

Esami abilitazione geologo sezione B

II prova scritta

Tema 1

Si rediga un piano di indagini, con prove in sito e di laboratorio, nell'ambito del progetto per la realizzazione di un edificio pubblico, adibito a scuola, localizzato nella fascia collinare periadriatica. Si motivi la scelta delle varie indagini, evidenziando i vantaggi e le criticità di ciascuna delle scelte effettuate.

Tema 2

Il candidato descriva la metodologia, i dati e le informazioni necessarie per la redazione di una Cartografia di suscettibilità all'inquinamento di un acquifero alluvionale monostrato, in un contesto di piana alluvionale di un fiume adriatico, ove sorgano complessi industriali e commerciali.

Tema 3

In allegato sono riportati i tabulati relativi ad una prova penetrometrica statica con punta meccanica. Il candidato:

- descriva il contenuto e le modalità di acquisizione/elaborazione delle diverse colonne contenute nei tabulati della prova CPT;
- descriva i parametri geomeccanici ricavabili dalla prova CPT;
- proceda alla discretizzazione e parametrizzazione (in termini di parametri geotecnici nominali) del profilo di sottosuolo indagato dalla CPT.

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PROVA PENETROMETRICA STATICA CON PUNTA MECCANICA CPT

Profondità (m)	Letture punta (Kg/cm ²)	Letture laterale (Kg/cm ²)	qc (Kg/cm ²)	fs (Kg/cm ²)	qc/fs Begemann	fs/qcx100 (Schmertmann)
0,40	16,0	25,0	16,0	0,5333	30,0	3,33
0,60	20,0	28,0	20,0	1,9333	10,35	9,67
0,80	20,0	49,0	20,0	1,4	14,29	7,0
1,00	17,0	38,0	17,0	1,4	12,14	8,24
1,20	19,0	40,0	19,0	1,6667	11,4	8,77
1,40	17,0	42,0	17,0	1,8667	9,11	10,98
1,60	17,0	45,0	17,0	1,6	10,63	9,41
1,80	17,0	41,0	17,0	1,0667	15,94	6,27
2,00	15,0	31,0	15,0	1,1333	13,24	7,56
2,20	12,0	29,0	12,0	0,4667	25,71	3,89
2,40	11,0	18,0	11,0	0,6	18,33	5,45
2,60	12,0	21,0	12,0	0,6	20,0	5,0
2,80	15,0	24,0	15,0	0,8	18,75	5,33
3,00	14,0	26,0	14,0	0,5333	26,25	3,81
3,20	17,0	25,0	17,0	0,7333	23,18	4,31
3,40	17,0	28,0	17,0	0,7333	23,18	4,31
3,60	14,0	25,0	14,0	0,7333	19,09	5,24
3,80	12,0	23,0	12,0	0,6667	18,0	5,56
4,00	10,0	20,0	10,0	0,5333	18,75	5,33
4,20	10,0	18,0	10,0	0,5333	18,75	5,33
4,40	11,0	19,0	11,0	0,5333	20,63	4,85
4,60	8,0	16,0	8,0	0,5333	15,0	6,67
4,80	6,0	14,0	6,0	0,4667	12,86	7,78
5,00	6,0	13,0	6,0	0,4667	12,86	7,78
5,20	6,0	13,0	6,0	0,4	15,0	6,67
5,40	5,0	11,0	5,0	0,4667	10,71	9,33
5,60	6,0	13,0	6,0	0,4	15,0	6,67
5,80	9,0	15,0	9,0	0,5333	16,88	5,93
6,00	9,0	17,0	9,0	0,6667	13,5	7,41
6,20	8,0	18,0	8,0	0,6	13,33	7,5
6,40	9,0	18,0	9,0	0,7333	12,27	8,15
6,60	6,0	17,0	6,0	0,4667	12,86	7,78
6,80	4,0	11,0	4,0	0,2667	15,0	6,67
7,00	3,0	7,0	3,0	0,2	15,0	6,67
7,20	4,0	7,0	4,0	0,2667	15,0	6,67
7,40	6,0	10,0	6,0	0,4	15,0	6,67
7,60	5,0	11,0	5,0	0,3333	15,0	6,67
7,80	5,0	10,0	5,0	0,3333	15,0	6,67
8,00	7,0	12,0	7,0	0,6	11,67	8,57
8,20	10,0	19,0	10,0	0,8667	11,54	8,67
8,40	11,0	24,0	11,0	0,9333	11,79	8,48
8,60	12,0	26,0	12,0	0,9333	12,86	7,78
8,80	19,0	33,0	19,0	1,4	13,57	7,37
9,00	18,0	39,0	18,0	1,3333	13,5	7,41
9,20	23,0	43,0	23,0	1,6	14,38	6,96
9,40	20,0	44,0	20,0	1,4	14,29	7,0
9,60	20,0	41,0	20,0	1,2	16,67	6,0
9,80	14,0	32,0	14,0	0,9333	15,0	6,67
10,00	15,0	29,0	15,0	0,9333	16,07	6,22
10,20	12,0	26,0	12,0	0,9333	12,86	7,78
10,40	13,0	27,0	13,0	0,8	16,25	6,15
10,60	10,0	22,0	10,0	0,5333	18,75	5,33

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