

WRITTEN EXAMINATION REVIEW WORKSHEET, ES-401-9

WITH NRC COMMENTS

FOR THE MONTICELLO INITIAL EXAMINATION - OCT 2002

The first 30 questions were used for the sample. All 125 questions were reviewed for accuracy and K/A match.

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | | 5. Other | | 6. U/E/S | 7. Explanation | |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|-------|----------|---|----------|----------------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | | |
| 1 | F | 2 | | | | | | | | | | | | x | | S | |
| 2 | H | 2.5 | | | | | | | | | | | | x | | U | K/A asks ability to monitor, Q asks what will cause a rod block. |
| 3 | H | 2.5 | | | | | | | | | | | | | x | U | Applicants will perform this operation during the operating test (overlap). |
| 4 | F | 2.0 | | | | | | | | | | | | | | S | |
| 5 | H | 2.5 | | | | | | | | | | | | | x | U | Not SRO ONLY. ROs required to know this material |
| 7 | H | 2.5 | | | | | | | | | | | | | | E | Put stem in past tense, put distractors in columns to highlight 2-parts |
| 8 | H | 2.0 | | | | | | | | | | | | x | | U | effecting should be affecting - K/A ask for recirc effects, Q asks who? |
| 9 | (F)H | 2.5 | | | | | | | | | | | | | | S | . |
| 10 | H | 2.5 | | | | | | | | | | | | | | E | Reformat distractors |
| 11 | H | 2.5 | | | | | | | | | | | | | | E | annunciator is annunciator |

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.
 - 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.
- 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).
- 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?
- At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. U/E/S | 7. Explanation |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 12 | H | 2.5 | | | | | | | | | | | | S | |
| 13 | F | 2.0 | | | | | | | | | | | | S | |
| 14 | H | 2.0 | | | | | | | | | | | | S | |
| 15 | (F)H | 2.0 | | | | | | | | | | | | U | Requires some analysis. With info given, can't rule out distractor b. how was this taught? |
| 16 | H | 2.5 | | | | | | | | | | | | E | inseration is spelled insertion |
| 17 | (H)F | 2.0 | | | | | | | | | | | | U | If 18 is fundamental, so is this one. Put plant conditions in past tense. ask how taught. |
| 18 | F | 2.0 | | | | | | | | | | | | S | |
| 19 | H | 3.0 | | | | | | | | | | x | | S | |
| 20 | F | 2.0 | | | | | | | | | | | | S | |
| 21 | (H)F | 2.5 | | | | | | | | | | | | U | Requires only memory of power supplies to the APRMs. |
| 22 | (F)H | 2.5 | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 23 | (H)F | 2.5 | | | | | | | | | | | x | U | Requires only memory of basis and when a T.S. is applicable. |
| 24 | (F)H | 3.0 | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 25 | (F)H | 2.5 | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 26 | (F)H | 2.0 | | | | | | | | | | | ? | U | Requires some analysis, do you require ROs to make operability calls? |
| 27 | (F)H | 2.0 | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 28 | H | 3.5 | | | | | | | | | | | | S | |
| 29 | (F)H | 2.5 | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 30 | F | 2.0 | | | | | | | | | | | | S | |

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|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------------|---|
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| 31 | H | 2.5 | | | | | | | | | | | | | E | Put "The Containment Spray Valves will" in the stem. In distractor C., make Valve plural like the other distractors (Valves). |
| 32 | H | 2.5 | | | | | | | | | | | | | S | |
| 33 | (F)H | 2.5 | | | | | | | | | | | ? | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 34 | H | 2.0 | | | | | | | | | | | | | S | |
| 35 | F | 2.0 | | | | | | | | | | | | | S | |
| 36 | H | 2.0 | | | | | | | | | | | | | S | |
| 37 | (F)H | 2.0 | | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 38 | H | 3.0 | | | | | | | | | | | | | S | |
| 39 | (F)H | 2.5 | | | | | | | | | | | | | U | Requires some analysis of given conditions to arrive at a conclusion. |
| 40 | F | 2.0 | | | | | | | | | | | | | S | |
| 41 | H | 3.0 | | | | | | | | | | | | | E | Put in column format. |
| 42 | H | 2.5 | | | | | | | | | | | | | E | Put in column format. |
| 43 | H | 2.5 | | | | | | | | | | | | | E | Put in column format |
| 44 | H | 4.0 | | | | | | | | | | | x | | S | |
| 45 | H | 2.5 | | | | | | | | | | | | | E | Put in column format |
| 46 | H | 2.0 | | | | | | | | | | | | | S | |
| 47 | (F)H | 2.0 | | | | | | | | | | | | | U | Requires an RO to make an operability determination. Describe the monthly test somewhat Requires some analysis of given conditions to arrive at a conclusion. |
| 48 | (H)F | 2.0 | | | | | | | | | | | | | U | Requires recall of memory items, no analysis. |
| 49 | H | 2.5 | | | | | | | | | | | | | S | |

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|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | |
| 50 | F | 2.0 | | | | | | | | | | | | S | |
| 51 | F | 2.0 | | | | | | | | | | | | S | |
| 52 | H | 2.0 | | | | | | | | | | | | E | Put in column format. |
| 53 | H | 2.0 | | | | | | | | | | | x | E | Put in column format |
| 54 | H | 2.0 | | | | | | | | | | | | E | Put in column format; put stem in past tense. |
| 55 | F | 2.0 | | | | | | | | | | | | E | Re-word the stem to reduce confusion. |
| 56 | F | 2.0 | | | | | | | | | | | | E | Put in column format |
| 57 | F | 2.0 | | | | | | | | | | | | S | |
| 58 | H | 2.5 | | | | | | | | | | | x | E | Remove "Postulated Scenario, quiet" answer doesn't fully answer question, reword d. to answer question, not make statement. |
| 59 | H | 2.0 | | | | | | | | | | | | E | Put in column format. Do you really have 300 cps with the head removed? |
| 60 | F | 2.0 | | | | | | | | | | | | S | |
| 61 | F | 2.5 | | | | | | | | | | | x | U | K/A is generic valve lineup. Q is specific to the RCIC system. |
| 62 | H | 2.5 | | | | | | | | | | | | U | If tech specs are provided, direct look-up. If no tech specs, not required to be memorized. |
| 63 | H | 2.5 | | | | | | | | | | | | S | |
| 64 | F | 2.0 | | | | | | | | | | | | S | |
| 65 | F | 2.5 | | | | | | | | | | | | S | |
| 66 | F | 2.0 | | | | | | | | | | | x | S | |
| 67 | F | 2.0 | | | | | | | | | | | | S | |
| 68 | F | 2.5 | | | | | | | | | | | x | U | ROs would be required to know this material from memory. |

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|-------|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|----------------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 88 | H | 2.5 | | | | | | | | | | | | x | E | Put in column format |
| 89 | F | 2.0 | | | | | | | | | | | | | S | |
| 91 | (H)F | 2.0 | | | | | | | | | | | | | U | Answer is memorized information |
| 92 | (H)F | 2.5 | | | | | | | | | | | | | U | Material is not required to be memorized (steps from a procedure). Put in column format. |
| 93 | (H)F | 2.5 | | | | | | | | | | | | | U | Answer is memorized information |
| 94 | F | 2.5 | | | | | | | | | | | | | E | Put in column format |
| 95 | H | 3.0 | | | | | | | | | | | | x | E | Put in column format |
| 96 | (H)F | 2.0 | | | | | | | | | | | | x | E | Put in column format |
| 96.1 | F | 2.0 | | | | | | | | | | | | | S | |
| 97 | H | 2.5 | | | | | | | | | | | | | S | |
| 98 | (H)F | 2.0 | | | | | | | | | | | | x | U | Answer is memorized information and not SRO ONLY (system info, not tech spec LCO Basis) Put in column format |
| 99 | H | 2.0 | | | | | | | | | | | | | S | |
| 100 | H | 2.0 | | | | | | | | | | | | | S | |
| 100.1 | H | 2.0 | | | | | | | | | | | | x | S | |
| 101 | H | 2.5 | | | | | | | | | | | | | S | |
| 102 | F | 2.0 | | | | | | | | | | | | x | S | |
| 103 | H | 2.0 | | | | | | | | | | | | | E | Put in column format |
| 104 | F | 2.0 | | | | | | | | | | | | | S | |
| 105 | (F)H | 2.0 | | | | | | | | | | | | | U | Analysis required to arrive at conclusion |

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| 106 | (F)H | 2.5 | | | | | | | | | | | | U | Analysis required to arrive at conclusion |
| 107 | H | 2.5 | | | | | | | | | | | x | U | Not SRO ONLY, ROs are responsible for EOP Basis. Put in column format |
| 108 | F | 2.0 | | | | | | | | | | | | S | |
| 109 | H | 2.0 | | | | | | | | | | | x | U | Not SRO ONLY, ROs are responsible for EOP Basis. |
| 110 | F | 2.0 | | | | | | | | | | | x | E | Plant conditions are unnecessary. |
| 111 | H | 2.0 | | | | | | | | | | | | S | |
| 112 | F | 2.0 | | | | | | | | | | | | S | |
| 113 | F | 2.0 | | | | | | | | | | | | U | Put in column format. Tests group 5 info - See Q #29. |
| 114 | (H)F | 3.0 | | | | | | | | | | | x | U | Answer is memorized information |
| 115 | (F)H | 2.0 | | | | | | | | | | | | U | Analysis required to arrive at conclusion |
| 116 | F | 2.0 | | | | | | | | | | | | S | |
| 117 | F | 2.0 | | | | | | | | | | | x | E | Put in column format |
| 118 | H | 2.0 | | | | | | | | | | | x | S | |
| 118.1 | H | 2.5 | | | | | | | | | | | | S | |
| 119 | F | 2.0 | | | | | | x | | | | | | U | ROs not required to be knowledgeable of LCO time limitations. |
| 120 | H | 3.0 | | | | | | | | | | | | S | |
| 121 | H | 2.5 | | | | | | | | | | | x | U | Not SRO ONLY, ROs are responsible for EOP Basis. |
| 121.1 | H | 3.5 | | | | | | | | | | | | S | |
| 122 | H | 2.5 | | | | | | | | | | | | S | |
| 123 | F | 2.0 | | | | | | | | | | | | E | Put in column format |

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|-------|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 123.1 | F | 2.0 | | | | | | | | | | | | S | |
| 124 | H | 2.5 | | | | | | | | | | | | S | |
| 125 | F | 2.0 | | | | | | | | | | | | S | |
| 126 | H | 2.0 | | | | | | | | | | | | S | |
| 127 | H | 2.0 | | | | | | | | | | | | S | |
| 127.1 | H | 2.0 | | | | | | | | | | | x | U | Not SRO ONLY, ROs are required to know EOP Basis. Put in column format |
| 128 | H | 2.0 | | | | | | | | | | | x | S | |