



**QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH**

**MID-SEMESTER EXAMINATION OF FIRST SEMESTER – FIRST YEAR (1<sup>st</sup>) 2023, 22-BATCH,**

**B.E (CE) B.S (MS)**

**SUBJECT: ISLAMIC STUDIES / ETHICS**

**Dated: 14.02.2023**

**Maximum Marks: 10**

**Time Allowed: 45 Minutes.**

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

**SUBJECT: ISLAMIC STUDIES**

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q. 01	Define morality and describe its importance.	01	C1	06	05
Q. 02	How being true and honest is necessary for a Muslim?	01	C2	06	05

**SUBJECT: ETHICS (NON MUSLIMS)**

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q. 01	Define morality and describe its importance.	01	C1	06	05
Q. 02	How being true and honest is necessary for a person? Describe it according to your religion.	01	C2	06	05

**The End**



**QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH**

**FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – FIRST YEAR, 2023 OF 22-BATCH, B.E (CE)**

**SUBJECT: ISLAMIC STUDIES / ETHICS**

**Dated: 05.05.2023**

**Maximum Marks: 30**

**Time Allowed: 02 Hours**

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

**ISLAMIC STUDIES**

Q. No.	QUESTION	CLO	Taxonomy Level	PLO	Marks
Q. 01	Interfaith harmony can be achieved by giving the due rights to religious minorities in any society. Discuss it in the light of rights of Non-Muslims in Islam.	3	A1	6	10
Q. 02	Explain some social evils which destroy the peace of society.	3	A1	6	10
Q. 03	Define Islam and describe any five of its distinctive characteristics.	3	A1	6	10

**ETHICS (for Non-Muslims)**

Q. No.	QUESTION	CLO	Taxonomy Level	PLO	Marks
Q. 01	Define religion and explain two theories about its beginning.	3	A1	6	10
Q. 02	What are the rights given to religious minorities in Hinduism / Christianity?	3	A1	6	10
Q. 03	Explain some basic beliefs of your religion (Hinduism / Christianity).	3	A1	6	10

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**Good Luck**

**QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH**

**MID-SEMESTER EXAMINATION OF FIRST SEMESTER – FIRST YEAR (1<sup>ST</sup>) 2023, 22-BATCH**

**B.E (CE, ME, IME) BS (IT, PHY)**

**SUBJECT: PAKISTAN STUDIES**

**Dated: 14.02.2023**

**Maximum Marks: 10**

**Time Allowed: 45 Minutes**

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q.01	What is Ideology? Discuss Ideology of Pakistan in the light of Allama Iqbal and Quaid-e-Azam.	1	C1	6	05
Q.02	Write short note on any Two of the following:	1	C2	6	5
	(a) Partition of Bengal				
	(b) Lucknow Pact 1916				
	(c) 14 Points of Jinnah				

***The End***

<b>Q. No.</b>	<b>QUESTION</b>	<b>CLOs</b>	<b>Taxonomy Level</b>	<b>PLOs</b>	<b>Marks</b>
<b>Q. 01</b>	<b>Examine the reasons for the transformation of East Pakistan into Bangladesh in 1971.</b>	<b>2</b>	<b>C3</b>	<b>6</b>	<b>10</b>
<b>Q. 02</b>	<b>Why constitution is necessary for a country? Write the salient features of Pakistan constitution 1973.</b>	<b>2</b>	<b>C2</b>	<b>6</b>	<b>10</b>
<b>Q.03</b>	<b>What is importance of Pakistan's location from geographical and strategic point of view.</b>	<b>2</b>	<b>C1</b>	<b>6</b>	<b>10</b>



**QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH**  
**MID-SEMESTER EXAMINATION OF FIRST SEMESTER - FIRST YEAR (1<sup>st</sup>) 2023\_22 BATCH B.E (CE / BAE)**

**SUBJECT: FUNCTIONAL ENGLISH**

**Date: 17.02.2023**

**Maximum Marks: 10**

**Time Allowed: 45 Minutes**

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

Q. No.	Question	CLO	Taxonomy Level	Marks
Q. 01	Write a paragraph (250 -300) words on any one of the following topics:  1. My First Day in University 2. My Favorite Book 3. The Pleasure of Reading	1	C1	05
Q. 02	Define the following with examples.  1. Declarative Sentence 2. Imperative Sentence 3. Exclamatory Sentence	1	C1	05

***The End***

**SUBJECT: FUNCTIONAL ENGLISH**

Date: 18.05.2023

Maximum Marks: 30

Time Allowed: 02 Hours.

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

Q. No.	QUESTION	CLO	Proficiency Level	PLO	Marks
Q.01	1. Standard of Education in Sindh: Problems and Suggestions. 2. The Future of artificial Intelligence. 3. My Favourite Book.	2	C3		10
Q.02	How can we encourage active participation and engagement in Functional English activities? Discuss in detail.	2	C3		10
Q.03	<p>Read the following passage carefully and answer the questions that follow.</p> <p>"I Have a Dream" is a public speech delivered by American civil rights activist Martin Luther King Jr. during the March on Washington for Jobs and Freedom on August 28, 1963, in which he calls for an end to racism in the United States and called for civil and economic rights. Delivered to over 250,000 civil rights supporters from the steps of the Lincoln Memorial in Washington, D.C., the speech was a defining moment of the civil rights movement.</p> <p>Beginning with a reference to the Emancipation Proclamation, which freed millions of slaves in 1863, King observes that: "one hundred years later, the Negro still is not free". Toward the end of the speech, King departed from his prepared text for a partly improvised peroration on the theme "I have a dream", prompted by Mahalia Jackson's cry: "Tell them about the dream, Martin!" In this part of the speech, which most excited the listeners and has now become its most famous, King described his dreams of freedom and equality arising from a land of slavery and hatred. Jon Meacham writes that, "With a single phrase, Martin Luther King Jr. joined Jefferson and Lincoln in the ranks of men who've shaped modern America". The speech was ranked the top American speech of the 20th century in a 1999 poll of scholars of public address.</p> <p>Q1. What issues does Martin Luther King's speech address? 1. Continuation of racism      • 2. End to racism and civil and economic rights 3. Civil rights      4. Civil War</p> <p>Q2. What pushes King to speak: "I have a dream"? 1. He reads out the Emancipation Proclamation • 2. He is prompted by Mahalia Jackson 3. He is overwhelmed by the crowd 4. Lincoln had asked him to give the speech</p> <p>Q3. From the last paragraph, give one word for "to leave" • 1. Departed      2. Proclamation 3. Improvised      4. Address</p> <p>Q4. What is the name of Martin Luther King's famed speech? 1. The Emancipation Proclamation      2. An Improvisation 3. A Peroration      • 4. I Have a Dream</p> <p>Q5. In front of who does King speak? • 1. The civil rights supporters      2. His friends 3. Lincoln      4. The Negroes</p>	2	C1		10

Good Luck

SUBJECT: CIVIL ENGINEERING MATERIALS

Date: 13.02.2023

Maximum Marks: 10

Time Allowed: 45 Minutes.

NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q. 01	Briefly describe manufacturing process of cement. Also discuss setting time test of cement.	1	C2	1	05
Q. 02	Describe properties of first-class brick. Also explain various tests conducted on bricks.	1	C2	1	05

The End



**QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH**  
**FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – FIRST YEAR, 2023 OF 22-BATCH, B.E (CE)**

**SUBJECT: CIVIL ENGINEERING MATERIALS**

**Date:** 08.05.2023

**Maximum Marks:** 30

**Time Allowed:** 02 Hours.

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

Q. No.	QUESTION	CLO	Taxonomy Level	PLO	Marks
Q. 01	Describe method of preparation of concrete. Also discuss all laboratory tests of concrete.	2	C5	6	10
Q. 02	What are different types of lime? Also explain various properties of cement mortar.	2	C5	6	10
Q. 03	Write notes on following: i. Steel ii. Mortar iii. Timber iv. Pozzolanas	2	C5	6	10

**Good Luck**



**QVAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, HAWABSHAH**  
**MID-SEMESTER EXAMINATION OF FIRST SEMESTER – FIRST YEAR (1<sup>st</sup>) 2023, 22-BATCH, B.E (CE)**

**SUBJECT: APPLIED CALCULUS**

date: 15.02.2023

Maximum Marks: 20

Time Allowed: 01 Hour.

**NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.**

Q. No.	QUESTIONS	CLO	Taxonomy Level	Marks
01	<p>Every <i>one-to-one</i> function is linear?</p> <p>At the surface of the ocean, the water pressure is the same as the air pressure above the water, <math>20 \text{ lb/in}^2</math>. Below the surface, the water pressure increases by <math>5 \text{ lb/in}^2</math> for every <math>15 \text{ ft}</math> of descent.</p> <p>Express the water pressure as a function of the depth below the ocean surface. Also sketch the graph of obtained linear model. At what depth is the pressure <math>90 \text{ lb/in}^2</math>?</p>	1	C2	10
02	<p>Let <math>f(x) = \frac{x}{x+1}</math> and <math>g(x) = 2x - 1</math>, then show that <math>(f \circ g)^{-1} = g^{-1} \circ f^{-1} = h(x)</math> and is <i>one-to-one</i> function.</p>	1	C2	10

"The calculus is the greatest aid we have to the application of physical truth in the broadest sense of the word" (William Fogg O.)

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**FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – FIRST YEAR, 2023 OF 22-BATCH, B.E (CE)**  
**SUBJECT: APPLIED CALCULUS**

Date: 22.05.2023

Maximum Marks: 60

Time Allowed: 3 Hours.

NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. No.	QUESTIONS	CLO	Taxonomy Level	Marks
01	The deck of a bridge is suspended 275 feet above a river. If a pebble falls off the side of the bridge, the height, in feet, of the pebble above the water surface after $t$ seconds is given by $y = 275 - 16t^2$ . (a) Find the average velocity of the pebble for the time period beginning when $t = 4$ and lasting (i) 0.1 seconds (ii) 0.05 seconds (iii) 0.01 seconds. (b) Estimate the instantaneous velocity of the pebble after 4 seconds.	CLO-2	C2	12
02	(a) Find the limit, if it exists. If the limit does not exist, explain why. (i) $\lim_{x \rightarrow -4} \frac{ x+4 }{2x+8}$ (ii) $\lim_{x \rightarrow 1} \arcsin\left(\frac{1-\sqrt{x}}{1-x}\right)$ (b) Discuss the differentiability of following function at $x = 1$ $f(x) = \begin{cases} x, & 0 \leq x \leq 1 \\ 2x - 1, & 1 < x \leq 2 \end{cases}$	CLO-2	C2	12
03	(a) Find $c$ of the Mean-Value Theorem for the following function $f(x) = x^3 - 5x^2 + 4x - 2$ on $[1, 3]$ . (b) Show that the function $f(x, y) = \ln \sqrt{x^2 + y^2}$ satisfies the Laplace's equation $\frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2} = 0$ .	CLO-2	C2	12
04	Show that $\int x^n \tan^{-1} x \, dx = \frac{x^{n+1}}{n+1} \tan^{-1} x - \frac{1}{n+1} \int \frac{x^{n+1}}{1+x^2} dx$ and also evaluate $\int x^n \tan^{-1} x \, dx$ for $n = 3$ .	CLO-3	C2	12
05	(a) Let $f$ be a scalar field and $F$ a vector field. State whether each expression is meaningful. If not, explain why. If so, state whether it is a scalar field or a vector field. (i) $\text{curl}(\text{grad } f)$ (ii) $\text{grad}(\text{div } F)$ (iii) $\text{div}(\text{div } F)$ (iv) $\text{div}(\text{grad } f)$ (v) $\text{div}(\text{curl}(\text{grad } f))$ (vi) $(\text{grad } f) \times (\text{div } F)$ (b) Show that any vector field of the form $F(x, y, z) = f(x)i + g(y)j + h(z)k$ where, $f, g, h$ are differentiable functions, is irrotational. Hence find $\text{div } F$ .	CLO-3	C2	12

**The End**

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MID-SEMESTER EXAMINATION OF FIRST SEMESTER – FIRST YEAR (1<sup>ST</sup>) 2023, 22-BATCH, B.E (CE-B&C)

SUBJECT: ENGINEERING MECHANICS

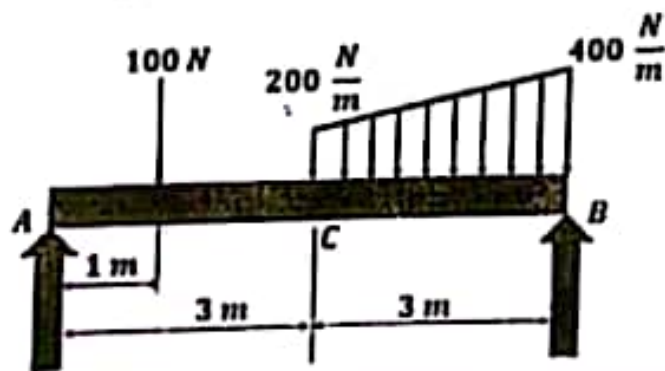
Date: 16.02.2023

Maximum Marks: 20

Time Allowed: 1 Hour

NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. No.			CLO	Taxonomy level	Max
Q. 01	(a)	Define "Resultant of forces", "Concurrent system of forces" and "parallelogram law of forces".	1	3	10
	(b)	A body on $30^\circ$ inclined acted upon by a force $P$ $20^\circ$ with horizontal. If $P$ is resolved into its component parallel and perpendicular to the inclined plane. The value of parallel component is 450 lb. compute the value of force $P$ and its perpendicular component.			
Q. 02	(a)	Define moment and principle of moments.	1	3	10
	(b)	Determine the magnitude and position of resultant force as shown in figure.			



Good Luck