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Sample MCQs for students of Semester IV Organic Chemistry

- Q.1 Which of the following statement is correct in case of Cascade reaction?
 - A. It is a chemical process that comprises at least two consecutive reactions
 - B. It is the chemical process that involve single step
 - C. Isolation of intermediate is required
 - D. Reaction condition is change among the consecutive steps.
- Q.2 Which of the following statement is not correct in case of click chemistry?
 - A. It is a class of biocompatible small molecules
 - B. It generates maximum and offensive byproducts
 - C. It allows joining of substrates of choice with specific biomolecules
 - D. It is useful in detection, localization and qualification of biomolecules
- Q.3 The product in the following sequence is

+ H Ph
$$\frac{O}{H_2N}$$
 NH₂

Q.4 The product in the following sequence is

Q.5 The reaction given below is an example of which of the following reaction.

A. Ugi reaction	B. Biginelli	C. Passerini	D. Strecker
	reaction	reaction	reaction

Q.6 Which of the following can be used for protection of carbonyl group?

- A. CH₂OH-CH₂OH/H
- B. CH₂OH-CH₂-CH₂OH/H
- C. $HS-(CH_2)_3-SH$
- D. CH₂OH-CH₂-CHO.
- Q.7 Which of the following statements best describes retrosynthesis?
 - A. The reaction conditions required to convert the product of a reaction back to the original starting materials
 - B. A strategy used to design a synthesis of a target molecule by working back from the target to simple starting materials
 - C. The design of a synthetic scheme using cheap, traditional reagents, rather than expensive modern reagents
 - D. The design of reaction conditions such that an equilibrium reaction is pushed towards the products rather than the starting materials.
- Q.8 Which of the following statements best describes a synthon?
 - A. synthetic reagent used in a reaction
 - B. A key intermediate in a reaction sequence
 - C. A transition state involved in a reaction mechanism
 - D. A hypothetical structure that would result in a given reaction if it existed
- Q.9 Deficiency of which one of the following causes knock-knee, bow legs, and pigeon chest in children?
 - A. Vitamin A
 - B. Vitamin B2
 - C. Vitamin D
 - D. Vitamin C
- Q.10 Which of the following nutrient deficiency causes megaloblastic anaemia?
 - A. Folic acid
 - B. Niacin
 - C. Pyridoxine
 - D. cobalamin
- Q.11 Consider the following vitamins
 - I) Niacin II) Pyridoxine III) Riboflavin IV) Thiamine

Which of these are water-soluble vitamins —

- A. I, II, III
- B. II, III, IV
- C. I and IV
- D. I, II, III, IV
- Q.12 Which of these must be avoided in any presentation?
 - A. Proper grammar
 - B. Complex words
 - C. Short sentences
 - D. Clear voice
- Q.13 Which of these is not important in an oral presentation?
 - A. Words
 - B. Body language
 - C. Gestures
 - D. The number of people as audience

- Q.14 Which of these is the best way to establish a proper rapport with audience?
 A. Pointing a finger
 B. Making eye contact
 C. Waving your hands
 D. Standing erect.
- Q.15 Chitin consist of
 - A. N-acetyl muramic acid
 - B. N-acetyl glucosamine
 - C. D-glucose units
 - D. N-acetyl muramic acid and N-acetyl glucosamine
- Q.16 The water-soluble photosynthetic pigment is
 - A. Chlorophyll a
 - B. Xanthophyll
 - C. Anthocyanin
 - D. Chlorophyll b
- Q.17 The lipids most likely functions as
 - A. a membrane component
 - B. an energy storage molecule
 - C. a sex hormone
 - D. a vitamin required for vision
- Q.18 What type of guest would a crown ether (essentially a cyclic poly ether) be able to bind?
 - A. Zwitterions (a molecule with both a positive and negative charge)
 - B. Anions
 - C. Cations
 - D. Neutral species
- Q.19 Supramolecular chemistry is primarily concerned with...
 - A. Non-covalent bonding
 - B. Atomic forces
 - C. Covalent bonding
 - D. d) Thermodynamics
- Q.20 Which of the following is used for making rechargeable batteries?
 - A. Polypyrrole
 - B. Polyester
 - C. Polyaniline
 - D. Polyacrylonitrile
- Q.21 Which of the following is not true for intrinsically conducting polymers?
 - A. Low conductivities
 - B. Poor mechanical strength
 - C. Improcessability
 - D. Good storage stability
- Q.22 Which of the following is not an application of conducting polymers?
 - A. Rechargeable batteries
 - B. Analytical sensors
 - C. Electronics
 - D. Adhesives

Q.23	The literature review will examine	
	a) Only opinionsb) Only one side of the main argument.c) Only factsd) All aspects of a topic.	
Q.24	The starting point for a literature search is:	
	 a) Tertiary data b) Primary data c) Secondary data d) Some other data 	
Q.25	Which of these will not help you to decide whether a publication is reputable? a) Citation rate b) Audience c) Advertising inside d) Importance of peers	
Q.26	Temperature (°C) is examplevariable a) Nominal variable b) Ordinal variable c) Interval variable d) Ratio	
Q.27	The most common data point is called a) Mean b) Mode c) Median d) Variance	
Q.28	Which of these is not important in an oral presentation? a) Words b) Body language c) Gestures d) The number of people as audience.	
Q.29	Which of these is the best way to establish a proper rapport with audience? a) Pointing a finger b) Making eye contact c) Waving your hands d) Standing erect.	
Q.30	Which of these must be avoided in any presentation? a) Proper grammar	

- b) Complex words
- c) Short sentences
- d) Clear voice
- Q.31 What is full form of MSDS Sheet?
 - a) Material safety data sheet
 - b) Material service data sheet
 - c) Molecular safety data sheet
 - d) Manufacturer service data sheet