

NRC Comments

Operating Test (5/12 - 5/22/2000)

Admin. - Calc ECP - No allowance \pm on calc. added \pm

✓ JPM Admin - Conduct Shift TO. - Can we make alt path or some other spec cond.?

(Both Admin alt) No change yet applicable

#1 Guest on NOB + Temp Std. Andine -

Self. Proc. Provide examples NOB/TSO and how Candidate determine if it still active.

✓ Guest #3.1 - Pipe break - Stay Time - add longer one on question atom. Now just yes or no. Revised

JPM - Sync. Time to grid (alt rate) AC Elect (62)

Sum #2 - 225 fair high - may need to add ^{delta}

Amputat paid to offset spec. action. ✓
changed to log. Most controls given.
Sum #4 S.R. paid to manage. spec. action? any log.

OK

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward			
1	H [✓]	2 ³					X						(U)	NOT AN? SRO ONLY QUESTION, >1 CORRECT ANSWER
2	HF	2					X						(U)	>1 CORRECT ANSWER WEAK Question.
3	H [✓]	3											S	SRO ONLY- OK
4	H [✓]	2											(E)	SRO ONLY- OK (MAY NEED TO BE MORE EXPLICIT IN STEM)
5	F [✓]	2					X						E	MAYBE >1 CORRECT ANSWER More stem specified. Require
6	F [✓]	2					X						E	MAYBE >1 CORRECT ANSWER
7	F	2											S	SRO ONLY OK
8	F	2											S	
9	F ^H	2											S	TERMINOLOGY QUESTION IN ANSWER 'C' OK
10	F	2											S	

Instructions

[Refer to 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.
 - More than one distractor is not credible.
 - 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.
- Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- For any "U" ratings, at a minimum, explain how the Appendix B psychometric attributes are not being met.

(C) also correct.
- 729248
- revised
- revised stem
- require revised
- minor revision

Room 15

SALEM EXAM 1/2000

ES-401

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward		
N	11	H	3	✓								S	add measurably affect. ✓ (done)
HP	N	12	H	3								S	GET? Not Not Lic. open hand? - ED decision
HP	N	13	H	3								S	
HP	N	14	F	2	✓							S	Rev Procedure
N	15	H	2									S	Stem ✓ done
0	16	H	3									S	SHOULD THIS BE SRO ONLY Upgrade? Now 124
NRC	17	H	3									S	SHOULD THIS BE SRO ONLY Upgrade?
N	18	H	3									S	SRO ONLY - OK
OK - N	19	H	2									U	NOT SRO ONLY System Q. With ^{discuss} Revised.
B	20	H	3	X								E	SRO ONLY - OK / STEM NEEDS TO STATE "REQUIRED BY"
N	21	F	2				X					U	NOT SRO ONLY / COULD 'B' BE CORRECT - ^{DEPENDING ON REQ LOCATION} POSSIBLE
N	22	F	3									E	SIMILAR TO #82 - POSSIBLE CUE OK
NRC	23	H	3									S	Distractor 'D' more Criticality Impact of Sent. - Revised 'D'
NRC	24	H	3									S	Backward Logic NO change
NRC	25	H	3									S	SRO ONLY - OK
NRC	26	H	2									S	
NRC	27	F	3									S	
NRC	28	H	3									S	
NRC	29	H	3									S	
NRC	30	H	3									S	

SALEM EXAM 1/2000

ES-401

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Form ES-401-9

	Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. U/E/S	6. Explanation
				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	
NRC	31	H	3									S	
NRC	32	H	3									S	
N	33	F	2									S	LOD Low Missed on RQ OK
N	34	F	3									S	LOD Design Change - OK
N	35	H	3									S	could. vs would (Backward) ✓
NRC	36	F	2									S	
NRC	37	H	3									S	
NRC	38	H	3									S	
NRC	39	H	3									U	NOT SRO ONLY - SYSTEM OPS QUESTION ^{revised} _{opportunity} ✓
N	40	H	3									S	
NRC	41	H	3									S	
NRC	42	H	3									U	NOT SRO ONLY - SYSTEM OPS QUESTION ^{revised} OK
N	43	H	3									S	I HAVE TECH ? REGARDING RUNAR START STORAGE OK
NRC	44	F	2									S	
B	45	H	4 ³									S	
B	46	H	3									S	
NRC	47	H	4									S	
B	48	H	3									S	
NRC	49	H	3									U	NOT SRO ONLY - TRANSMITTER ^{Revised OK} FAILURE EFFECTS _{System op} ✓
B	50	H	4									S	

SALEM

EXAM

1/2000

ES-401

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward		
N 51	F	3										S	
B 52	F	3										S	
N 53	H	23										S	
N 54	H	3										S	SRO? upgrade
B 55	H	3										S	
B 56	F	3										S	
B 57	H	2										S	
B 58	F	3										S	
B 59	F	3										S	
N 60	H	2										S	
B 61	H	3										S	
NRC 62	H	4										S	
NRC 63	F	3										S	
NRC 64	F	3										(U)	NOT SRO ONLY. - Revised Q.
B 65	H	4										S	
N 66	H	3										S	
B 67	H	4										E	RESTATE STEM Revised
N 68	H	2										(U)	NOT SRO ONLY - INTERLOCK? revised design Q
NRC 69	H	3										E	RESTATE CORRECT ANSWER Remove 'C' or 'D' Due to port OK
N 70	H	3										(U)	NOT SRO ONLY - SYSTEM OPS? Revised to AOP actions req.

SALEM EXAM 1/2000

ES-401

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	
B	71	F	3 ²								S	
N	72	F	2								S	
NRC	73	F	2								S	
B	74	F	3								S	
B	75	F	2 ³								S	
B	76	F	3								U	NOT SRO ONLY - SYSTEM INTERLOCK? <i>revised & IS active</i>
B	77	F	3								S ^E	SHOULD THIS BE SRO ONLY? <i>Maybe.</i>
N	78	F	1					X			U	PURPOSE QUESTION <i>Revised? No change</i>
B	79	F	3								S	
B	80	H	2								S	
<i>Marginal</i> NRC	81	H	2								U	NOT SRO ONLY - SYSTEM OPS? <i>revised -</i>
N	82	H	3								S/E	WHAT IS A "NON URGENT FAILURE" ALARM - DOES IT EXIST <i>new</i>
N	83	H	2								S	
B	84	H	3								U	NOT SRO ONLY - SYSTEM OPS? <i>revised & Basis Q</i>
NRC	85	F	3								S	
NRC	86	H	3								S	
B	87	H	4								S	
N	88	F	3 ²								S	<i>could</i> SHOULD THIS BE SRO ONLY NO
N	89	F	2								S	
N	90	H	4								S ^E	SRO ONLY - OK "SRO" <i>Revised & Underscore</i>

SALEM EXAM - 1/2000

ES-401

2

Form ES-401-9

	Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
NRC	91	H	3										S	
O	92	H	3										S	
N	93	H	3										S	
N	94	H	3										E	RESTATE STEM - "PREFERRED METHOD" - BY WHAT PROCEDURE? ✓
B	95	H	3 ²										S	
N	96	F	2										S	
NRC	97	H	3										S	
N	98	F	3										E	SRO ONLY - OK - NEED ^{MORE} EXPLANATION FOR DISTRACTOR - "B" OK
B	99	F	3										S	
✓NRC	100	H	3										(S)	NOT SRO ONLY - SYSTEM OPS QUESTION - ^{revised} response
B	101	F	3										S	
✓B	102	F	2					X					(U)	BORDERLINE (SRO ONLY)? ATB dist. Not planned by ^{revised} OK
N	103	F	3										S	SRO ONLY - OK
NRC	104	F	3										S	Would we could in stem. ✓
NRC	105	H	3										S	
N	106	F	3										S	
N	107	H	3										S	
NRC	108	F	3										S	SRO ONLY - OK
NRC	109	F	3										S	
NRC	110	F	3										S	

NUREG-1021, Revision 8

Salem 1/10/00 RO NRC Exam Question Cognitive Level and Source Summary

RECORD #	RO	COGNITIVE LEVEL	SOURCE	NOTES
2	x	C H	NRC(PI)	SM
5	x	M F	New(jkl)	
6	x	M F	New	
8	x	M F	NRC(Braid)	
9	x	C F	New(jkl)	
10	x	A F	New	
11	x	C H	New	
12	x	A H	New	
13	x	A H	New(jkl)	
14	x	A F	New(jkl)	
15	x	C H	New(jkl)	
16	x	A H	BV Audit	SM
17	x	C H	NRC(PI)	
22	x	M F	New(jkl)	
23	x	C H	SalemNRC 2/99	Last two NRC-SM
24	x	C H	NRC Bank	
26	x	M H	NRC Bank	
27	x	M F	NRC Bank	
28	x	M H	NRC Bank	
29	x	C H	NRC Bank	
30	x	A H	New	
31	x	C H	NRC Bank	
32	x	C H	NRC Bank	
33	x	M F	New(jkl)	
34	x	M F	New(jkl)	
35	x	C H	New	
36	x	M F	NRC Bank	
37	x	C H	NRC Bank	
38	x	A H	NRC Bank	
40	x	C H	New(jkl)	
41	x	C H	NRC Bank	SM
43	x	M H	New	
44	x	M F	NRC Bank	
45	x	C H	SalNRC 6/98	

Salem 1/10/00 RO NRC Exam Question Cognitive Level and Source Summary

RECORD #	RO	COGNITIVE LEVEL	SOURCE	NOTES
46	x	C H	Fac Bk	
47	x	A H	NRC Bank	
48	x	C H	Fac Bk	SM
50	x	C H	SalNRC 2/98	
51	x	M F	New(jkl)	
52	x	M F	Fac Bk	
53	x	A H	New(jkl)	
54	x	M H	New(jkl)	
55	x	C H	Fac Bk	
56	x	M F	SalNRC 6/98	
57	x	A H	Fac Bk	
58	x	M F	SalNRC 2/98	
59	x	M F	SalNRC 2/98	
60	x	C H	New	
61	x	C H	SalNRC 6/98	
62	x	A H	SalNRC 9/98	Last two NRC
63	x	M F	SalNRC 9/98	
65	x	A H	Fac Bk	SM
66	x	C H	New	
67	x	C H	SalNRC 6/98	
69	x	C H	NRC Bank	
71	x	M F	Fac Bk	
72	x	M F	New	
73	x	M F	NRC(Braid)	SM
74	x	M F	SalNRC 6/98	
75	x	M F	Fac Bk	SM
77	x	M F	SalNRC 2/98	
78	x	M F	New(jkl)	
79	x	M F	SalNRC 2/98	
80	x	M H	SalNRC 6/98	
82	x	C H	New(jkl)	
83	x	C H	New(jkl)	
85	x	M F	NRC Bank	
86	x	A H	NRC(PI)	

Salem 1/10/00 RO NRC Exam Question Cognitive Level and Source Summary

RECORD #	RO	COGNITIVE LEVEL	SOURCE	NOTES
87	x	C H	Fac Bk	
88	x	M F	New(jkl)	
89	x	M F	New(jkl)	
91	x	C H	NRC(PI)	
92	x	C H	PI Bank	
93	x	M H	New	
94	x	C H	New	
95	x	C H	SalNRC 6/98	
96	x	M F	New	
97	x	A H	NRC(WC)	
99	x	M F	SalNRC 6/98	
101	x	M F	Fac Bk	SM
104	x	M F	NRC(Byron)	
105	x	C H	NRC(Braid)	
106	x	M F	New(jkl)	
107	x	C H	New(jkl)	
109	x	M F	NRC(Braid)	
110	x	M F	NRC(Braid)	SM
111	x	C H	Fac Bk	
112	x	M F	SalNRC 6/98	
114	x	C H	Fac Bk	
115	x	M F	Fac Bk	SM
116	x	M H	SalNRC 2/97	
117	x	C H	New	
118	x	M H	PI Bank	
119	x	M F	Fac Bk	SM
120	x	C H	New(jkl)	
121	x	A H	SalNRC 2/99	Last two NRC-SM
122	x	C H	NRC(Braid)	SM
123	x	M F	NRC(Braid)	
125	x	C H	New(jkl)	
127	x	C H	New(jkl)	

Salem 1/10/00 SRO NRC Exam Question Cognitive Level and Source Summary

RECORD #	SRO	COGNITIVE LEVEL	SOURCE	NOTES
1	x	C H	New(jkl)	
3	x	A H	New	
4	x	C H	SalNRC 6/98	
5	x	M F	New(jkl)	
6	x	M F	New	
7	x	A F	New(jkl)	
8	x	M F	NRC(Braid)	
9	x	C F	New(jkl)	
10	x	A F	New	
12	x	A H	New	
13	x	A H	New(jkl)	
14	x	A F	New(jkl)	
16	x	A H	BV Audit	SM
17	x	C H	NRC(PI)	
18	x	A H	New(jkl)	
19	x	M H	New(jkl)	
20	x	M H	SalNRC 2/98	SM
21	x	M F	New(jkl)	
23	x	C H	SalemNRC 2/99	Last two NRC-SM
25	x	C H	NRC Bank	
26	x	M H	NRC Bank	
27	x	M F	NRC Bank	
28	x	M H	NRC Bank	
29	x	C H	NRC Bank	
30	x	A H	New	
31	x	C H	NRC Bank	
32	x	C H	NRC Bank	
33	x	M F	New(jkl)	
34	x	M F	New(jkl)	
37	x	C H	NRC Bank	
38	x	A H	NRC Bank	
39	x	A H	Salem NRC 9/98	Last two NRC
41	x	C H	NRC Bank	SM
42	x	M H	NRC Bank	

Salem 1/10/00 SRO NRC Exam Question Cognitive Level and Source Summary

RECORD #	SRO	COGNITIVE LEVEL	SOURCE	NOTES
46	x	C H	Fac Bk	
49	x	C H	NRC Bank	
51	x	M F	New(jkl)	
52	x	M F	Fac Bk	
53	x	A H	New(jkl)	
54	x	M H	New(jkl)	
56	x	M F	SalNRC 6/98	
57	x	A H	Fac Bk	
59	x	M F	SalNRC 2/98	
61	x	C H	SalNRC 6/98	
62	x	A H	SalNRC 9/98	Last two NRC
63	x	M F	SalNRC 9/98	
64	x	M F	NRC Bank	
68	x	C H	New(jkl)	
70	x	C H	New(jkl)	
71	x	M F	Fac Bk	
73	x	M F	NRC(Braid)	SM
75	x	M F	Fac Bk	SM
76	x	M F	Fac Bk	SM
77	x	M F	SalNRC 2/98	
78	x	M F	New(jkl)	
79	x	M F	SalNRC 2/98	
80	x	M H	SalNRC 6/98	
81	x	A H	NRC(Braid)	SM
82	x	C H	New(jkl)	
83	x	C H	New(jkl)	
84	x	C H	SalNRC 6/98	
86	x	A H	NRC(PI)	
87	x	C H	Fac Bk	
88	x	M F	New(jkl)	
90	x	A H	New(jkl)	
91	x	C H	NRC(PI)	
92	x	C H	PI Bank	
93	x	M H	New	

Salem 1/10/00 SRO NRC Exam Question Cognitive Level and Source Summary

RECORD #	SRO	COGNITIVE LEVEL	SOURCE	NOTES
94	x	C H	New	
95	x	C H	SalNRC 6/98	
96	x	M F	New	
97	x	A H	NRC(WC)	
98	x	M F	New(jkl)	
99	x	M F	SalNRC 6/98	
100	x	C H	NRC Bank	
101	x	M F	Fac Bk	SM
102	x	M F	Fac Bk	
103	x	M F	New(jkl)	
104	x	M F	NRC(Byron)	
106	x	M F	New(jkl)	
107	x	C H	New(jkl)	
108	x	M F	NRC(PI)	
110	x	M F	NRC(Braid)	SM
111	x	C H	Fac Bk	
112	x	M F	SalNRC 6/98	
113	x	C H	New(jkl)	
114	x	C H	Fac Bk	
115	x	M F	Fac Bk	SM
116	x	M H	SalNRC 2/97	
117	x	C H	New	
118	x	M H	PI Bank	
119	x	M F	Fac Bk	SM
120	x	C H	New(jkl)	
121	x	A H	SalNRC 2/99	Last two NRC-SM
122	x	C H	NRC(Braid)	SM
123	x	M F	NRC(Braid)	
124	x	C H	New(jkl)	
125	x	C H	New(jkl)	
126	x	M H	Fac Bk	SM
127	x	C H	New(jkl)	

ECHO WRITTEN EXAM
NRC COMMENTS

#	NRC COMMENT	RESPONSE/ACTION
1	Not at SRO Level	Revised question
2	Add.....According to procedure or TS	Done
4	Add.....According to procedure or TS	Done
5	Add.....According to procedure or TS	Done
6	Consider adding "due to intentional....."	Re-worded, added intentional and unintentional
11	Add "measurable" to stem	Done
14	Add.....According to procedure or TS	Done
15	Consider changing to an injury	Done
16	Utility replacement question	Moved old Rec. #16 to Rec. #124 (SRO only)
19	Not at SRO Level	Discuss
20	Add.....According to procedure or TS	Done
21	Not at SRO Level	Revised
23	Make d. read like the others	Done
33	EZ but not required to change	Knowledge of difference between RxTrip and ESFAS
34	EZ but not required to change	Knowledge of recent design change
35	Change "could" to "would"	Done
39	Not at SRO Level	Revised
42	Not at SRO Level	Revised
49	Not at SRO Level	Replaced with new question
64	Not at SRO Level	Replaced with new question
67	Move "CRS wants.." to "to around AF923"	Done
68	Not at SRO Level	Revised
69	Make c. and d. similar in length	Done
70	Not at SRO Level	Revised
76	Not at SRO Level	Revised
78	No action required but <desirable purpose quest.	No action
81	Not at SRO Level	Revised stem
84	Not at SRO Level	Revised
94	Add.....According to procedure or TS	Done
100	Not at SRO Level	Replaced with new question
102	More than one implausible distractor	Modified distractors c. and d.
104	Change "could" to "would"	Done
124	Not at SRO Level	Replaced w/Rec.#16. New question for Rec.#16