VITEEE 2021 Memory Based Questions and Answers for 28 May Slot 4

Q: Tangents PQ, PR are drawn from P = (5,0) to the ellipse $\left(\frac{x^2}{16}+\frac{y^2}{9}=1\right)$. The length of the chord QR is:

1. 6/5
2. 8/5
3. 18/5
4. ⅘

Q: Arrange the following compounds in order of increasing dipolement
I) Toluene II) m-dicholorobenzene III) o-dicholorobenzene Iv) p-dicholorobenzen

1. I<IV<II<III
2. IV<I<II<III
3. IV<I<III<II
4. IV<II<I<III

Q: If $f(x)=x^2+2x^2+4x+d$ and $o<b^2<c$, then in $(-\infty, \infty)$

1. f(x) is strictly increasing function
2. f(x) has local maxima
3. f(x) is strictly decreasing function
4. f(x) is bounded

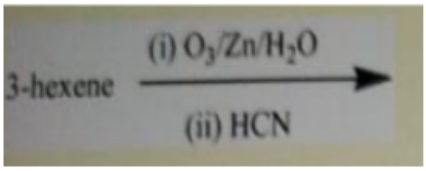
Q: An example of Polysaccharide is

1. Maltose
2. Cellulose
3. Glucose
4. Sucrose

Q: Which ion is expected to form colored species?

1. Ti^{4+}
2. Cr^{3+}
3. Zn^{2+}
4. Cu^{+}

Q: The product of the following reaction possesses:



1. Both geometric and optical isomerism
2. Geometric isomerism
3. Optical isomerism
4. Structural Isomerism

Q: Ethers should not be evaporated to dryness as the peroxide formed is:

1. Poisonous
2. Insoluble in water
3. Explosive
4. An air pollutant

Q: The cis-$[(NH_3)_2PtCl_2]$ is mostly used in

1. Medicine
2. Glass
3. Paint
4. Paper

Q: A parallel plate capacitor has a capacitance of 80 μF. The area between the plates is filled by 4 identical dielectric slabs with different dielectric constants (3,2,5 and 6). What will be the new capacitance?

1. 5 μF
2. 320 μF
3. 1280 μF
4. 20 μF