Which of the following explains the increase in the reaction rate by a catalyst?	(c) catalyst provides an alternative pathway by reducing the active energy between the reactants and products.

15. Sufficient amount of 2-methylpropan-2-ol heated with 20% phosphoric acid at 358 K gives main product 'X' with the elimination of water and tert-butyl alcohol undergoes dehydration when it is passed over heated copper at 573 K gives Y Pick the correct staternent regarding X and Y.	(c) The boiling point of 'X 'is lesser than the boiling point of 'Y'.

Question 2 (Fill in the Blanks)

Questions	2nd PUC Chemistry Answer Key 2025 Karnataka
16. Arrhenius factor is also called _____ factor	Pre-exponential
17. Paramagnetism arised from the presence of _____electrons	Unpaired
18. _____ is one of the most common freon in industrial use.	CCl 2 F 2

19. The electrophilic attack of H,O" on alkene forms _____	Carbocation
20. The hormone glucorticoids control the _____ metabolism	Carbohydrate

Part B Question 3

Questions	2nd PUC Chemistry Answer Key 2025 Karnataka
21. Explain Wurtz reaction with suitable chemical equation.	The general chemical equation is: 2R-X + 2Na → R-R + 2NaX, where R represents an alkyl group and X a halogen.
22. Molarity (M), molality (m) and mole fraction (x) are some methods for expressing concentration of solutions. Which of these are temperature dependent? Give Reason.	mole fraction: it is the ratio of number of moles of particular component through the total number of moles of all the components present in the solution.
23. What are non essential amino acids? Name an optically inactive naturally occurring α-amino acid	Non-essential amino acids are those the body can synthesize, while the only naturally occurring, optically inactive α-amino acid is glycine.

24. Write any two characteristic properties of interstitial compounds	(I) They have high melting points, higher than those of pure metals. (II) They are very hard.
25) While separating a mixture of ortho and para nitrophenols by s distillation, name the isomer which will be steam volatile. Give reason.	In a mixture of ortho- and para-nitrophenols, ortho-nitrophenol (o-nitrophenol) will be steam volatile because of the presence of intramolecular hydrogen bonding (chelation) while p-nitrophenol has intermolecular hydrogen bonding