IFPUG 4.1 PRACTICE CERTIFICATION EXAM

Student Question Sheet

PART 1 – DEFINITIONS MULTIPLE CHOICE

INSTRUCTIONS

- Circle the correct answer ***on the attached Student Answer Sheet for Part 1***
- Answer all questions.
- DO NOT WRITE YOUR ANSWER ON THIS FORM

1. An elementary process is defined as:

a. A business requirement.
b. A self-contained action
c. The smallest unit of activity that is meaningful to the user(s)
d. Text information that may be a single word, sentence, or phrase

2. There are three types of Function Point counts, which of the following is not a valid count type:

a. Development project count
b. Enhancement project count
c. Application count
d. First Installation project count

3. The main difference between External Inputs, External Outputs and External Inquiries is:

a. External Inputs update ILFs
b. External Inquiries do not update ILFs
c. Their primary intent
d. None of the above

4. If two input processes are always sequential and dependent, how many elementary processes do we have?

a. Two elementary processes
b. The number of elementary processes cannot be determined
c. One elementary process
d. None of the above

5. Which of the following rules must apply for the process to be identified as an elementary process:

a. The smallest unit of activity that is meaningful to the user(s)
b. Textual information is presented to user(s) in an approved manner
c. The process is self contained and leaves the business of the application in a consistent state

d. Both A and C

6. Control Information is defined as:

a. Data that is required to maintain user defined functions
b. Information which is extracted from the application under study
c. Data that influences an elementary process of the application being counted. It specifies what, when or how data is to be processed
d. None of the above

7. A User is defined as:

a. Any person that specifies Functional User Requirements and/or any person or thing that communicates or interacts with the software at any time
b. Any person that specifies the application boundary of the software under study
c. A human resource which is utilised when constructing the application software
d. None of the above

8. User identifiable is defined as:

a. Functions which may be utilised by the primary user
b. Identifiable functions from the perspective of the primary user
c. Defined requirements for processes and/or groups of data that are agreed upon, and understood by, both the user(s) and software developers(s)
d. Both A and C

9. A File Type Referenced (FTR) is defined as:

a. A logical file which is required by the application under study
b. An Internal Logical File read or maintained by a transactional function
c. An External Logical File read by a transactional function
d. Both B and C

10. Which of the following could be described as being processing logic:

- ***a.*** Mathematical formulas and calculations which are performed
- ***b.*** Where capability exists to accept data or control information that enters the application boundary
- ***c.*** Validations being performed
- ***d.*** All of the above

11. A Data Element Type is defined as:

- ***a.*** A field held on a logical file
- ***b.*** A unique user recognisable, non-repeated field
- ***c.*** An error or warning message which is produced by the application
- ***d.*** None of the above

12. An External Input (EI) is defined as:

- ***a.*** Any screen which is user recognisable and which stores data
- ***b.*** An elementary process which accepts and validates user entered data
- ***c.*** An elementary process which updates an Internal Logical File
- ***d.*** An elementary process that processes data or control information that comes from outside the application boundary where the primary intent is to maintain ILF(s) and/or alter the behaviour of the system

13. Which statement describes the difference(s) between an External Output(EO) and External Inquiry(EQ):

- ***a.*** An EO is an elementary process that sends data or control information outside the application boundary, the EQ does not.
- ***b.*** The processing logic of an EO must contain at least on mathematical formula or calculation, or create derived data.
- ***c.*** An EO may also maintain one or more ILFs and/or alter the behaviour of the system
- ***d.*** Both B and C

14. An Internal Logical File is defined as:

- ***a.*** An Internal Logical File (ILF) is user identifiable data referenced within the boundary of the application
- ***b.*** An Internal Logical File (ILF) is user identifiable data maintained outside the boundary of the application
- ***c.*** An Internal Logical File (ILF) is a user identifiable group of logically related data or control information maintained within the boundary of the application
- ***d.*** None of the above

15. The primary intent of an ILF is to:

a. Hold data maintained through one or more elementary processes of the application being counted.
b. Define the user identifiable group of logically related data
c. Provide the application a weighting for data storage
d. Both A and C

16. An External Interface File is defined as:

a. An External Interface File (EIF) is a user identifiable group of logically related data or control information maintained within the boundary of the application
b. An External Interface File (EIF) is a user identifiable group of logically related data or control information referenced by the application, but maintained within the boundary of another application
c. An External Interface File (EIF) is a user identifiable group of logically related data or control information maintained within and external to the boundary of the application
d. None of the above

17. The primary intent of an EIF is to:

a. Hold data referenced through one or more elementary processes within the boundary of the application counted
b. Define the user identifiable group of logically related data
c. Provide the application a weighting for data storage
d. Both A and C

18. A Record Element Type is defined as:

a. A unique user recognisable, non-repeated subgroup field
b. A subgroup of fields held on an ILF
c. A user recognisable subgroup of data elements within an ILF or EIF
d. All of the above

19. How many types of subgroups can a Record Element Type have?

a. Two
b. One
c. Infinite
d. None of the above

20. The application boundary determines the following:

a. The number of elementary processes for the application
b. Is dependent on implementation considerations
c. The focus of the design considerations
d. None of the above

21. The request specifying 'what and/or how' data is to be retrieved or generated is referred to as:

a. The input side of an External Input
b. The input side of an External Output
c. Control Information
d. None of the above

22. What is the primary intent of an External Input:

a. Maintain an ILF or alter the behaviour of the system.
b. Extract and present information to a user
c. Validate the data being entered by the application's users
d. All of the above

23. The objectives of Function Point Analysis are to:

a. Measure functionality that the user requests and receives
b. Measure software development and maintenance independently of technology used for implementation
c. Both A and B
d. None of the above

24. Organisation may apply Function Point Analysis as:

a. A normalisation factor for software comparison
b. A tool to measure the units of a software product to support quality and productivity analysis
c. A vehicle to estimate cost and resources required for software development and maintenance
d. All of the above

25. According to IFPUG, what is the TDI?:

a. The sum of the 14 Degrees of Influence
b. The Transaction Detail Input
c. +/-35%
d. The Value Adjustment Factor

26. The development project Function Point count measures:

a. The functions provided which are referred to as the application Function Point count
b. The functions provided to the users with the first installation of the software delivered when the project is complete
c. The baseline or installed application size
d. Both B and C

27. Which count is also referred to as the baseline Function Point count?:

a. Development Project count
b. Enhancement Project count
c. Application count
d. Initial Project count

28. Data transfer capability is accounted for in which of the following GSCs?

a. Installation ease
b. Distributed Data Processing
c. Performance
d. End user efficiency

29. In order for an external interface file to score high complexity, which situation must be true:

a. One that contains more than 50 DETs and 2 RETs.
b. One that contains 15 RETs
c. One that contains hundreds of DETs
d. A and C

30. Operational restrictions are recognised by which of the following GSCs?

a. Heavily used configuration
b. Complex processing
c. Installation ease
d. None of the above

31. When determining the complexity of External Inquiries, are all literals counted as DETs?

a. Yes
b. No
c. Depends upon the user view
d. None of the above

32. According to IFPUG 4.1, when a user requirement exists to store audit details, how is it counted? :

a. As a separate logical file
b. As 2 DETs on the appropriate logical file
c. As a RET on the appropriate logical file
d. It is ignored given its technical nature

33. According to IFPUG's 4.1 manual, which of the following formula is used to calculate the Development Project Function Point count (DFP)?:

a. (UFP + CFP) * VAF
b. UFP + AFP * VAF
c. CIA + FBI > ASIO
d. None of the above

34. In the above formula, explain the UFP acronym:

a. User Function Points
b. User Features Paid
c. Unadjusted Feature Points
d. Unadjusted Function Points

35. Select the correct formula for calculating the enhancement project Function Point count:

a. [(ADD + CHGA + CFP) * VAFA] + (DEL * VAFB)
b. [(ADD + CHGB + CFP) * VAFA] + (DEL * VAFB)
c. [(ADD + CHGA + CFP) * VAFB] + (DEL * VAFA)
d. [(ADD - DEL + CFP) * VAFA] + (CHGA * VAFB)

36. Enhancement Function point Count consists of:

a. Function Points identified from the functionality that is added by the enhancements
b. Function Points counted because existing functionality is changed during the enhancement project
c. Function Points counted for functionality deleted during the enhancement project
d. All of the above

37. In the formula to calculate the development project function point count, what do the formula's arguments represent?:

a. DFP is the derived project function point count, UFP is the unadjusted function point count, CFP is the function points added by the conversion unadjusted function point count, VAF is the value adjustment factor
b. DFP is the development project function point count, UFP is the unadjusted function point count, CFP is the function points added by the changed unadjusted function point count, VAF is the value adjustment factor
c. DFP is the development project function point count, UFP is the unadjusted function point count, CFP is the function points added by the conversion unadjusted function point count, VAF is the value adjustment factor
d. DFP is the deleted project function point count, UFP is the unadjusted function point count, CFP is the function points added by the changed unadjusted function point count, VAF is the value adjustment factor

38. In order to achieve an average complexity External Output, which situation must be true:

a. An elementary process which includes 4 DETs and 4 FTR.
b. An elementary process which includes 14 DETs and 4 FTR.
c. An elementary process which includes 4 DETs and 3 FTR.
d. **Both** A and C

39. Response time is accounted for in which of the following GSCs?

a. Installation ease
b. Distributed Data Processing
c. Performance
d. End user efficiency

40. In the GSC where Bilingual support contributes to the degree of influence. How many items does it contribute to the score? :

a. One
b. Two
c. Three
d. Four

41. When rating the complexity of an External Input, the following rules must apply when counting FTRs

a. Count an FTR for each ILF maintained
b. Count an FTR for each ILF or EIF read during the processing of the EI
c. Count only one FTR for each ILF that is both maintained and read
d. All of the above

42. When determining the complexity of External Inputs, are fields derived and stored on an ILF during the elementary process counted as DETs:

a. Count the derived and stored fields only if they have crossed the boundary
b. Count all derived and stored fields as DETs
c. Count all DETs updated on the ILF
d. None of the above

43. When determining the complexity of logical files, are all fields counted as DETs:

a. Yes
b. Only count each unique user recognizable, non-repeated field maintained in or retrieved from the ILF or EIF through the execution of an elementary process
c. Count a DET for each field acting as a foreign key required by the user to establish a relationship with another ILF or EIF
d. Both B and C

44. Where no subgroups of data exist, how many RETs are counted for the logical file:

a. One
b. None
c. Depends upon the classification of the subgroup type
d. Logical files must contain at least one subgroup of data

45. Which of the following statement(s) are correct:

a. One physical file does not always equate one logical file

b. A transaction which occurs in multiple physical inputs, but which has identical processing logic, typically responds to one transactional function type

c. One physical report may correspond to a number of EOs/EQs

d. All of the above