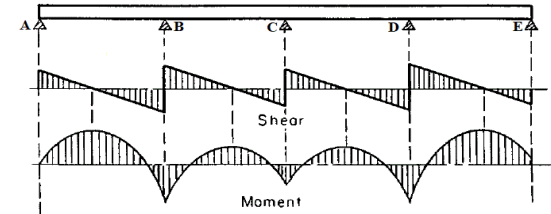


Reinforced Concrete Design Project			Instructor: Prof. Dr. Bayan Salim							
Deadline: Wednesday 20/12/2022			Assistant: Mr. Muhammad Kani							
A four span continuous beam of constant rectangular cross section is supported at A,B,C,D, and E .The factored moments resulting from analysis are shown in the table below .Design the required final concrete dimensions for this beam, and determine the reinforcements requirements at each critical moment section.										
Group	Name	Moments at Supports (KN.m)			Moments at Midspan (KN.m)		f'_c (MPa)	f_y (MPa)	Cross-section	ρ
		Ma, Me	Mb, Md	Mc	Mab, Mde	Mbc, Mcd				
1	Nzar Ezzaldin	370	480	450	390	365	42	560	d=2.5b	0.5 ρ_{Max}
	Shkar Mohammed									
	Avan Sideeq									
	Arena Anwar									
2	Ahmed Hamza	80	200	170	110	85	21	280	d=2.25b	0.6 ρ_{Max}
	Avreen Chyavan									
	Ahmed Kamaran									
	Hakar Yasir									
3	Aram Sami	320	460	430	350	335	35	560	d=2b	0.8 ρ_{Max}
	Hana Khalid									
	Manwan Muzaffar									
	Yousif Mohammed									
4	Najat Yilmaz	130	240	210	155	130	28	350	d=1.75b	0.9 ρ_{Max}
	Ahmed Sameer									
	Rovan Abdulgahar									
	Razwan Amir									
5	Ahmed Nzar	40	155	130	70	45	21	280	d=1.5b	ρ_{Max}
	Nechirvan Sulhi									
	Laso Nadheer									
	Sina Kamaran									
6	Bushra Ismail	330	470	440	360	345	56	560	d=2.5b	0.5 ρ_{Max}
	Hardi Sabah									
	Srawt Kheder									
	Blind Abdulkarim									
7	Bakir Hamid	400	280	410	380	365	28	420	d=2.25b	0.6 ρ_{Max}
	Ahmed Sabah									
	Chya Nawzad									
	Eram Yassen									
8	Ahmed Dilshad	330	470	450	360	345	35	560	d=2b	0.8 ρ_{Max}
	Ameen Faisal									
	Hana Sarkawt									
	Hamad Qarani									
9	Ahmed Masud	150	280	210	165	140	28	350	d=1.75b	0.9 ρ_{Max}
	Kamand Kamaran									
	Ahmed Salahaddin									
	Soma Azad									
10	Ali Sarhang	80	180	150	90	55	21	280	d=1.5b	ρ_{Max}
	Ahmed Tariq									
	Assad Ismail									
	Mahmud Hunar									
11	Orahim Kostantin	300	430	400	320	305	35	560	d=2b	0.8 ρ_{Max}
	Peshawa Ahmed									
	Rozh Fadhil									
	Zhyar Khalid									



Required:

- * Full design report required, showing clear sketches with detailed reinforcement beam drawn using AutoCAD.
- * Prepare ppt. presentation and send to bayan.salim@tiu.edu.iq, you may present your report in class
- * Deliver in well-issued printed group report with a soft copy emailed to muhammad.mahmud@tiu.edu.iq