

CLASS: XII  
SUB: CHEMISTRY

TIME: 1:30Hrs

**I. Choose the correct answer****10x1=10**

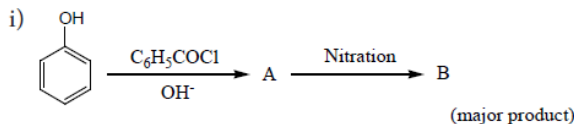
- The atomic radius of 4d series Zr is.  
a) 132 pm b) 146 pm c) 145 pm d) 155 pm
- Which of the following d block element has half filled penultimate d sub shell as well as half filled valence sub shell?  
a) Cr b) Pd c) Pt d) none of these.
- Which of the following is called as bayer's reagent  
a)  $\text{KMnO}_4$  b)  $\text{MnO}_4$  c)  $\text{MnSO}_4$  d)  $\text{H}_2\text{SO}_4$
- PKa Value of o – cresol is.  
a) 11.2 b) 12.5 c) 10.9 d) 10.2
- Natural rubber has a) alternate cis- and trans-configuration b) random cis- and trans-configuration c) all cis-configuration d) all trans-configuration
- Nylon is an example of  
a) polyamide b) polythene c) polyester d) poly saccharide
- Which of the following is a co-polymer?  
a) Orlon b) PVC c) Teflon d) PHBV
- Which of the following is an analgesic? a) Streptomycin b) Chloromycetin c) Aspirin d) Penicillin
- Antiseptics and disinfectants either kill or prevent growth of microorganisms. Identify which of the following statement is not true.  
a) dilute solutions of boric acid and hydrogen peroxide are strong antiseptics. b) Disinfectants harm the living tissues.  
c) A 0.2% solution of phenol is an antiseptic while 1% solution acts as a disinfectant. d) Chlorine and iodine are used as strong disinfectants.
- Drugs that bind to the receptor site and inhibit its natural function are called  
a) antagonists b) agonists c) enzymes d) molecular targets

10.

**.Answer the following Questions (Q.no 17 is compulsory)****5X2=10****11.** The  $E^0_{\text{M}^{2+}/\text{M}}$  value for copper is positive. Suggest a possible reason for this.**12.** Define Hume-Rothery rule**13.** Give the Structure of OH.**14.** Write Reaction of Glycerol

15

Complete the following reactions



16. Draw the major product formed when 1-ethoxyprop-1-ene is heated with one equivalent of HI

17. Convert crotonaldehyde to Crotyl alcohol.

III. Answer the following Questions (Q.no 24 is compulsory)

5x3=15

18. Explain Chromyl chloride test.

19. How is the Phenols prepared by the following methods

a) From halo arenes b) From aniline

20. Write the structural formula of aspirin.

21. Explain the followings

(i) Hydroformylation of olefins.

(ii) Preparation acetic acid from acetaldehyde.

(iii) Zeigler – Natta catalyst.

22. What is an anti-Markownikoff 's product.

23. Give the Examples, structures and uses of Antacids

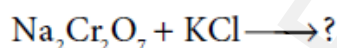
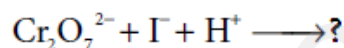
24. What are the Preparation of Bakelitemention their uses.

IV Answer All the Questions

3x5=15

25.a) Describe the variable oxidation state of 3d series elements.

b) Complete the following reaction



(Or)

b) Explain the mechanism of cleansing action of soaps and detergents

26.i) a) Differentiate primary, secondary and tertiary alcohols by victor Meyer's test.

b) Explain Schotten-Baumann reaction.

(Or)

ii) a) What are bio degradable polymers? Give examples.

b) Classify the following as linear, branched or cross linked polymers ) Nylon-6,6 b) LDPE c) HDPE

27. i) a) Give the Uses of phenol.

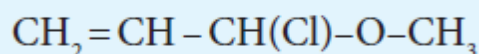
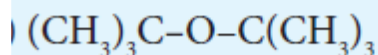
b) Friedel Craft's reaction

(Or)

b) i) Explain the following reactions

a) Riemer – Tiemann Reaction b) Phthalein reaction c) Coupling reaction

ii) Give the IUPAC name of the followings



**\*ALL THE BEST\***

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