



**CHEMISTRY**

**JEE MAIN AND ADVANCED**

**MOCK TEST 40**

**Example**

1. Which of the following carbohydrate is a monosaccharide?

A. Sucrose

B. Maltose

C. Ribose

D. Glycogen

**Answer: C**



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2. Glucose on prolonged heating with HI, forms

A. n-Pentane

B. n-Hexane

C. Iodopentane

D. Iodohexane

**Answer: B**



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3. The statement which is incorrect with respect to glucose is

- A. Reduces Fehling's solution and Tollen's reagent
- B. Reacts with hydroxylamine to form an oxime
- C. Adds a molecule of hydrogen cyanide to give cyanohydrin
- D. Gives yellow ppt with  $I_2$  in alkali

**Answer: D**



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4. Acetylation of glucose with acetic anhydride gives

- A. Glucose hexaacetate
- B. Glucose pentaacetate
- C. Glucose butaacetate
- D. Glucose diacetate

**Answer: B**



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5. Oxidation of glucose with bromine water and nitric acid yields respectively

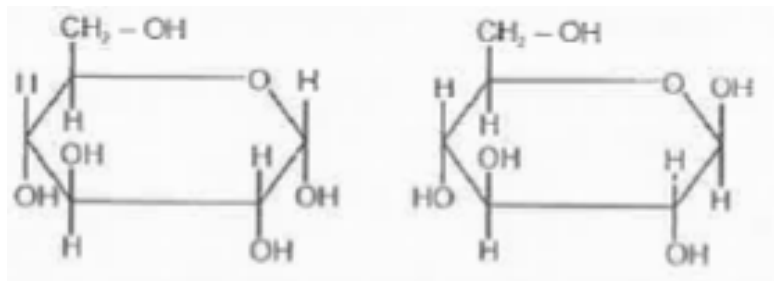
- A. Gluconic acid and Saccharic acid
- B. Saccharic acid and Gluconic acid
- C. Gluconic acid and Gluconic acid
- D. Saccharic acid and Saccharic acid

**Answer: A**



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6. Two cyclic hemiacetal forms of glucose given below are called as



- A. Enantiomers
- B. Optical antipodes
- C. Anomers
- D. Tautomers

**Answer: C**



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7. Correct statement with respect to sucrose is

A. It is dextrorotatory and gives

dextrorotatory glucose and

laevorotatory fructose on hydrolysis

B. It is laevorotatory and gives

laevorotatory glucose and

dextrorotatory fructose on hydrolysis



C. It is dextrorotatory and gives

levorotatory glucose and dextrorotatory

fructose on hydrolysis

D. It is laevorotatory and gives

dextrorotatory glucose and

laevorotatory fructose on hydrolysis

**Answer: A**



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8. IUPAC name of serine is

A. 2-Aminoethanoic acid

B. 2-Aminopripanoic acid

C. 2-Amino-3-hydroxypropanoic acid

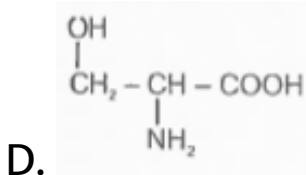
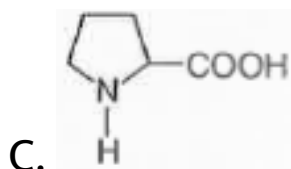
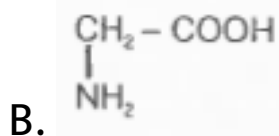
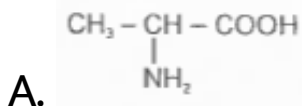
D. 2-Amino-3-mercaptopropanoic

**Answer: C**



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9. Identify the optically inactive amino acid



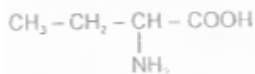
**Answer: B**

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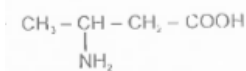
10. The correct structure of product, D formed in the following sequence of reactions is



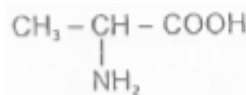
A.



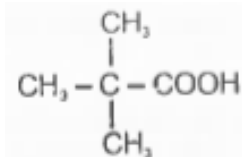
B.



C.



D.

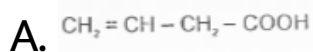


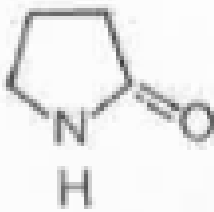
**Answer: B**



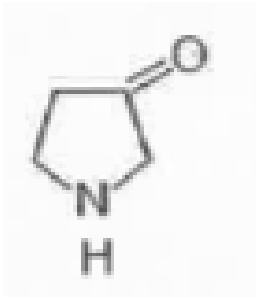
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**11.** Product obtained by heating 4-Amino butanoic acid





C.



D.

**Answer: C**



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**12. Bakelite is an example of**

- A. Linear polymer
- B. Branched chain polymer
- C. Cross linked polymer
- D. Thermoplastic polymer

**Answer: C**



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**13. Which among the following is a polyester?**

- A. Teflon

B. PVC

C. Nylon 6, 6

D. Terylene

**Answer: D**



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**14. Ziegler-Natta catalyst is**

A. Triethylaluminium and titanium  
trichloride



B. Triethylaluminium and titanium  
tetrachloride

C. Trimethylaluminium and titanium  
tetrachloride

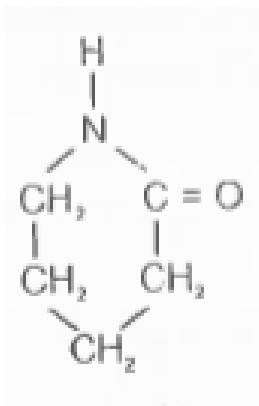
D. Trimethylaluminium and titanium  
trichloride

**Answer: B**

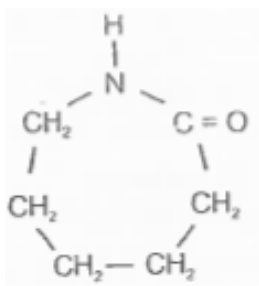


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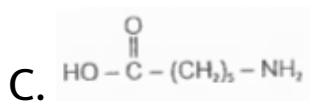
## 15. Monomer unit of Nylon 6 is



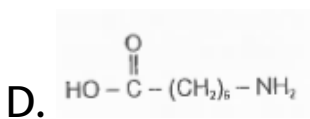
A.



B.



C.



D.

**Answer: B**



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**16.** Poly Beta-hydroxybutyrate-co-Beta-hydroxy valerate (PHBV) is obtained by the copolymerisation of

A. 2-hydroxybutanoic acid and 3-hydroxypentanoic acid

B. 3-hydroxybutanoic acid and 2-hydroxypentanoic acid

C. 3-hydroxybutanoic acid and 3-hydroxypentanoic acid

D. 3-aminobutanoic acid and 3-hydroxypentanoic acid

**Answer: C**

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**17. Incorrect statement among the following is**

- A. PHBV undergoes bacterial degradation in the environment
- B. Nylon 2-nylon 6 is a copolymer of glycine and amino caproic acid
- C. Nylon 2-nylon 6 is a non-biodegradable polymer
- D. PHBV is used in orthopaedic devices

**Answer: C**



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Name of polymers	Uses
(a) PVC	(i) Manufacture of paints and lacquers
(b) Glyptal	(ii) Making of unbreakable cups and laminated sheets
(c) Bakelite	(iii) Making of combs, electrical switches
(d) Urea-formaldehyde resin	(iv) Manufacture of rain coats, water pipes

18.

The correct match is

A. a - ii, b - i, c - iii, d - iv

B. a - iv, b - i, c - iii, d - ii

C. a - iv, b - iii, c - i, d - ii

D. a - iv, b - ii, c - iii, d - i

**Answer: B**



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**19.** Drugs that bind to the receptor site and inhibit its natural function are called

A. Agonists

B. Antagonists

C. Co-factors

D. Allosterics

**Answer: B**



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**20.** Cimetidine (Tegamet) and Ranitidine (Zantac) drugs are

- A. Analgesics
- B. Tramquilizers
- C. Antacids
- D. Antidepressants



**Answer: C**



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**21.** Among the following, indentify the pair of antihistamine drugs

A. Brompheniramine and Terfenadine

B. Iproniazid and Phenelzine

C. Chlordiazepoxide and Equanil

D. Veronal and Valium

**Answer: A**



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**22.** The class of chemical compounds used for the treatment of stress are called

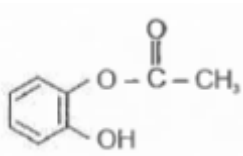
- A. Analgesics
- B. Tramquilizers
- C. Antihistamines
- D. Antibiotics

**Answer: B**

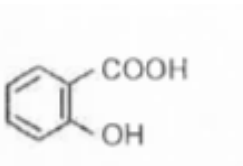


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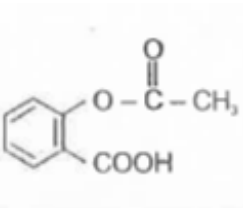
**23.** Correct structure of Aspirin is



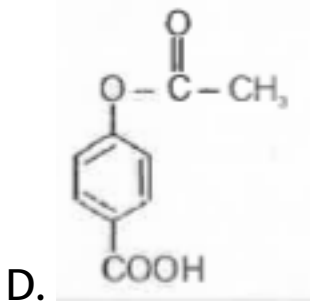
A.



B.



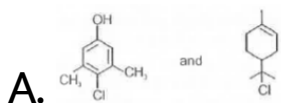
C.

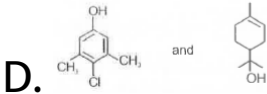
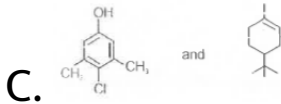
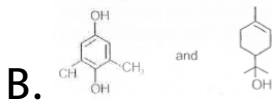


**Answer: C**

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24. Dettol, commonly used antiseptic is a mixture of





**Answer: D**

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**25.** Consider the following statements -

- (i) Antiseptics are chemical substances which prevent the growth of microorganisms,
- (ii) Boric acid in dilute aqueous solution is

weak antiseptic for eyes,

(iii) 0.2 percent solution of phenol is disinfectant

(iv) Iodine is a powerful antiseptic, The correct statement (s)

A. (i) and (ii)

B. (i), (ii) and (iv)

C. (i), (ii) and (iii)

D. (iii) and (iv)

**Answer: B**



26. Penicillin is an example of

A. Analgesic

B. Antiseptic

C. Antibiotic

D. Anaesthetic

**Answer: C**



27. Drugs which produce insensibility to the vital functions of nervous system are known as

- A. Antibiotics
- B. Analgesics
- C. Anaesthetics
- D. Antipyretics

**Answer: C**



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**28.** The incorrect statement with respect to saccharin is

- A. Artificial sweetening agent
- B. About 550 times as sweet as cane sugar
- C. Excreted from the body in urine
- D. Chemical name is para-sulphobenzimide

**Answer: D**



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29. Identify the false characteristic regarding detergents

A. Anionic detergents are sodium salts of sulphonated long chain hydrocarbons

B. In anionic detergents, the cationic part of detergent is involved in the cleansing action

C. Cationic detergents are quaternary ammonium salts of amines with bromides as anions

D. Liquid dishwashing detergents are non-ionic detergents

**Answer: B**



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**30.** Norethindrone is an example of synthetic progesterone derivative which is most widely used as

A. Antiseptics

B. Antifertility drugs

C. Antibiotics

D. Analgesics

**Answer: B**



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