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

MID-SEMESTER EXAMINATION OF FIRST SEMESTER - 2nd YEAR (2nd SEMESTER) 20 BATCH B.E (CE) (B & C)

SUBJECT: CIVIL ENGINEERING DRAWING

Dated: 16.02.2022 Maximum Marks: 30 Time Allowed: 1 Hour

NOTE: ATTEMPT ANY TWO (02) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS. ASSUME NECESSARY DATA YOURSELF.

Q. No.	Questions	CLO	Taxonomy Level	Marks
Q. 01	Distinguish between the following: (i) Architectural drawing and structural drawing (ii) line plan and working plan. (iii) Super-structure and sub-structure (iv) Horizontal circulation and Vertical circulation	1	C2	10
Q. 02	Draw a typical cross section of a wall and show components of building.	1	C2	10
Q. 03	Draw working plan and front elevation of a single room structure of size 16'x12'. The other detail is given bellow. 1. Plinth height/Level from ground level =2' 2. Thickness of wall =1' 3. Height of lintel =6' 4. Ceiling level =12' 5. Thickness of RCC slab = 6" Assume a suitable scale.	1	C2	10

Good Luck

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

MID-SEMESTER EXAMINATION OF FIRST SEMESTER – SECOND YEAR (3RD SEMESTER) 2022, 20-BATCH, B.E (CE-C)

SUBJECT: SURVEYING II

Dated: 14.02.2021 Maximum Marks: 20 Time Allowed: 1 hour.

NOTE: ATTEMPT ANY TWO (02) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. No.	Question Statement	CLO	Taxonomy Level	Marks
Q. 01	How does geodetic surveying differ from plane surveying? Enlist different terms related to levelling.	CLO 1	3	10
Q. 02	Define leveling. Discuss in detail different types of levelling.	CLO 1	3	10
Q. 03	The following readings (In meter) were taken with a levelling instrument using the staff of 4m long. 2.0, 2.5, 3.1, 3.9, 0.6, 1.3, 2.0, 2.8, 2.1, 3.1, 0.9, 3.0, 1.2, 2.3, 0.8. The instrument was shifted after 4th, 9th, 11th and 13th reading. The first reading was taken on BM of RL 100m. Calculate RL of all points.	CLO 2	4	10

Good Luck

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

MID-SEMESTER EXAMINATION OF FIRST SEMESTER – SECOND YEAR (3RD SEMESTER) 2022, 20 BATCH, B.E (CE)

SUBJECT: ARCHITECTURE & TOWN PLANNING

Dated: 17.02.2022 Maximum Marks: 10 Time Allowed: 45 Min

NOTE: ATTEMPT ANY TWO (02) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. 01 What do you know about architecture? Define in detail, the importance of architecture in Civil Engineering.

Q. 02 Describe in detail the production process of an architectural design. Define the factors which influence the architectural design process.

Q. 03 Define proportions and scales. Define golden section in detail.

Good Luck

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

MID-SEMESTER EXAMINATION OF FIRST SEMESTER - SECOND YEAR (3rd SEMESTER) 2022, 20 BATCH, B.E (CE)

SUBJECT: STATISTICS & PROBABILITY

Date: 15.02.2022 Maximum Marks: 20 Time Allowed: 01 Hour.

NOTE: ATTEMPT ANY TWO (02) QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

Q. No.	QUESTIONS	PLO	CLO	Taxonomy Level	Marks
01	(a) Prove that the mean square deviation is least when deviations are measured from mean. (b) Show that $\mu_1' = \bar{x} - a$.	PLO-2	CLO-1	C2	10
02	Derive the recurrence relations between μ_r' and μ_r.	PLO-2	CLO-1	C2	10
03	(a) If variables x_i assumes the values $0,1,2,\ldots,n$ with corresponding frequencies f_i $\binom{n}{0}, \binom{n}{1}, \binom{n}{2}, \ldots, \binom{n}{n}$. Find $\mu_1' = \bar{x}$, μ_2' and μ_2. (b) The distribution consists of three components with frequencies 210, 260 and 310 having means 25, 10, 15 and standard deviations 4, 5, 6. Find the mean of the combined distribution and its variance.	PLO-2	CLO-1	C2	10

"History cannot be reduced to a set of statistics and probabilities" (Alan Greenspan)

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

MID-SEMESTER EXAMINATION OF FIRST SEMESTER – SECOND YEAR (3rd SEMESTER) 2022, 20-BATCH, B.E (CE)

Dated: 18.02.2022 SUBJECT: STRENGTH OF MATERIALS-I Time Allowed: 1 Hour

Maximum Marks: 20

NOTE: ATTEMPT ANY TWO (02) QUESTIONS. QUESTION 3 IS COMPULSORY.

			CLOs	Taxonomy Level	Marks
Q. 01		A hollow cast iron cylinder 4m long, 300 mm outer diameter and thickness metal 50mm is subjected to a central load on the top when standing straight. The stress produced 75000 KN/m². Assume Young's modulus for cast-iron as 1.5×10^6 KN/m² and find (i) Magnitude of the load (ii) Longitudinal strain produce (iii) Total decrease in length.	2	3	10
Q. 02		A tensile test was conducted on a mild steel bar. The following data was obtained from the test. Diameter of the steel bar = 3 cm Gauge Length of the bar = 20 cm Load at elastic limit = 250 kN Extension at a load of 150 kN = 0.21 mm Maximum Load = 380 kN Total extension = 60 mm Diameter of the rod at the failure = 2.25 cm Determine: (i) Young's modulus of elasticity (ii) Yield point stress (iii) Ultimate stress, and (iv) Percentage elongation	2	3	10
Q. 03	A.	Define following terms: 1. Poisson's Ratio 2. Ultimate Stress 3. Strain 4. Elasticity 5. Ductility	1	2	05
	B.	Discuss the importance of "strength of materials" in the field of civil engineering.	1	2	05

GOOD LUCK

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

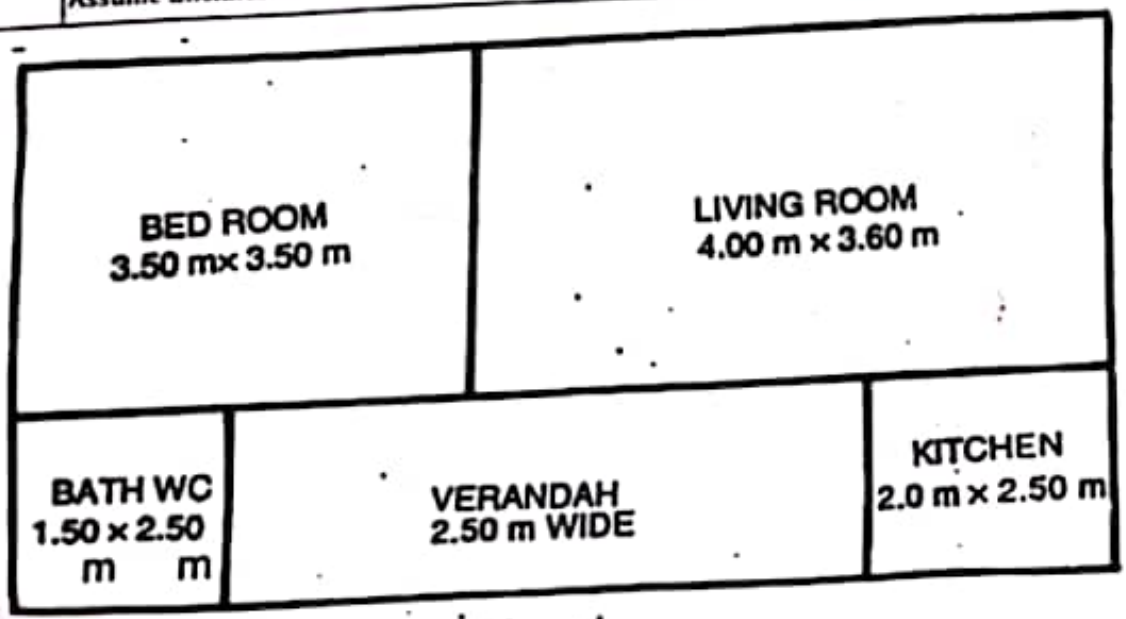
FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – SECOND YEAR 2022 OF 20-BATCH, B.E (CE-B&C)

SUBJECT: CIVIL ENGINEERING DRAWING

Dated: 30.05.2022 Maximum Marks: 60 Time Allowed: 3 Hours

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

Q. No.	Question	CLOs	Taxonomy Level	PLOs	Mark
Q.01	What is the use of coping in building structures? Draw the brick copings and cement concrete copings.	1	C2	1	12
Q. 02	Develop a working plan and sectional elevation of R.C.C dog-legged stair case for a school building with following data. Width of stair=90cm Length of stair=360cm Height of stair/Rise of stair=180cm No. of steps=12.	2	C3	12	12
Q. 03	Draw the front elevation (front view) of a paneled and glazed 1200mmx2100mm double leafed door with door frame and shutter.	2	C3	12	12
Q. 04	Using scale of 1:20, draw the plan, L-section and two cross-sections of a cantilever beam projecting 3.50m from support. Other data is given bellow. Clear span =3.50m Overall depth at fixed end =40cm Overall depth at free end =15cm Main steel =4-25mm dia bars with two bars curtailed at 1.5m from support Anchor bars =2-15mm dia bars Stirrups =10mm dia stirrups @10cm c/c Bearing at fixed end =300mm Thickness of wall =300mm	2	C3	12	12
5	Line plan of a plot is given in figure, draw a working plan showing position of doors and windows. Also calculate the area of plot. Assume thickness of wall =30cm.	2	C3	12	12



Line plan

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

FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – SECOND YEAR 2022 OF 20 BATCH, B.E (CE-C)

SUBJECT: SURVEYING-II

Dated: 23.05.2022 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 methods of reduction of level and explain their merits and demerits?	1	3	12
Q. 02 (a)	Derive the distance equations for the tangential system of tachometry when both the sightings are angles of depression.	1	3	12
Q. 02 (b)	Two distances of 20 m and 100 m were accurately measured out and the intercepts on the staff between the outer stadia webs were 0.196 m at the former distance and 0.996 at the latter. Calculate the tacheometric constants.			
Q. 03	A tacheometer was setup at a station 'A' and the readings on a vertically held staff at BM were 1.2, 1.9 and 2.6. the line of sight being at an inclination of -6° 24'. Another observations on the vertically held staff at B gave the readings 0.8, 1.6, and 2.4, the inclination of the line of sight being +8° 20'. Calculate the horizontal distance between A and B, and the elevation of B if the RL of BM is 850.50 meters. The constants of the instruments were 100 and 0.15.	2	4	12
Q. 04 (a)	(a) What is transition curve & where it is used? How will you determine the length of transition curve and amount of super elevation to be provided?	2	4	12
Q. 04 (b)	The chainage of the intersection point of two straights is 1060 m, and the angle of intersection is 120°. If radius of a circular curve to be set out is 570 m, and peg interval is 30 m, determine the tangent length, the length of the curve, the chainage at the beginning and end of the curve, the length of the long chord, the lengths of the sub-chords, and the total number of chords.			
Q. 05 (a)	(a) Explain the different methods of plane tabling? State the advantages and disadvantages of plane table surveying.	1	3	12
Q. 05 (b)	Why hydrographic surveying is carried out? Differentiate different methods of bathymetric surveying.			

Good Luck

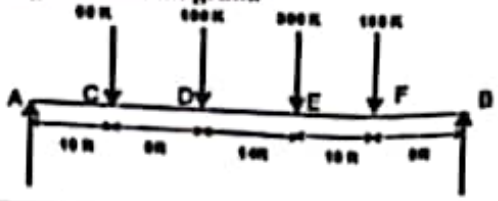
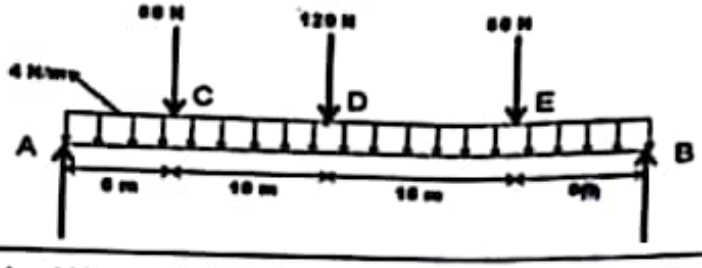
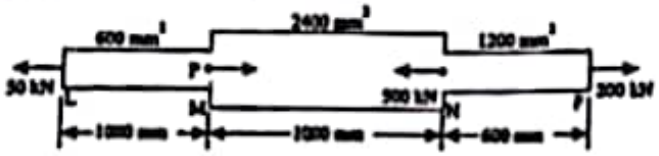
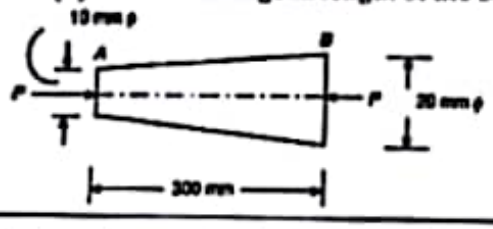
QUAID-E-AWAM UNIVERSITY OF ENGINEERING, SCIENCE & TECHNOLOGY, NAWABSHAH

FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER - SECOND YEAR, 2022 OF 20 BATCH, B.E (CE)

SUBJECT: STRENGTH OF MATERIALS-I

Dated: 06.06.2022 Maximum Marks: 60 Time Allowed: 3 Hours.

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

	Questions	CLOs	Taxonomy Level	PLO	Marks
Q. 01	Demonstrate shear force and bending moment of a simply supported beam subjected to various loads as shown in Figure by drawing shear force and bending moment diagram. 	1	2	1	12
Q. 02	Show shear force and bending moment of a simply supported beam under various loads by drawing SFD and BMD. The loading condition of the beam is given in Figure. 	1	2	1	12
Q. 03	A member LMNP is subjected to point loads as shown in figure. If E=210 GN/m², Calculate (i) Force P necessary for equilibrium, (ii) Total elongation of the bar. 	2	3	2	12
Q. 04	A brass bar uniformly tapered from diameter 20mm at one end to diameter 10mm at the other end over an axial length 300mm is subjected to an axial compressive load of 7.5kN. If E = 100 kN/mm² for brass (as in figure), determine (a) the maximum and minimum axial stresses in bar and (b) the total change in length of the bar. 	2	3	2	12
Q. 05	A tensile load of 60KN is gradually applied to a circular bar of 4cm diameter and 5m long. If the value of E=2.0x10⁵ N/mm², determine: (i) Stretch in the rod (ii) Stress in the rod (iii) Strain energy absorbed by the rod	2	3	2	12

GOOD LUCK

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

FINAL SEMESTER SUPPLEMENTARY EXAM OF FIRST SEMESTER - SECOND YEAR (Session 2017-18) BATCH B.E (CE)

SUBJECT: CIVIL ENGINEERING DRAWING (OBJECTIVE TEST)

Dated: 02.04.2022 Maximum Marks: 10 Time Allowed: 20 Minutes.

ID NO. [redacted]

Marks obtained in figures: _____ Sign of Internal Examiner _____

Marks obtained in words: _____ Sign of External Examiner _____

CHOOSE APPROPRIATE ANSWER

1. To draw or measure angles, ... is used.
   (a) T-square (b) Protractor (c) Compass (d) Divider
2. The two parts of the T-square are.....and.....
   (a) Vertical and horizontal edge (b) straight edge and linear edge (c) Stock and Blade
3. In isometric projection of an object is inclined at an angle of.....
   (a) 60° (b) 120° (c) 30° (d) 90°
4. The building construction industry relies on sets of _____ drawings to construct homes and commercial buildings.
   (a) mechanical (b) isometric (c) architectural working (d) all of these
5. What is the other name of dwelling unit?
   (a) Row building (b) Residential building (c) commercial building (d) Educational building
6. Foundation is the ..... part of the building
   (a) Upper (b) Middle (c) Lower (d) Sill
7. What is the other name of circulation in the same floor.....
   (a) Vertical (b) Horizontal (c) Upward (d) Downward
8. A stair turning Through one right angle is known as a.....
   (a) Quarter-turn (b) Half-turn (c) Dog-legged (d) Open navel
9. The horizontal platform between two flights of a stair is known as the.....
   (a) Rise (b) Pitch (c) Nosing (d) Landing
10. The inclined rail over the string is known as a.....
    (a) Headroom (b) Landing (c) Handrail (d) Heading

STATE WHETHER TRUE OR FALSE:

11. Doors and windows are only made of wood. (T / F)
12. Middle rail of a door is also called lock rail. (T / F)
13. A combination of tread and riser is known as soffit. (T / F)
14. Service area where cooking is done is called dining room. (T / F)
15. A structural member used mainly for covering spaces in the form of roof or floor is called beam. (T / F)
16. R.C.C columns are only circular in shape. (T / F)
17. A dog-legged stair has a well between two flights. (T / F)
18. Floor on first storey of building is numbered as floor 1. (T / F)
19. Under-ground pipe of masonry used for disposal of sewage is called sewer pipes. (T / F)
20. Vertical side of an opening of door and windows is called jamb. (T / F)

The End

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

FINAL SEMESTER REGULAR EXAMINATION OF FIRST SEMESTER – SECOND YEAR 2022 OF 20 BATCH B.E (CE)

SUBJECT: ARCHITECTURE & TOWN PLANNING

Dated: 02.06.2022 Maximum Marks: 30 Time Allowed: 02 Hours.

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

Q. No.		QUESTION	CLOs	Taxonomy Level	PLOs	Marks
Q. 01		Define Islamic Architecture in detail. Discuss briefly types of Islamic architecture.	1	C2	4	10
Q. 02	(a)	Discuss the principles of town planning in detail. define why town planning is necessary?	2	C6	3	05
	(b)	Define zoning in town planning and what importance it has in town planning.	2	C6	3	05
Q. 03		Describe what are various stages of a town development in detail. Define the types of growth of town and satellite town in detail.	2	C6	3	05

The End