

Bihar Public Service Commission

Assistant Public Sanitary and Waste Management Officer Written (Objective)

Competitive Examination (Advt. No. 01/2022)

(Examination Date : 13.11.2022)

FINAL ANSWER KEY : Solid and Liquid Waste Management, Paper - II

Series-A		Series-B		Series-C		Series-D		Remarks
Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	
1	B	26	C	59	D	96	A	
2	D	27	A	60	B	97	C	
3	A	28	B	61	C	98	D	
4	A	29	B	62	C	99	D	
5	C	30	D	63	A	100	B	
6	D	31	A	64	B	101	C	
7	C	32	D	65	A	102	B	
8	D	33	A	66	B	103	C	
9	C	34	D	67	A	104	B	
10	A	35	B	68	C	105	D	Correct answer is option 'A'. No Change. Dumping is the most suitable answer as it covers all types of dumping. Open dumping is not a method of disposal, it means putting solid waste at some location and may not address environmental concerns. Open sea disposal is accepted method of disposal in many countries.
11	A	36	B	69	C	106	D	
12	B	37	C	70	D	107	A	
13	A	38	B	71	C	108	D	
14	B	39	C	72	A	109	B	
15	A	40	B	73	C	110	D	
16	D	41	D	74	D	111	D	Correct answer is option 'D'. No Change. All types of vehicles given in options are used for transfer of solid waste depending upon requirement is different countries.
17	A	42	B	75	C	112	D	Correct answer is option 'A'. No Change. Curbside pickup is specifically used for single residences. Apartments or Institutional buildings have temporary storage for solid waste which is picked up through other collection methods rather than curbside pickup.
18	A	43	B	76	C	113	A	
19	B	44	C	77	D	114	A	Correct answer is option 'B'. No Change
20	D	45	D	78	D	115	D	Correct answer is option 'D'. No Change. All gases i.e. Methane, Nitrogen & Hydrogen will be generated in reducing anaerobic environment.
21	B	46	C	79	D	116	A	
22	C	47	D	80	A	117	B	

Series-A		Series-B		Series-C		Series-D		Remarks
Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	
23	D	48	A	81	B	118	C	
24	A	49	B	82	C	119	A	
25	B	50	C	83	D	120	A	
26	A	51	B	84	C	121	D	
27	D	52	D	85	D	122	D	
28	C	53	D	86	A	123	B	
29	D	54	D	87	D	124	D	
30	Deleted	55	Deleted	88	Deleted	125	Deleted	CEEPHO manual of solid waste management – Part II page no. 342 section 17.6.2. gives 0.4-1.2 t/m ³ or 400-1200 kg/ m ³ as range which can be covered by two options.
31	D	56	A	89	B	1	C	
32	A	57	B	90	C	2	D	
33	B	58	C	91	D	3	A	
34	C	59	D	92	A	4	B	
35	D	60	A	93	B	5	C	
36	A	61	B	94	C	6	D	
37	B	62	C	95	D	7	A	
38	C	63	D	96	A	8	B	
39	Deleted	64	Deleted	97	Deleted	9	Deleted	No Change. (Deleted). WHO has 8 Categories.
40	A	65	B	98	C	10	D	
41	D	66	A	99	B	11	C	
42	A	67	B	100	C	12	A	Correct answer is option 'A'. No Change. Developing countries have lesser per capita consumption and produce lesser solid waste.
43	A	68	B	101	C	13	D	
44	C	69	D	102	A	14	B	
45	B	70	C	103	D	15	A	
46	D	71	A	104	B	16	C	
47	A	72	B	105	C	17	D	
48	D	73	A	106	B	18	C	
49	D	74	A	107	B	19	C	
50	B	75	C	108	D	20	A	
51	A	76	B	109	C	21	D	
52	A	77	B	110	C	22	A	Correct answer is option 'A'. No Change. Removal of floating solids is main purpose as it can affect function of further units not only trickling filter. So, 'A' is the best option.
53	D	78	D	111	D	23	D	
54	A	79	B	112	C	24	A	
55	B	80	C	113	A	25	B	Correct answer is option 'B'. No Change. ASP is aerobic process.
56	A	81	B	114	C	26	D	Correct answer is option 'A'. No

Series-A		Series-B		Series-C		Series-D		Remarks
Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	
								Change. CEEPHO manual for sewage & sewerage section 5.6.1.2 Page no.- 5-29 states "Medium bar screens have clear opening of 12 mm.". 12 mm is the answer covered by option 'A' Only. The IS:6280 gives classification of Screens and not only bar screens. So going by exact term the answer is chosen
57	D	82	A	115	B	27	C	
58	D	83	D	116	D	28	D	Correct answer is option 'D'. No Change. CEEPHO manual for sewage & sewerage (section 5.6.2.7.1.3 page No.- 5-42) gives detention time not exceeding 60s. So A, B & C are not correct.
59	D	84	A	117	B	29	C	
60	A	85	B	118	C	30	D	
61	C	86	A	119	B	31	C	
62	A	87	B	120	C	32	D	
63	C	88	A	121	B	33	C	
64	C	89	D	122	A	34	B	Correct answer is option 'C'. No Change. Trickling filter uses randomly packed material.
65	Deleted	90	Deleted	123	Deleted	35	Deleted	None of given options is corrected, hence the question is deleted.
66	B	91	C	124	D	36	A	
67	B	92	C	125	D	37	A	
68	D	93	A	1	B	38	C	
69	B	94	C	2	D	39	A	
70	B	95	C	3	D	40	A	
71	A	96	B	4	C	41	D	
72	D	97	A	5	B	42	C	
73	B	98	C	6	D	43	A	
74	C	99	D	7	A	44	B	
75	A	100	B	8	C	45	D	
76	D	101	A	9	B	46	C	
77	B	102	C	10	D	47	A	
78	D	103	A	11	B	48	C	
79	C	104	D	12	A	49	B	Correct answer is option 'C'. No Change. Oxidation ditch is an extended aeration system and algae is not a functional part of this system.
80	D	105	A	13	B	50	C	
81	C	106	D	14	A	51	B	
82	A	107	B	15	C	52	D	
83	C	108	D	16	A	53	B	
84	B	109	C	17	D	54	A	
85	C	110	D	18	A	55	B	
86	A	111	B	19	C	56	D	

Series-A		Series-B		Series-C		Series-D		Remarks
Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	
87	D	112	A	20	B	57	C	
88	B	113	C	21	D	58	A	
89	D	114	A	22	B	59	C	Correct answer is option 'D'. No Change. D is best option as it includes chemical precipitation as well.
90	A	115	B	23	C	60	D	
91	D	116	A	24	B	61	C	
92	B	117	C	25	D	62	A	Correct answer is option 'B'. No Change. Stabilization is of chemical nature.
93	C	118	D	26	A	63	B	
94	A	119	B	27	C	64	D	
95	C	120	D	28	A	65	B	
96	C	121	D	29	A	66	B	
97	A	122	B	30	C	67	D	
98	B	123	C	31	D	68	A	
99	A	124	B	32	C	69	D	
100	C	125	D	33	A	70	B	
101	C	1	D	34	A	71	B	
102	A	2	B	35	C	72	D	
103	A	3	B	36	C	73	D	
104	D	4	A	37	B	74	C	
105	B	5	C	38	D	75	A	
106	C	6	D	39	A	76	B	
107	B	7	C	40	D	77	A	
108	D	8	A	41	B	78	C	
109	C	9	D	42	A	79	B	
110	B	10	C	43	D	80	A	
111	B	11	C	44	D	81	A	
112	A	12	B	45	C	82	D	
113	D	13	A	46	B	83	C	
114	A	14	B	47	C	84	D	
115	C	15	D	48	A	85	B	Correct answer is option 'C'. No Change. SWM rules 2016.
116	D	16	A	49	B	86	C	
117	D	17	A	50	B	87	C	
118	B	18	C	51	D	88	A	
119	A	19	B	52	C	89	D	
120	C	20	D	53	A	90	B	
121	B	21	C	54	D	91	A	
122	A	22	B	55	C	92	D	
123	C	23	D	56	A	93	B	
124	D	24	A	57	B	94	C	
125	C	25	D	58	A	95	B	