

Braidwood Initial License Exam (2016)

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only				
1	H	2											Y		N	S	
2+	H	4											Y		N	S	Answer explanation has "D" as correct answer. RE: corrected
3	H	3											Y		N	S	Answer explanation has "B" & "D" as correct answer. RE: Corrected
4	F	3											Y		M	S	
5+	H	2											Y		B	S	

Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

- Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
- Enter the level of difficulty (LOD) of each question using a 1 – 5 (easy – difficult) rating scale (questions in the 2 – 4 range are acceptable).
- Check the appropriate box if a psychometric flaw is identified:
 - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
 - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
 - The answer choices are a collection of unrelated true/false statements.
 - The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
 - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
- Check the appropriate box if a job content error is identified:
 - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
 - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
 - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
 - The question requires reverse logic or application compared to the job requirements.
- Check questions that are sampled for conformance with the approved K/A and those that are *designated SRO-only* (K/A and license level mismatches are unacceptable).
- Enter question source: (B)ank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
- Based on the reviewer’s judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- At a minimum, explain any “U” ratings (e.g., how the Appendix B psychometric attributes are not being met).

A “+” in the “Q#” column indicates that question was reviewed as part of the representative sample of 30 questions.

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6	F	2										Y		N	S	
7	H	3										Y		B	S	2009 NRC Exam
8+	H	2										Y		N	S	
9	H	3										Y		N	S	
10	F	2										Y		B	S	2009 NRC Exam
11	F	2										Y		M	S	
12+	F	2										Y		N	S	
13+	F	2										Y		N	S	
14	H	3										Y		B	E S	2014 NRC Exam First bullet references "1P-455". Should it read "1PT-455"? RE: No, "P" designator is for Pressure control loop, not just the transmitter. Stay as is.
15	F	3										Y		B	S	2009 NRC Exam
16	H	3										Y		N	S	
17	H	3										Y		B	S	
18+	F	2										Y		B	S	Answer explanation has "B" as correct answer. RE: Corrected Does 'local' mean a mechanical indicator on the breaker? RE: Yes. 2011 NRC Exam
19	H	4										Y		B	S	Would operators know function of Test switches during testing? Is this a surveillance done by OPS? RE: Yes, operators have been trained on this ST, done frequently, included in OJT/TPC.
20	F	2										Y		B	S	
21+	H	2										Y		N	S	
22	F	2										Y		B	S	
23	F	2										Y		B	S	2009 NRC Exam
24+	F	2										Y		N	S	
25	H	3										Y		N	S	

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only				
26+	H	3											N		B	U	K/A references, "major DC Loads" whereas question asks about power on AC busses? 2011 NRC Exam. RE: Replace/Revise question.
27	F	3											Y		B	S	2011 NRC Exam
28	F	2											Y		N	S	1/2X2
29	H	2											Y		B	E S	2014 NRC Exam Why is this a high cog question? Conditions in stem don't change choice of correct answer. RE: Higher cog question since 1A AFW Pump has self-driven shaft cooling where as 1B AFWP does not have this design feature. Stay as is.
30	F	3											N		B	U	K/A requires monitoring automatic operation with air pressure. Nothing is operated in automatic. RE: Replace/Revise Q. 2011 NRC Exam
31+	H	3											N		B	U S	K/A mismatch since not in 'A2" format. RE: Q reconsidered to be acceptable. A2 format exception allowed by NUREG ES-401, D.2.a
32	H	3											Y		N	S	
33	H	3											Y		N	S	
34+	H	2											Y		N	S	
35	H	2											Y		N	S	
36	H	2											Y		N	S	
37	H	3											Y		N	S	
38+	H	2											Y		N	S	
39+	H	2											Y		N	S	
40	H	3											Y		B	S	2011 NRC Exam
41	H	2											Y		B	S	2011 NRC Exam
42	F	2											Y		N	S	
43+	F	2											Y		M	S	Answer Explanation box describes 1CV8110 as MOV referenced in PRI 13, but PRI 13 references 1CV8100. RE Corrected typo.

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44	H	3										Y		N	S	
45	F	2										Y		B	S	
46+	F	2										Y		B	S	2011 NRC Exam
47	F	2										Y		N	S	
48	H	2										Y		B	S	
49	F	2										Y		N	S	
50+	F	3	X									?		B	U	2011 NRC Exam. Don't need the initial conditions given to answer the question, only need last sentence. Suggest this question be reconstructed for a SBLOCA with an ATWS. RE: Replace/Revise Q.
51	H	2										Y		B	E	2011 NRC Exam. How is this a High cog question? How is the sequence changed with event type? RE: LOOP/LOCA vs. LOCA alone changes answer. Keep as Higher Cog.
52	F	3										Y		N	S	
53+	F	2										Y		N	S	
54	H	2										Y		B	S	1/2X2
55	H	3										Y		N	S	1/2X2: Third bullet references "1P-457". Should it read "1PT-457"? RE: Sat as is, "P" designator refers to pressure loop.
56	F	2										Y		N	S	
57+	H	2										Y		N	S	
58	F	2										Y		B	S	
59	H	3										Y		B	S	2011 NRC Exam
60+	F	2										Y		B	S	2011 NRC Exam
61	H	2				X						?		M	U S	I don't understand the explanation for the correct answer provided in the explanation box. MFW flow reg valve is referenced but there would be no MFW flow during a LOOP. Explanation is about AFW and SGWL. I believe AFW would fill the SGs to the top w/o operator intervention. RE: Unit does not trip, FW/Cond stays on line via ABT action. Steaming reduces SGWL. Keep Q as is.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
62	H	2										Y		M	S	
63+	H	2										Y		B	S	2009 NRC Exam (Modified question is on 2016 Cert exam).
64	F	2										Y		M	S	
65	H	3										Y		M	S	
66	H	3										Y		B	S	2009 NRC Exam
67+	F	2										Y		N	S	
68	H	3										Y		B	S	2009 NRC Exam
69	F	2										Y		N	S	
70+	H	2										Y		M	S	
71	H	2										Y		N	S	
72	H	2										Y		B	S	2011 NRC Exam
73	F	2										Y		N	S	
74+	F	2										Y		N	S	
75	F	2										Y		N	S	
76	F	2										Y	Y	B	S	2009 NRC Exam
77	F	2										Y	Y	N	S	
78+	H	3										Y	Y	N	S	1/2X2
79	H	3										Y	Y	B	S	2009 NRC Exam
80	H	4										Y	Y	N	S	
81	H	2										Y	Y	N	S	1/2X2
82+	H	3										Y	Y	B	S	
83	F	2										Y	Y	B	S	2011 NRC Exam. Wrong supporting reference provided (AFW vs EDG).
84	F	2										Y	Y	N	S	

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85+	F	2											Y	Y	N	S	1/2X2
86	H	3											Y	Y	N	S	
87	H	2											Y	Y	N	S	
88	H	3		X									Y	Y	N	U	Stem states that alarm came in and cleared in 5 seconds cueing that an auto closure occurred. First part of question is RO knowledge. Consider changing distractors to TS 3.7.7 is/is not applicable and how RCP CC Barrier is tracked for repair or enter into BOA for RCP malfunction. RE: Q corrected by removing 2 nd bullet about HIGH alarm clearing in 5 seconds. Deletes cue.
89+	F	3											Y	Y	N	S	
90	F	2											Y	Y	N	S	
91	H	2											Y	Y	N	S	1/2X2 Does loss of DC bus 113 result in loss of any panel indicators ON Table M1? RE: No, annunciators lost to all M1 components, but not indications.
92	H	2											Y	Y	B	S	2014 NRC Exam Why is this question Hi Cog? RE: Considered High cog since applicant must have knowledge of limits for different parameters provided in distractors. Stay as is.
93+	F H	3											Y	Y	B	S	2009 NRC Exam Why is this question Low Cog? RE: Changed to High cog since containment pressure introduces adverse containment conditions. Operators must apply this to SGWL to get correct answer.
94	H	2											Y	Y	B	S	2009 NRC Exam Why is this question Hi Cog? RE: Type and rate of runback determines whether or not chem sample is required. Stay as is.
95	F	2											Y	Y	M	S	
96+	H	4											Y	Y	N	S	
97	F	3											Y	Y	M	S	
98	H	2											Y	Y	B	S	2009 NRC Exam

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99	H	3										Y	Y	B	S	2009 NRC Exam
100+	F	2										Y	Y	N	S	

Questions from Previous NRC Exam: 28%
 1/2x2 questions: 7
 # of Unsat questions: 4 or 4%

New Q's: 36 / 14
 Modified Q's: 8 / 2
 Bank Q's: 31 / 9

RO LOK: F – 33; H - 42
 SRO LOK: F – 11; H - 14