

Bihar Public Service Commission

Assistant Engineer (Civil) Written (Objective) Competitive Examination (Advt. No. 07/2020)

(Examination Date : 11.11.2022)

FINAL ANSWER KEY : Civil Engineering, Paper – VI

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
1	C	15	D	27	A	39	B	
2	B	16	C	28	D	40	A	
3	B	17	C	29	D	41	A	
4	A	18	B	30	C	42	D	
5	A	19	B	31	C	43	D	
6	A	20	B	32	C	44	A	
7	B	21	C	33	D	45	A	
8	C	22	D	34	A	46	B	
9	A	23	B	35	C	47	A	
10	D	24	A	36	B	48	C	No Change. After flowing over the weir, the nappe falls away from the weir, thus creating a space beneath the water. Within this space, some air is trapped below the initial nappe. With time, the air trapped is carried away by flowing water gradually, thus creating negative pressure beneath the nappe.
11	A	25	B	37	C	49	D	
12	A	26	B	38	C	50	D	
13	C	27	D	39	A	1	B	No Change. FSL of canal is sufficiently below the bottom of the drain trough so that canal water flows freely under gravity. The structure provided, is called super passage. (Source: Irrigation Engineering and Hydraulic Structures by S.K. Garg)
14	B	28	C	40	D	2	A	
15	B	29	C	41	D	3	A	
16	B	30	C	42	D	4	A	
17	D	31	A	43	B	5	C	
18	B	32	C	44	D	6	A	
19	D	33	D	45	D	7	D	
20	B	34	C	46	D	8	A	
21	D	35	A	47	B	9	C	
22	B	36	C	48	D	10	A	No Change.
23	A	37	B	49	C	11	D	
24	B	38	C	50	D	12	A	
25	C	39	D	1	A	13	B	
26	C	40	D	2	A	14	B	
27	D	41	A	3	B	15	C	

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
28	B	42	C	4	D	16	A	
29	A	43	B	5	C	17	D	
30	C	44	D	6	A	18	B	
31	B	45	C	7	D	19	A	
32	C	46	D	8	A	20	B	
33	C	47	D	9	A	21	B	No Change. CBR value of soil and number of commercial vehicles per day. According to IRC: 37, the total thickness of a flexible pavement is determined by two fundamental input values: the CBR values of the soil subgrade and the number of commercial vehicles per day. Option (D) is incorrect because it is based on the CBR value of the soil and the total standard axle load rather than the design traffic in terms of cumulative number of standard axles (IRC: 37-2001). Hence the correct answer is option 'C'.
34	C	48	D	10	A	22	B	
35	C	49	D	11	A	23	B	
36	C	50	A	12	B	24	C	
37	B	1	C	13	D	25	A	
38	C	2	D	14	A	26	B	
39	A	3	B	15	C	27	D	
40	B	4	C	16	D	28	A	
41	C	5	A	17	B	29	C	
42	B	6	C	18	D	30	A	
43	B	7	C	19	D	31	A	
44	B	8	C	20	D	32	A	
45	C	9	A	21	B	33	C	Canal drops are provided to dissipate excess land slope. Ref.- S. K. Garg, Khanna Publishers.
46	D	10	D	22	D	34	D	No Change. Soil pH ranging between 6 to 7.5 (i.e., slightly acidic to slightly basic) is good for plant growth. Low pH value (< 5.5) indicates acidic soils and high pH value (> 8.0) indicates alkaline soils. When pH is greater than 10:50, it is termed as practically infertile soil. At this pH, there is complete dispersion of soil partially, which causes soil crusting and as a result of this, germination problem due to clogs that restrict soil and air movement and makes the soil infertile.

Series-A		Series-B		Series-C		Series-D		Remarks
Question No.	Answer	Question No.	Answer	Question No.	Answer	Question No.	Answer	
47	C	11	D	23	A	35	B	
48	C	12	D	24	A	36	B	
49	B	13	C	25	A	37	B	
50	A	14	B	26	C	38	D	