MUHAMMAD NAWAZ SHARIF-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH
SEMESTER EXAMINATION OF SECOND SEMESTER – 1ST YEAR (2ND SEMESTER), 22-BATCH, B.E (CE) (A, B & C)

SUBJECT; ENGINEERING DRAWING

Maximum Marks: 30 Time Allowed: 2 Hours

DATE: 27.11.2023

NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. ASSUME SUITABLE SCALE AND OTHER DATA YOURSELF.

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q. 01	Define orthographic projection? Draw the projections of the following points. (i) 40mm above the H.P and 30mm infront of the V.P. (ii) 30mm bellow the H.P and 20mm behind the V.P. (iii)In the H.P and 30mm infront of the V.P. (iv) 20mm above the H.P and 50mm behind the V.P. (v) In the V.P and 40mm above the H.P.	1	C1	1	10
Q.02	The length of the top view of a line parallel to the V.P and inclined at 45° to the H.P. is 50mm. One end of the line is 20mm above the H.P and 30mm infront of the V.P. Draw the projections of the line and determine its true length and traces.	2	C2	1	10
Q. 03	Draw isometric projections/views of the followings. i. Set of three cubes ii. Rectangular prism iii. Three steps of stair	2	C2	1	10

Good Luck

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MID-SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2nd) 2023, 22-BATCH, B.E (CE)

SUBJECT; ENGINEERING DRAWING

Dated: 11.09.2023 Maximum Marks: 10 Time Allowed: 45 Minutes

NOTE: ATTEMPT ALL QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. ASSUME SUITABLE SCALE AND OTHER DATA YOURSELF.

Q. No.	Question	CLO	Taxonomy Level	PLO	Marks
Q. 01	Describe the followings with sketches: (i) T-Square and Set-Square (ii) Protractor and Compass	1	C1	1	05
Q. 02 (a)	Define the following types of line with sketches. (i) Outlines (ii) Hatching or section lines	1	C1	1	2.5
Q.02 (b)	When 5cm line in drawing represents 5m length of object, what will be Representative Fraction?	1	C1	1	2.5

Good Luck

MEHRAN UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH

MID-E-AWAM SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2nd) 2023, 22-BATCH B.E (CE-B&C)

SUBJECT: INTRODUCTION TO COMPUTER PROGRAMMING FOR CIVIL ENGINEERING

Dated: 08.09.2023 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	(a)	Define briefly: a) Computer b) Input Devices & Output Devices c) System Software & Application Software	1	C2	12	[03]
	(b)	Enlist: a) Classifications of Computers according to Purpose, Data handling, Size, Power and Price b) Units of a Computer c) Secondary Memory Devices d) Names of Characteristics of a Computer	1	C2	12	[02]
Q. 02	(a)	Discuss the importance of C++ Programming, and Write the code for the following: a) Declare a variable of integer type named as student b) Take two variables as num1 and num2, initialize them values at runtime c) Write a statement that calculates area and circumference of a circle	2	C3	5	[03]
	(b)	WAP which is a menu-driven program to calculate area of various geomaterial shapes. Show the following menu to the user, take required inputs and calculate area of the shape according to the user's choice: Sample Output: 1. Area of Circle 2. Area of Triangle 3. Area of Rectangle Note: Use switch-case decision making structure	2	C3	5	[02]

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

FINAL SEMESTER REGULAR EXAM OF SECOND SEMESTER – FIRST YEAR (2nd SEM.) 2023 OF 22 BATCH B.E (CE-B & C)

SUBJECT: INTRODUCTION TO COMPUTER PROGRAMMING FOR CIVIL ENGINEERING

Dated: 23.11.2023 Maximum Marks: 30 Time Allowed: 02 Hours.

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

Q. No			CLO	Taxonomy Level	PLO	Marks
01	(a)	Define what is a Loop Structure? Explain the role of While and do-while Loop in C++ with syntax and example program?	2	C3	5	[05]
	(b)	Write a program to generate a comprehensive table using For Loop illustrating the variation in load carrying capacity of reinforced concrete beams under different span lengths from 1 to 10 and varying reinforcement ratios.	2	C3	5	[05]
02	(a)	Discuss the importance and use of an Array? How array elements store in memory? Write syntax for declaration and initialization of an array with suitable example.	3	C4	3	[05]
	(b)	Consider we have five materials concrete, steel, wood, stone and aluminium. Take the strength for each material as an input from user. Create a C++ program to sort the load in ascending order based on their load-bearing capacities.	3	C4	3	[05]
03	(a)	Define how many types of functions are supported by C++? Explain the declaration syntax of user defined function in detail.	3	C4	3	[05]
	(b)	Write a C++ program that take input of a load type from user and computes the effect of the load on structure, considering the magnitude and durations. Create a user defined function that uses factorial method to solve above problem.	3	C4	3	[05]

The End

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

SUBJECT: CIVIL ENGINEERING GEOLOGY

Dated: 20.11.2023 Maximum Marks: 30 Time Allowed: 02 Hours.

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

			CLOs	Taxonomy Level	Marks
Q. 01	A	Nawabshah is one of the cities where water shortage is a major problem. Discuss what considerations you will consider for a successful reservoir?	1	1	05
	B	Earth has complementary two different views, draw & define?	2	3	05
Q. 02	A	Identify & Draw Figure for elements of the Earth Crust? Draw and define Meandering, its causes with figures.	1	1	05
	B	What is the Hardness Describe Field Test for Identifying Hardness?	2	3	05
Q. 03	A	The structural components are always essential, where faults have been of the crucial importance in structural engineering, what is the engineering consideration of faults please explain?	1	1	05
	B	What is the importance of dams in Civil Engineering? Define classification of rocks?	2	3	05

GOOD LUCK

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MID-SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2nd) 2023, 22-BATCH, B.E (CE)

SUBJECT: SURVEYING I

Dated: 10.09.2023 **Maximum Marks: 20** **Time Allowed: 1 hour.**

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

Q. No.	Question Statement	*CLO*	*Tax: Level*	*PLO*	*Marks*
Q. 01	Enlist different classifications of surveying. Differentiate between Plane and Geodetic surveying.	1	C2	1	10
Q. 02	Discuss in detail different types of chain and tapes used in Chain surveying.	1	C2	1	10

Good Luck

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

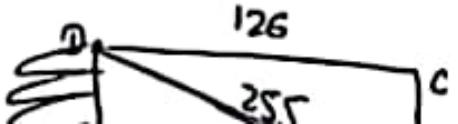
FINAL SEMESTER REGULAR EXAM OF SECOND SEMESTER – FIRST YEAR (2ND SEM.) 2023 OF 22-BATCH, B.E (CE)

SUBJECT: SURVEYING-I

Date: 16.11.2023 | Maximum Marks: 60 | Time Allowed: 3 Hours.

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

Q. No.	Question Statement	CLO	Taxonomy Level	Mark
Q. 01	Describe in detail the principles and characteristics of Electronic Distance Measurement (EDM)?	1	2	12
Q. 02	Calculate the interior angles of closed traverse ABCDEF. Line: AB — Fore bearing: N 69° 15'W Line: BC — Fore bearing: S 70° 48'W Line: CD — Fore bearing: S 16° 12'W Line: DE — Fore bearing: S 04° 36'E Line: EF — Fore bearing: S 67° 42'E Line: FA — Fore bearing: N30° 0'E	2	3	12
Q. 03	The following length, Latitude and Departure were obtained for closed traverse ABCDE. Adjust the traverse by Bowditch's method. AB: Length 70.0, Latitude +21.500, Departure −65.450 BC: Length 80.0, Latitude −80.755, Departure −5.250 CD: Length 42.0, Latitude −41.000, Departure +13.550 DE: Length 38.0, Latitude −14.250, Departure +35.150 EA: Length 115.0, Latitude +114.150, Departure +22.315	2	3	12
Q. 04	(a) Explain local attraction. Differentiate between Whole circle bearing (WCB) and Reduced bearing (RB). (b) Explain the difference between chain surveying and traverse surveying.	1	2	12
Q. 05	A tract of land has three straight boundaries *AB*, *BC*, and *CD*. The fourth boundary *DA* is irregular. The measured lengths are as under: *AB* = 135 m, *BC* = 191 m, *CD* = 126 m, *BD* = 255 m. The offsets measured outside the boundary *DA* to the irregular boundary at a regular interval of 30 m from *D*, are as below: Distance: 0.0, 30, 60, 90, 120, 150, 180 Offsets: 0.0, 3.7, 4.9, 4.2, 2.8, 3.6, 0.0 Determine the area of tract.	2	3	12



Good Luck

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

MID-SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2nd) 2023, 22-BATCH, B.E (CE)

SUBJECT: CIVIL ENGINEERING GEOLOGY

Date: 07.09.2023 Maximum Marks: 10 Time Allowed: 45 Minutes

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

		CLOs	Taxonomy Level	Marks
Q. 01	A Define structure of earth, where faults have been of the crucial importance in engineering, what is engineering consideration of faults?	1	1	05
	B Discuss that the Civil Engineers performs 90% of work on the earth, however, earth has complementary two different views, draw & outline both.	2	3	05
Q. 02	A Identify sedimentary rocks, how are they formed? Rock Cycle has significant importance, draw out the complete diagram and examine phases of sedimentary rocks?	1	1	05
	B Explain Folds, enlist types? Precisely, define below given figure, what does it show?	2	3	05

GOOD LUCK

				Level	
Q. 01	A	Define structure of earth, where faults have been of the crucial importance in engineering, what is engineering consideration of faults?	1	1	05
	B	Discuss that the Civil Engineers performs 90% of work on the earth, however, earth has complementary two different views, draw & outline both.	2	3	05
Q. 02	A	Identify sedimentary rocks, how are they formed? Rock Cycle has significant importance, draw out the complete diagram and examine phases of sedimentary rocks?	1	1	05
	B	Explain Folds, enlist types? Precisely, define below given figure, what does it show? 	2	3	05

GOOD LUCK

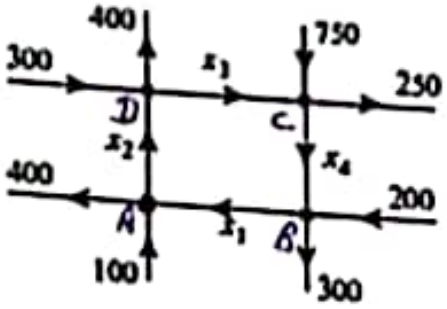
QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH

MID-SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2nd) 2023, 22-BATCH, B.E (CE)

SUBJECT: LINEAR ALGEBRA & ANALYTICAL GEOMETRY

Dated: 06.09.2023 Maximum Marks: 20 Time Allowed: 01 Hour,

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

Q. No.	QUESTIONS	CLO	Taxonomy Level	Marks
01	The accompanying figure shows a network of one-way streets with traffic flowing in the directions indicated. The flow rates along the streets are measured as the average number of vehicles per hour.  (i) Set up a linear system whose solution provides the unknown flow rates. (ii) Solve the system for the unknown flow rates.	1	C2	10
02	(a) Show that the elements of main diagonal of a skew symmetric matrix are all zero. (b) Write down the necessary and sufficient conditions for a non-empty subset S of a vector space V to become a subspace of V.	1	C2	10

The End

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

FINAL SEMESTER REGULAR EXAM OF SECOND SEMESTER – FIRST YEAR (2nd SEM.) 2023 OF 22-BATCH, B.E (CE)

SUBJECT: LINEAR ALGEBRA AND ANALYTICAL GEOMETRY

Dated: 10.11.2023 Maximum Marks: 60 Time Allowed: 3 Hours.

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

Q. No.		QUESTION	CLO	Taxonomy Level	PLO	Marks
Q. 01	(a)	What is matrix & what are its applications?	3	C3	2	08
	(b)	Find the rank of the matrix by using (E-R-Os) $A=\begin{bmatrix}1 & 0 & 3\\ 2 & 4 & 1\\ 1 & 3 & 0\end{bmatrix}$	2	C2	2	04
Q. 02	(a)	Write down the differences between Gauss-elimination and Gauss-Jordon method	2	C2	2	04
	(b)	In a given electrical network, the linear system of equations for the currents i_1, i_2 and i_3 are $3i_1+i_2-i_3=4$, $i_1+i_2-2i_3=-4$, $-i_1+2i_2-i_3=1$. Compute the currents by Gauss-elimination method	2	C2	2	08
Q. 03	(a)	Show that the points (4,3,1),(2,1,2) and (6,−1,2) are the vertices of an isosceles triangle	2	C2	2	06
	(b)	Find the parametric equations for the straight line and direction cosines through the points (3,−1,4) and (−5,2,−3)	2	C2	2	06
Q. 04	(a)	Show that the straight lines are perpendicular $L:\frac{x-2}{1}=\frac{y+1}{-2}=\frac{z-1}{6}$ and $M:\frac{x-3}{-2}=\frac{y-6}{2}=\frac{z-4}{-1}$	2	C2	2	06
	(b)	Find the angle between straight lines $L:\frac{x-2}{3}=\frac{y+1}{-2}=\frac{z-1}{2}$ and $M:\frac{x-3}{-2}=\frac{y-6}{2}=\frac{z-4}{-1}$	2	C2	2	06
Q. 05	(a)	Define plane? find the equation of plane passing through the points $A(1,-1,2)$, $B(-3,-2,6)$ and $C(6,0,1)$	2	C2	2	06
	(b)	Convert the equation of plane $2x-3y-z+7=0$ (i) intercept form (ii) normal form.	2	C2	2	06

Good Luck

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

MID-SEMESTER EXAMINATION OF SECOND SEMESTER – FIRST YEAR (2ND) 2023, 22-BATCH, B.E (CE)

SUBJECT: WRITING & COMMUNICATION SKILLS

Dated: 05.09.2023 Maximum Marks: 10 Time Allowed: 45 Minutes.

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

Q. No.	QUESTION	CLOs	Taxonomy Level	PLOs	Marks
Q. 01	"Effective Communication enhances the Personality" Justify the statement by giving examples from communication at workplace.	1	C2	2	5
Q. 02	Describe the Components/Process of Communication in detail.	1	C2	2	5

Good Luck

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

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

SUBJECT: WRITING & COMMUNICATION SKILLS

Dated: 13.11.2023 Maximum Marks: 30 Time Allowed: 2 Hours.

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

Q. No.	QUESTION	CLOs	Taxonomy Level	PLOs	Marks
Q. 01	What is General Report writing and Technical Report Writing and its Characteristics?	3	C3	3	10
Q. 02	Discuss in detail the format of technical report writing with suitable examples?	3	C3	3	10
Q. 03	Write a short note on any two of the following. (1) Social Barrier (2) Institutional Barrier (3) Physical Barrier	2	C3	3	10

Good Luck