ModEng Midterm MC Questions:

1. If an Ecore metaclass A defines a containment reference to the meta-class B, it means that an instance of metaclass B is part of at most one instance of metaclass A. [ ]

2. Any OCL constraint needs to be assigned a context, except if the context instance is unique. [ ]

3. A metamodel defines the concrete syntax of a modeling language. [ ]

4. OCL invariants can be used to further constrain the models conforming to a metamodel. [ ]

5. Eugenia is a framework for defining the textual concrete syntax of a modeling language.

6. One abstract syntax can be represented by multiple concrete syntaxes. [ ]

7. The Platform Independent Model specifies the structure while the Platform Specific Model specifies the behavior of a system. [ ]

8. With Xtext the textual concrete syntax and the abstract syntax of a modeling language can be defined. [ ]

9. OCL invariants are OCL expressions that return a Boolean value indicating whether a model element fulfills the invariant. [ ]

10. MOF (MetaObject Facility) is an OMG standard for the definition of metamodels. [ ]

11. A general-purpose modeling language is a language that is designed specifically for a certain domain. [ ]

12. A model is an instance of a metamodel. [ ]

13. During the modeling phase the technologies used for the implementation are defined. [ ]

14. PIM models can specify functionalities defined in PSM models in more detail. [ ]

15. A business process is an example for a computation independent model. [ ]

16. UML is an example for a General Purpose (Modeling) Language. [ ]

17. In Model-Driven Software Engineering models are just pictures. [ ]

18. Changes in technology stacks do not always require changes in the domain models. [ ]

19. In Model-Driven Engineering models are primarily used for communication of ideas and alternatives. [ ]

20. A model is based on an original (= System), but it only reflects a selection of the original's properties. [ ]

21. Metamodels are models conforming to higher level metamodels. Those higher level descriptions are called meta-metamodels. [ ]

22. If an Ecore metaclass A defines a containment reference to the metaclass B, it means that an instance of metaclass A is a part of at least one instance of metaclass B. [ ]

23. Classes and relations are not a part of Ecore metamodels. [ ]

24. Upon changes in the metamodel, already existing models might become invalid. [ ]

25. Meta-metamodels are mostly self-descriptive which means they conform to themselves. [ ]

26. A model by definition conforms to multiple metamodels. [ ]

27. The validity of a model can only be determined in combination with a metamodel. [ ]

28. Theoretically, the concept of meta-hierarchies is not limited to four layers. [ ]

29. OCL is often used to define invariants on metamodel level. [ ]

30. OCL invariants are expressions that can return boolean values as integer values. [ ]

31. OCL is often used to set attribute values in models. [ ]

32. OCL is often used to define invariants on meta-metamodel level. [ ]

33. OCL constraints are defined on metamodel level and evaluated on model level. [ ]

34. OCL is ofted used as a query language. [ ]

35. In a grammar-first approach, the metamodel can be generated from the grammar definition. [ ]

36. With Xtext semantics can be added to domain-specific languages. [ ]

37. The Java syntax could theoretically be defined with an Xtext grammar. [ ]

38. The Xtext grammar uses EBNF. [ ]

39. Scoping has to be implemented for every cross-reference in a Xtext grammar. [ ]

40. Scoping enables the definition of the attribute visibility in a Xtext grammar. [ ]

41. The Sirius Creation Tools enable the creation of mappings between abstract syntax and their graphical representation. [ ]

42. Every class of a metamodel has to be covered by ate least one Sirius representation viewpoint. [ ]

43. If multiple conditional styles match to an element, all styles will be applied. [ ]

44. A viewpoint can only contain a single representation description. [ ]

45. Sirius provides a default representation for undefined class mappings. [ ]

46. In an annotation based approach the metamodels are annotated within the Ecore file. [ ]

47. One abstract syntax of modeling language can be realized by multiple concrete syntaxes. [ ]

48. References can be represented as edges as well as labels. [ ]

49. The sirius runtime automatically and dynamically interprets the model and adjusts the graphical representation. [ ]

50. Mappings in Sirius allow to specify the type and cardinality of references. [ ]

51. A diagram is the graphical visualization of a model. [ ]