

CHEMISTRY

ANSWER KEY

GRADE 12

| 1. | |
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| 2. | d. 3,3 dimethyl pentan-2-ol c. 9 |
| 2. | |
| 3. | a. CH3-CH=CH-CH2-CHO |
| | |
| 4. | a. 2-nitro phenol |
| 5. | b. propanol |
| 6. | Cis and trans forms |
| 7. | |
| | Steam distillation because in o-nitro phenol there is intramolecular H bonding whereas in par isomer there is inter r |
| 8. | bonding. |
| 0. | $ \bigcirc H + CHCl_3 + 3KOH \longrightarrow \bigcirc H + 3KCl +$ |
| | Phenol Salicyladehyde |
| 9. | |
| | [Ni(CN)4]2– is square planar because CN is a strong field ligand . In the presence of this ligand, electrons pair up in 3 and it is undergoing dsp2 hybridization. So it is in square planar geometry while [Ni(CO)4] undergoes sp3 hybridization has a tetrahedral geometry. |
| 10. | Mechanism of acid catalysed dehydration of ethanol |
| | Step I: Protonation of ethanol |
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