

UNIVERSITY OF SARDODHA
DEPARTMENT OF PHYSICS

Conduct of Online Mid Term Exam Assignment through zoom. The due date of submission of Mid Term Exam Assignment is 26-04-2020

Subject: Vector & Tensor (MATH-210)

Teacher Name: Nida Ibrar

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ASSIGNMENT

Student Name:

Student ID:

Q1. Define Vector algebra and their properties with example and graphically. Given reason to support your answer and show your work not less than 15 pages. **(10) Your presentation/Viva will held on 06-05-2020 at 8:00 am**

(Amina Anwar (BPHF16M007))

Q2. Proof theorem if $\vec{a}, \vec{b}, \vec{c}$ are three given non coplanar vectors, then any vector \vec{r} can be expressed uniquely as linear combination of $\vec{a}, \vec{b}, \vec{c}$ such as $\vec{r} = x\vec{a} + y\vec{b} + z\vec{c}$ where Given reason to support your answer and show your work not less than 15 pages. **(10) Your presentation/Viva will held on 10-05-2020 at 11:00 am**

(Kainat Khalid (BPHF16E017))

Q3. Explain direction cosines in details and suppose 3 vector also find their sum and direction cosine. Given reason to support your answer and show your work not less than 15 pages. **(10) Your presentation/Viva will held on 06-05-2020 at 8:30 am**

(Sana Imtiaz (BPHF17E049))

Q4. Find the value of β , If the vector $5\hat{i} + 4\hat{j} - 3\hat{k}$ and $2\hat{i} + 2\hat{j} - \beta\hat{k}$ have the same direction. Given reason to support your answer and show your work not less than 15 pages. **(10) Your presentation/Viva will held on 10-05-2020 at 11:00 am**

(Muhammad Usman (BPHF17E043))

Good Luck