

Name: _____

Date: _____

Instructions: Please refer to the CDA R2.0 Visio diagram as needed.

1. According to the CDA R2.0 standard, for what **primary** purpose was the CDA document markup specification that specifies the structure and semantics of "clinical documents" defined for?
 - A. Natural Language Processing
 - B. Clinical Research
 - C. Continuity of Care Management
 - D. Exchange
 - E. Medical Records Storage

2. Which of the following most completely defines the goals identified for the CDA?
 - I. Give priority to delivery of patient care.
 - II. Be compatible with a wide range of document creation applications.
 - III. Enable a wide range of post-exchange processing applications.
 - IV. Support exchange of human-readable documents between users, including those with different levels of technical sophistication.
 - V. Enable policy-makers to control their own information requirements without extension to this specification.
 - A. I, II only
 - B. I, II, III only
 - C. I, II, III, IV, V
 - D. I, III, IV only
 - E. II, III only

3. Which of the following most completely defines the design principles specified for CDA?
 - I. This architecture must be compatible with XML and the HL7 RIM.
 - II. Third normal form should be preserved in the document representation.
 - III. This architecture must be compatible with representations of clinical information arising from other HL7 committees.
 - IV. The architecture must be scalable to accommodate fine-grained markup such as highly structured text and coded data.
 - V. Document specifications based on this architecture should accommodate such constraints and requirements as supplied by appropriate professional, commercial, and regulatory agencies.
 - A. I, II, III, IV only
 - B. I, II, III, V only
 - C. I, II, IV, V only
 - D. I, III, IV, V only
 - E. II, III, IV, V only

4. The CDA requirement for human readability ensures that the receiver of a CDA document can ...
- A. retrieve a specified stylesheet from the document originator at anytime.
 - B. display the clinical content of the note on a standard Web browser.
 - C. assume that the additional structured content contained in the document must be rendered.
 - D. assume that the additional structured content contained in the document has been authenticated.
 - E. omit the Section.text element whenever the narrative is derived from structured content.
5. An originator of a CDA document has which of the following responsibilities?
- I. If the CDA Body is structured, the label of a section must be conveyed in the Section.title component.
 - II. An originator of a CDA document is required to fully encode all narrative into CDA entries within the CDA body.
 - III. If the CDA Body is structured, the attested narrative contents of a section must be placed in the Section.text field.
 - IV. An originator of a CDA document is required to provide a custom stylesheet to every trading partner.
 - V. If the CDA Body is structured, the contents of the Section.text field must be created per the rules defined in Section Narrative Block.
- A. I, II, IV only
 - B. I, III, IV only
 - C. I, III, V only
 - D. I, IV, V only
 - E. II, III, IV only
6. Which version of the HL7 RIM was used to define CDA, Release Two?
- A. Version1.00
 - B. Version 1.25
 - C. Version 2.07
 - D. Version 2.13
 - E. Version 3.32
7. The ClinicalDocument.classCode has which of the following for its value set?
- A. "POCD_HD000040"
 - B. "2.16.840.1.113883.1.3"
 - C. "CDA-R2.0"
 - D. "DOCCLIN"
 - E. "DOCUMENT"
8. What is the ClinicalDocument.effectiveTime element in the header used to signify?
- A. the time of patient encounter referenced in this document
 - B. the time the document was published for clinical care
 - C. the time the document was copied from the medical record archive
 - D. the document creation time, when the document first came into being
 - E. the time of event recorded in this document occurred

9. Which of the following statements hold true for the authenticator in the CDA document header?
- I. Represents a participant who has attested to the accuracy of the document.
 - II. Mandates that an electronic signature be captured and preserved within a CDA document.
 - III. Has a required authenticator.time indicating the time of authentication.
 - IV. It is a mandatory element and must be included in the header.
 - V. More than one instance can be specified in the header.
- A. I, II, IV only
 - B. I, III, IV only
 - C. I, III, V only
 - D. I, IV, V only
 - E. II, III, IV only
10. Resident Peters dictates a progress note on Henry Levin, the 7th, which is later transcribed by Ms Jones in a transcription pool and signed by Staff Physician Anderson. Who should be identified as the data enterer?
- A. Resident Peters
 - B. Staff Physician Anderson
 - C. Ms Jones
 - D. Henry Levin, the 7th
 - E. None of the above
11. Which of the following statements hold true for the informationRecipient in the CDA document header?
- I. The value holds true for the whole document unless overridden later in the document.
 - II. The value holds true for the whole document, and cannot be overridden.
 - III. It is a required component of the CDA document.
 - IV. It is an optional component in the CDA document.
 - V. More than one instance can be specified in the header.
- A. I, III only
 - B. I, IV only
 - C. I, IV, V only
 - D. II, III only
 - E. II, IV, V only

12. What participant values would be expected in the following scenario:
 "ResidentOne sees a patient with StaffPhysicianOne. ResidentOne dictates a note and later signs it. The note is co-signed by StaffPhysicianTwo."?
- A. Author — StaffPhysicianOne
 Legal Authenticator — StaffPhysicianTwo
 - B. Author — StaffPhysicianOne
 Encounter Participant — StaffPhysicianOne (typeCode="CONS")
 Legal Authenticator — StaffPhysicianOne
 - C. Author — ResidentOne
 Authenticator — ResidentOne
 Encounter Participant — StaffPhysicianOne (typeCode="ATND")
 Legal Authenticator — StaffPhysicianTwo
 - D. Author — ResidentOne
 Authenticator — ResidentOne
 Encounter Participant — StaffPhysicianOne (typeCode="ATND")
 Legal Authenticator — StaffPhysicianOne
 - E. Author — ResidentOne
 Authenticator — ResidentTwo
 Encounter Participant — StaffPhysicianOne (typeCode="ATND")
 Legal Authenticator — StaffPhysicianOne
13. Which of the following are valid relatedDocument typecodes?
- I. APND (append).
 - II. ERR (erroneous).
 - III. ORIG (original).
 - IV. RPLC (replace).
 - V. XFRM (transform).
- A. I, II, III, IV only
 - B. I, II, III, IV, V
 - C. I, III, V only
 - D. I, IV, V only
 - E. II, III, IV only
14. A published CDA document is replaced with a corrected document, which of the following statements are true for the replacement document?
- I. If specified the value of ClinicalDocument.versionNumber is set equal to "1".
 - II. If specified the value of ClinicalDocument.versionNumber is incremented by 1.
 - III. If specified the value of ClinicalDocument.versionNumber is left unchanged.
 - IV. If specified the replacement document gets a new unique ClinicalDocument.setId value.
 - V. The replacement document gets a new globally unique ClinicalDocument.id value.
- A. I, IV only
 - B. I, V only
 - C. II, IV only
 - D. II, V only
 - E. III, V only

15. Which of the following statements hold true for the Order in the CDA document header?

- I. It represents those orders that are fulfilled by this document.
- II. It represents any order(s) requested by the author of this clinic document.
- III. It is a required component of the CDA document.
- IV. It is an optional component in the CDA document.
- V. More than one instance can be specified in the header.

- A. I, III only
- B. I, IV only
- C. I, IV, V only
- D. II, III only
- E. II, III, V only

16. Which of the following statements are true for the body of a CDA document?

- I. The RTFBody is composed with RTF markup.
- II. The StructuredBody is composed with XML markup.
- III. The HTMLbody is composed with W3C XHTML markup.
- IV. The NonXMLBody is in some format other than XML.
- V. The body can be omitted entirely.

- A. I, II only
- B. I, II, III, IV only
- C. I, III only
- D. II, IV only
- E. V only

17. What is the Section.text element used for?

- A. It defines the expected content for a given Section.code value.
- B. It is used to store narrative to be rendered.
- C. It points to a stylesheet reference used to convert Section.entry content into rendered text.
- D. It's sole purpose is to define the language code used for the Section.entry content.
- E. It contains a complete stylesheet (inline) used to render the Section.entry content.

18. Which of the following are valid section participants?

- I. authenticator
- II. author
- III. informant
- IV. legal authenticator
- V. subject

- A. I, II, IV only
- B. I, IV, V only
- C. II, III, V only
- D. II, V only
- E. IV, V only

19. Which of the following statements hold true for sections and nested sections?

- I. The context from the header can not be overridden within a document.
- II. Context propagates to nested sections.
- III. Nesting of sections is not supported in the CDA Release 2.0 standard.
- IV. The "component" Act Relationship is used to nest a section within a section.
- V. The "entry" Act Relationship is used to nest a section within a section.

- A. I, II only
- B. I, V only
- C. II, IV only
- D. III only
- E. V only

20. Which of the following statements hold true for the revised attribute found on the content element?

- I. It is used to flag content that has been revised, but not yet approved by the author.
- II. It is an optional attribute and must be valued as either: insert or delete.
- III. It is a required element and must be valued as either: insert or delete.
- IV. It can be used to indicate narrative changes made during the last revision of a CDA document.
- V. It can be used to indicate narrative changes for all previous versions of a CDA document.

- A. I, III only
- B. I, IV only
- C. II, IV only
- D. III, IV only
- E. III, V only

21. Which of the following statements are true for the sub and sup elements?

- I. The CDA sub and sup elements are used to indicate subsection and supplemental entries, respectively.
- II. The CDA sub and sup elements are used to indicate subscripts and superscripts, respectively.
- III. It is a required component of the CDA document section.text.
- IV. It is an optional component in the CDA document section.text.
- V. More than one instance can be specified in the CDA document section.text.

- A. I, III only
- B. I, IV, V only
- C. II, IV only
- D. II, IV, V only
- E. II, V only

22. Which of the following statements hold true for the list element?

- I. A CDA list has an optional caption, and contains one or more item elements.
- II. The required listType attribute specifies whether the list is ordered or unordered.
- III. It is a required component of the CDA document section.text.
- IV. It is an optional component in the CDA document section.text.
- V. More than one instance can be specified in the CDA document section.text.

- A. I, II, IV, V only
- B. I, III, V only
- C. I, IV only
- D. II, IV only
- E. IV, V only

23. Which of the following statements hold true for the table element?

- I. The CDA table th elements defines the headings of key entry fields and can be used to determine meaningful field names.
- II. The CDA table is for presentation purposes only and, unlike a database table, does not possess meaningful field names.
- III. It is a required component of the CDA document section.text.
- IV. It is an optional component in the CDA document section.text.
- V. More than one instance can be specified in the CDA document section.text.

- A. I, III only
- B. I, IV, V only
- C. II, IV only
- D. II, V only
- E. II, IV, V only

24. Which of the following statements hold for an Act where the negationInd, is set to "true"?

- I. An act statement with negationInd is still a statement about the specific fact described by the Act.
- II. An act statement with negationInd set to true, is used to flag content within the document as deleted.
- III. A negated "finding of wheezing on July 1" means that the author is unsure if there was or was not any wheezing on July 1.
- IV. Some properties such as Act.id, Act.moodCode, and the participations are not affected.
- V. It is used to indicate that properties like Act.id, Act.moodCode, and the participations are incorrect in this particular usage.

- A. I, II only
- B. I, III, V only
- C. I, IV only
- D. I, V only
- E. III, IV only

25. Which of the following statements best describes the use of an Observation entry in the CDA?

- A. It is used to create arbitrary groupings of other CDA entries that share a common context.
- B. It is used to represent related encounters, such as follow-up visits or referenced past encounters.
- C. It is used for representing procedures
- D. It is used when the other more specific classes aren't appropriate.
- E. It is used for representing coded and other observations.

26. Which of the following statements best describes the use of an ObservationMedia entry in the CDA?

- I. An ObservationMedia can have zero to many referenceRange relationships.
- II. It is used to represents multimedia that is logically part of the current document.
- III. It is a required component of the CDA document clinical statement.
- IV. It is an optional component in the CDA document clinical statement.
- V. More than one instance can be specified in the clinical statement.

- A. I, III only
- B. I, IV, V only
- C. II, IV only
- D. II, IV, V only
- E. II, V only

27. Which of the following statements are true about the RegionOfInterest entry used in the CDA?

- I. The units of the coordinate values in RegionOfInterest.value are in pixels, expressed as a list of integers.
- II. An XML attribute "ID" of type XML ID, is added to RegionOfInterest and serves as the target of a renderMultiMedia reference.
- III. It is a required component of the CDA document clinical statement.
- IV. It is an optional component in the CDA document clinical statement.
- V. More than one instance can be specified in the clinical statement.

- A. I, II, IV, V only
- B. I, III only
- C. II, IV only
- D. II, IV, V only
- E. III, V only

28. What sub-element of the SubstanceAdminstration entry is used to indicate how much medication is given per dose?

- A. minDoseQuantity
- B. maxDoseQuantity
- C. rateQuantity
- D. doseQuantity
- E. None of the above

29. Which of the following statements are true about the SubstanceAdministration.effectiveTime used in the CDA?
- A. SubstanceAdministration.effectiveTime is used to record the when the prescription was written.
 - B. SubstanceAdministration.effectiveTime is used to record when the prescription was acquired (pickup) by the subject (patient).
 - C. SubstanceAdministration.effectiveTime is used to describe the timing of administration.
 - D. SubstanceAdministration.effectiveTime is used to identify the expiration date for a medication.
 - E. None of the above.
30. Which entry relationships are possible from the Organizer class?
- I. component
 - II. entryRelationship
 - III. precondition
 - IV. reference
 - V. referenceRange
- A. I, II, III only
 - B. II, III, IV only
 - C. I, III, IV only
 - D. I, II, IV, V only
 - E. II, III, IV, V only
31. What is an ActRelationship of type "CAUS" used to represent?
- A. The source Act starts after the start of the target Act (for instance source "diaphoresis" starts after the start of target "chest pain").
 - B. Used to show that the source caused the target observation (for instance, source "diabetes mellitus" is the cause of target "kidney disease").
 - C. Used to link an observation (intent or actual) to a goal to indicate that the observation evaluates the goal (for instance, a source observation of "walking distance" evaluates a target goal of "adequate walking distance").
 - D. Used to show a general relationship between the source and the target, when the more specific semantics of the relationship isn't known.
 - E. Used to relate a source region of interest to a target image, or to relate an observation to its subject observation (for instance, source "moderate severity" has subject target "chest pain").
32. What is an ActRelationship of type "REFR" used to represent?
- A. The source Act starts after the start of the target Act (for instance source "diaphoresis" starts after the start of target "chest pain").
 - B. Used to show that the source caused the target observation (for instance, source "diabetes mellitus" is the cause of target "kidney disease").
 - C. Used to link an observation (intent or actual) to a goal to indicate that the observation evaluates the goal (for instance, a source observation of "walking distance" evaluates a target goal of "adequate walking distance").
 - D. Used to show a general relationship between the source and the target, when the more specific semantics of the relationship isn't known.
 - E. Used to relate a source region of interest to a target image, or to relate an observation to its subject observation (for instance, source "moderate severity" has subject target "chest pain").

33. What is an ActRelationship of type "RSON" used to represent?

- A. Used to say that the source is a manifestation of the target (for instance, source "hives" is a manifestation of target "penicillin allergy").
- B. Used to show that the target is a component of the source (for instance "hemoglobin measurement" is a component of a "complete blood count").
- C. Used to show the reason or rationale for a service (for instance source "treadmill test" has reason "chest pain").
- D. Used to show that the source is excerpted from the target (for instance source "hemoglobin value of 12" is an excerpt of target "complete blood count").
- E. Used to show that the target provides supporting evidence for the source (for instance source "possible lung tumor" has support target "mass seen on chest-x-ray").

34. Which of the following statements is true about external references?

- I. External references within a CDA document should have their contents duplicated completely in the source document.
- II. CDA entries can reference external objects such as external images and prior reports.
- III. External references are to be acts attributed to other custodial organizations.
- IV. These external objects are not part of the authenticated document content.
- V. None of the above

- A. I, II only
- B. I, III only
- C. II, III only
- D. II, IV only
- E. V only

35. Which of the following lists of context components can be overridden at the level of a document section?

- A. Data enterer
Legal authenticator
Participant
Record target
- B. Authenticator
Custodian
Data Enterer
Information Recipient
- C. Author
Confidentiality
Human language
Informant
Subject
- D. Legal Authenticator
Human language
Informant
Participant
Subject
- E. Record Target
Responsible Party
Encounter Participant
Performer

Answer Key

(D,C,D,B,C,C,D,D,C,C,E,C,D,D,C,D,B,C,C,C,D,A,E,C,E,D,A,D,C,C,B,D,C,D,C)