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کیمیا دفتر امتحانی - قسم دہشتہ C - ۱۸

$$\textcircled{1} \text{ الف) } \tan \frac{3\pi}{4} + \sin \frac{\pi}{4} \cos \frac{5\pi}{4} \rightarrow -1 + \left(\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} \right) = -\frac{1}{2}$$

$$\text{ب) } \tan \frac{5\pi}{4} \sin \frac{3\pi}{4} + \cos \frac{7\pi}{4} = \left(\frac{-\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} \right) + \left(\frac{1}{2} \right) = 0$$

$$\textcircled{2} \cot = \frac{\cos}{\sin} = f \rightarrow \cos = f \sin \quad \frac{11 \sin - \sin}{f \sin + \sin} = \frac{11 \sin}{\omega \sin} = \frac{11}{\omega}$$

$$\textcircled{3} \sin^2 + \cos^2 = 1 \rightarrow f \cos^2 + \cos^2 = 1 \rightarrow \cos^2 = 1 \rightarrow \cos = \frac{1}{\sqrt{5}}$$

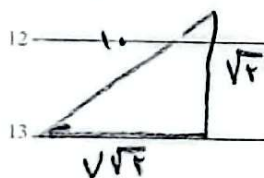
جب دیکھ سکتے ہیں

$$\textcircled{4} \cos(\alpha + \beta) = \cos \alpha \cos \beta - \sin \alpha \sin \beta$$

$$\text{الف) } \cos \left(\frac{3\pi}{4} + \alpha \right) = \left(\left(\frac{-\sqrt{2}}{2} \right) \left(\frac{-\sqrt{2}}{10} \right) \right) - \left(\left(\frac{\sqrt{2}}{2} \right) \left(\frac{\sqrt{2}}{10} \right) \right) = \frac{4}{10}$$

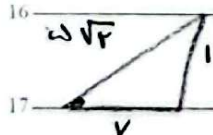
$$\cos \frac{11\pi}{4} = \frac{1}{2}$$

$$\frac{1f}{20} = \frac{V}{10} = \frac{1}{10}$$



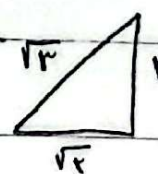
$$\text{ب) } \sin \left(\frac{5\pi}{4} + \alpha \right) = \left(\left(\frac{-\sqrt{2}}{2} \right) \left(\frac{V}{2\sqrt{2}} \right) \right) + \left(\left(\frac{1}{2\sqrt{2}} \right) \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{-1}{10}$$

$$\frac{-V}{2} = \frac{-1}{10}$$



$$\textcircled{5} 2(1 - \cos^2) + \cos^2 = \frac{f}{r} \rightarrow 2 - 2\cos^2 + \cos^2 = \frac{f}{r} \rightarrow \cos = \frac{\sqrt{r}}{\sqrt{r}}$$

$$\tan^2 = \frac{\sin^2}{\cos^2} = \frac{\frac{1}{r}}{\frac{r}{r}} = \frac{1}{r}$$



Genobar

$$⑧ \quad S_{\triangle PQR} \Rightarrow S = \frac{1}{2} \times \sqrt{r} \sin \alpha \Rightarrow r \sin \alpha = \frac{r}{\sqrt{r}} \Rightarrow \frac{r}{\sqrt{r}} = \frac{\sqrt{r}}{r}$$

$$\frac{r_0}{r_0} = \sqrt{r} \Rightarrow \text{مساحت زوایای } r_0 \text{ و } r_0 \text{ است } \frac{\sqrt{r}}{r}$$

$$⑨ \quad \begin{array}{l} \text{Diagram: A parallelogram with sides } r \text{ and } r, \text{ and an angle of } 140^\circ. \\ r \times r \times \sin \frac{1}{r} = \Delta f \Rightarrow r \times r = \Delta f \Rightarrow r = \sqrt{\Delta f} = \sqrt{r} \\ P = (r \times \sqrt{r}) + (r \times \sqrt{r}) = \boxed{2r \cdot \sqrt{r}} \end{array}$$

$$⑩ \quad S_{ABC} = \frac{V \times \omega}{r} \sin A = \frac{r \omega \sin A}{r}$$

$$S_{ADE} = \frac{V \times \omega}{r} \sin A = \frac{1}{r} \sin A$$

$$\frac{r \omega \sin A}{r} - \frac{r \omega \sin A}{r} = \frac{1}{r} \sin A \Rightarrow V \sin A = \frac{r}{\omega} \Rightarrow \sin A = \frac{1}{r}$$

$$\sin = \frac{1}{r} \rightarrow A, r_0, \tan = \frac{1}{\sqrt{r}}$$

$$⑪ \quad \begin{array}{l} \text{Diagram: A triangle ABC with a point M on BC. A dashed line connects A to M. The angle at M is labeled } \theta. \\ \left\{ \begin{array}{l} r \sin \theta, r \sin \theta \rightarrow \sin \theta, \frac{r \sin \theta}{r} \\ BC = NC + \frac{r \sin \theta}{r} = \frac{\omega \sin \theta}{r} \end{array} \right. \\ S_{ABC} = r S_{BMN} \end{array}$$

$$\begin{array}{l} \frac{1}{r} AB \times \frac{\omega \sin \theta}{r} \times \sin \theta = r \times \frac{1}{r} MB \times \frac{r \sin \theta}{r} \times \sin \theta \rightarrow AB \times \omega \sin \theta = MB \times r \sin \theta \Rightarrow \omega AM + \omega BM = \omega BM \\ \omega AM = \omega BM \rightarrow AM = \frac{r \sin \theta}{\omega} \rightarrow \frac{BM}{\omega} = \frac{\omega}{r} \end{array}$$

Senobar 

$$1) \frac{|\sin|}{\cos} = -\frac{\sin}{\cos} \quad , \quad |\sin| = -\sin, \quad \sin \neq 0$$

$$\frac{1}{\sqrt{\cos^2}} \cdot \tan = \frac{1 + \sin}{|\cos|} \quad , \quad 1 - \tan |\cos| = 1 + \sin$$

$$\tan = \frac{\sin}{\cos} \quad , \quad 1 - \frac{\sin}{\cos} |\cos| = 1 + \sin \quad , \quad |\cos| = -\cos$$

$$\Rightarrow 1 + \sin = 1 + \sin \quad \text{نورثه} \quad \text{منه جديده} *$$