

Student Question Sheet

PART 2 – IMPLEMENTATION RULES

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. The Unadjusted Function Point value of an EIF with 6 RETs and 19 DETs is:

- a. 7
- b. 10
- c. 15
- d. None of the above

2. Application A and Application B reference the Employee File, which is maintained by Application C. Application A references Employee Name, Employee Address, Employee Start Date and Current Project Id. Application B references Employee Name, Employee Address and Current Project Id. Note, the Application B's users require the Employee Address as:

- **Street Number**
- **Street Name**
- **City**
- **State**
- **Postcode**

State the number of DETs attributable to the Employee File from the perspective of both Application A and Application B:

- a. Application A - 9 DETs and Application B - 5 DETs
- b. Application A - 9 DETs and Application B - 8 DETs
- c. Application A - 4 DETs and Application B - 7 DETs
- d. Application A - 8 DETs and Application B - 4 DETs

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3. If you were paid \$1.00 for every Function Point you counted, and you had 3 average ILFs, 2 high EIFs, 4 low EIs and 1 high EO, how much money would you earn?:
- a. Not much more than the minimum wage
 - b. \$69.00
 - c. \$60.00
 - d. \$74.00
4. If the View Customer screen allowed the customer records to be added, modified and deleted, how many EI's would be counted?
- a. 7
 - b. 4
 - c. 3
 - d. None of the above
5. Which would attract the higher Adjusted Function Point score:
- a. An Unadjusted Function Point count of 73 with a TDI of 50
 - b. An Unadjusted Function Point count of 95 with a TDI of 25
 - c. An Unadjusted Function Point count of 110 with a TDI of 25
 - d. An Unadjusted Function Point count of 153 where the TDI is yet to be determined
6. The 'I cant believe its not a computer' system is planning an enhancement. An existing EO, which references 2 FTRs and produces 6 DETs is going to read an additional FTR. How many Function Point would be counted for the EO attract prior to the enhancement?
- a. 5
 - b. 4
 - c. 7
 - d. None of the above
7. How many Function Point would be counted for the EO after the Enhancement Project is complete?
- a. 5
 - b. 4
 - c. 7
 - d. None of the above

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- 8. What is the Adjusted Function Point count for the following application?
 2 low complexity External Inputs, 3 average complexity External Inputs,
 1 high complexity External Inputs, 3 high complexity External Outputs, 1
 low complexity External Inquiry, 1 average complexity External Inquiry,
 1 high complexity External Inquiry, 3 low complexity Internal Logical
 Files and the following General System Characteristics:**

Data Communications	3	On-line Update	4
Distributed Processing	2	Complex Processing	3
Performance	2	Reusability	3
Heavily Used Configuration	3	Installation Ease	2
Transaction Rates	5	Operational Ease	2
On-line Data Entry	5	Multiple Sites	1
Design for End-user Efficiency	1	Facilitate Change	3

- a. 82.16
 - b. 83.45
 - c. 79
 - d. 96.22
- 9. The 'Commission' application provides sales reports to users on a weekly basis. Each Thursday, prior to the wages being drawn, a detailed report containing sales (in salesperson order) is produced. How is the report to be counted?**
- a. As either an External Output or External Inquiry
 - b. External Output
 - c. External Inquiry
 - d. None of the above
- 10. In order for an application to calculate the amount of sales commission, users are required to input the agent's name and the sales figure for the week. The commission total is calculated and stored (note, the commission total is confidential not displayed to users). Assume the screen supports error/warning messaging and 'hot-keys' to specify actions. What type of elementary process is described here?**
- a. External Output
 - b. External Input
 - c. External Inquiry
 - d. Either an External Output or External Inquiry

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11. Based upon question 10, what criteria did you use to arrive at your answer?

- a.* Cannot determine if the elementary process is an External Output or External Inquiry as there is no derived or calculated totals displayed
- b.* The primary intent of the elementary process
- c.* Calculated totals are displayed and therefore the elementary process is an External Output
- d.* Not enough DETs cross the boundary to determine the type of elementary process

12. Based upon question 10, determine the number of DETs to be counted:

- a.* Five
- b.* Three
- c.* Two
- d.* Four

13. An application is used to produce payment cheques to suppliers. To accurately calculate the amount owing, the application reads all outstanding invoices held on file. Once the outstanding amount is calculated the cheques are produced and the outstanding invoice is updated with a 'paid' flag. How is the cheque production to be counted?

- a.* As either an External Output or External Inquiry
- b.* External Output
- c.* External Inquiry
- d.* An External Input and External Output

14. Based upon question 13, How is the 'paid' flag dealt with?

- a.* The elementary process does not count the DET 'paid' flag
- b.* Counted as a DET on the External Input
- c.* Counted as a DET on the External Output
- d.* Counted as a DET on the External Inquiry

15. Each quarter, a report is produced which lists all customers that require a 'courtesy visit'. The customers are selected by calculating the 'courtesy visit' date based upon the customer's last 'courtesy visit' plus 120 days. How is this elementary process to be counted?

- a.* As an External Inquiry as no calculated fields are produced on the report
- b.* As an External Output
- c.* As either an External Output or External Inquiry
- d.* None of the above

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- 16. An application provides users with the ability to create customer details and store details on the Customer ILF, the ILF contains 8 user identifiable attributes, which are entered on-line. In order to provide a user-friendly system, the application allows users to commit the data using one of three possible keys (enter key, PF3 and the right-hand mouse button). If data does not pass validation, an error, a warning message is displayed to them. How many DETs are counted?**
- a.* 6
 - b.* 10
 - c.* 8
 - d.* None of the above
- 17. Users have the ability to create, modify and delete customer details on-line. Users have specified the need for an automatically triggered customer deletion function. 'Dormant' customers (ones that have not purchased goods within 18 months) are to be removed from the company database. How would you count the automated procedure?**
- a.* Automated procedure cannot be counted
 - b.* Automated procedure is a single DET External Input
 - c.* Automated procedure is a multiple DET External Input
 - d.* None of the above
- 18. The creator of the 'X' application, the evil Professor Finkelhoffen was quoted as saying "X never makes mistakes, it's those stupid and 'pesky' users! Because of those idiots, I had to spoil this wonderful creation with error messages ". As Function Point counters, how do we account for the error messages?**
- a.* As an EI
 - b.* As one DET on an elementary process
 - c.* As multiple DETs (depending on the number of error messages) on an External Input
 - d.* None of the above

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19. What is the TDI of the following General Systems Characteristics?

Data Communications	3	On-line Update	4
Distributed Processing	2	Complex Processing	3
Performance	2	Reusability	3
Heavily Used Configuration	3	Installation Ease	2
Transaction Rates	5	Operational Ease	2
On-line Data Entry	5	Multiple Sites	1
Design for End-user Efficiency	1	Facilitate Change	3

- a. 39
- b. 1.04
- c. 65
- d. None of the above

20. What is the Unadjusted Function Point for the following application?

An External Input with 17 DETs and 1 FTR, an External Input with 4 DETs and 3 FTR, an External Input with 5 DETs and 2 FTR, an External Input with 4 DETs and 2 FTR

- a. 12
- b. 13
- c. 14
- d. None of the above

21. If the following transactions were added to the above application, what would be the sum total Unadjusted Function Points?

An External Input with 18 DETs and 1 FTR, an External Inquiry with 4 DETs and 3 FTR on its Input side and 6 DETs on its output side (of the 6 DETs, 4 are supplied by the input side) and , an External Output with 5 DETs and 2 FTR, an External Output with 14 DETs and 2 FTR

- a. 17
- b. 19
- c. 22
- d. None of the above

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22. What is the Adjusted Function Point Count for the following application?

12 low complexity External Inputs, 31 average complexity External Inputs, 11 high complexity External Inputs, 13 high complexity External Outputs, 11 low complexity External Inquiry, 1 average complexity External Inquiry, 12 high complexity External Inquiry, 13 low complexity Internal Logical Files and the following General Systems Characteristics:

Data Communications	4	On-line Update	4
Distributed Processing	4	Complex Processing	3
Performance	3	Reusability	3
Heavily Used Configuration	4	Installation Ease	2
Transaction Rates	4	Operational Ease	2
On-line Data Entry	5	Multiple Sites	1
Design for End-user Efficiency	3	Facilitate Change	3

- a.* 517
- b.* 573.87
- c.* 579.04
- d.* 568.70

23. Determine the TDI for the following equations

Unadjusted FP Count	TDI	Adjusted FP Count
100		135
117		134.55
150		135
180		135

- a.* 70, 50, 25 and 10 Respectively
- b.* 25, 50, 15 and 9 Respectively
- c.* 70, 45, 29 and 10 Respectively
- d.* None of the above

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24. An application, which records football player and the player's bank account details, requires a Function Point count. There is a requirement to enable the user to store player's details (name, age, residential address, etc). There is an additional user requirement to store the player's bank account details. The bank account details are recorded at the time of recording new player details.

If a user adds a new player, the user is required to enter both player and bank account details (assuming the player has a bank account). The user is presented with a screen to enter bank account details only when the 'bank account exists' field is flagged on the player detail screen.

Would the player information without the associated bank account information be considered an elementary process?

- a.* Yes
- b.* No
- c.* Only when the player has employed an agent
- d.* None of the above

25. Based upon question 24, State the reason for your answer:

- a.* If two input processes are always sequential and dependent, then there is one elementary process and therefore one function.
- b.* Both elementary processes are user identifiable and therefore considered elementary processes
- c.* The agent details are considered separate from the user perspective
- d.* A decision cannot be reached as the business work flow is not understood

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26. The user requires the ability to:

- Add player injury details
- Generate an error message and highlight the incorrect field so that the error may be corrected online
- Store injury details

The following screen is used to record player injuries:

‘Player Injury Entry Screen’			‘Date: 99/99/99’
Player Name: _Leaping Larry_____			
Player Number: 7__ Footballer Current salary: \$ 140,000_			
<u>Line Nbr</u>	<u>Date of Injury</u>	<u>Matches Missed</u>	<u>Description</u>
01	01/05/1998	6	Broken Arm
02	11/07/1998	3	Hammy
F1=Help F2 Add Injury F6=Scroll Up F7=Scroll Down F9=Save			

Determine the type of elementary process associated with this screen:

- a. External Input
- b. External Output
- c. External Inquiry
- d. Combination of External Input and External Output

27. Based upon question 26, state the reason for your answer:

- a. External Output as the details are presented to the user
- b. External Inquiry as the primary intent is to display details without deriving data
- c. Combination as there is a user requirement to input and retrieve data
- d. External Input as the primary intent is to maintain an ILF

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28. Based upon question 26 determine the number of DETs:

- a.* 9
- b.* 11
- c.* 6
- d.* 5

29. Based upon question 26, The number of matches missed is used by club officials to determine the worth of the player (relative to his annual salary). When injury details are entered, the number of matches missed is used to formulate a 'worth-ratio', the figure is stored on the Player ILF. Do we account for this action within this elementary process?

- a.* Yes, all fields updated on an ILF are counted
- b.* No
- c.* Cannot determine
- d.* Yes, with the understanding that it is a user requirement

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30. The following report is produced for every player at the end of the season in order to evaluate performance and assist in contractual negotiations.

‘Player Season Statistics’			‘Date: 99/99/99’	
Player Name: _Jerka Jenkins_____				
Player Number: 13__		Footballer Current salary: \$ 560,000_		
<u>Game Nbr</u> 99	<u>Nbr Kicks</u> 99	<u>Nbr Marks</u> 99	<u>Nbr Tackles</u> 99	<u>Nbr Votes</u> 9
Total Games Played	99	Nbr Votes	999	
Total kicks	999	Nbr Goals	999	
Total Marks	999	Worth Ratio	99.99	
Total Tackles	999			

Determine the type of transaction this report represents:

- a. External Output
- b. External Inquiry
- c. External Input
- d. All of the above

31. Based upon question 30, state the reason for your answer:

- a. There are no error or warning messages present
- b. The report had to extract the details from an External Input
- c. The report contains a calculated total
- d. Combinations of input and output transactions cannot be determined

32. Based upon question 30, state the complexity of the elementary process (assume 2 FTRs):

- a. Low
- b. Average
- c. High
- d. Cannot be determined

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33. Application 'X' receives a transaction file on a monthly basis and is processed overnight as a batch job. The transaction file contains new, modified and removed product details. Each record on the transaction file is prefixed with a 'transaction type' indicator, ie A (add product details), M (change product details) and R (delete product details). How do we account for the 'transaction type' indicator?

- a.* The transaction type is ignored
- b.* The transaction type is an elementary process and counted
- c.* The transaction type is counted as a DET
- d.* The transaction type is counted as three DETs as it is user recognisable

34. Application 'X' generates and transfers a transaction file to Application 'Y'. The transaction file contains the product number, description, unit price which is read from the Product ILF. The transaction file also contains the number of units sold to date (this is done by reading each record stored on the Invoice ILF and aggregating the sales units). Determine the type of transaction the transaction file represents:

- a.* External Output
- b.* External Inquiry
- c.* External Input
- d.* None of the above

35. Based upon question 34, determine the Function Point score :

- a.* 3
- b.* 4
- c.* 5
- d.* 6

36. Based upon question 34, Application 'Y' stores the details of the transaction file on its Sales ILF. Users are able to view the details stored, ie product number, description, unit price and total units sold to date. Determine the type of transaction represented here:

- a.* External Output
- b.* External Inquiry
- c.* External Input
- d.* All of the above

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37. Based upon question 36, state the reason for your answer:

- a. External Output as the details presented contain a calculated field
- b. External Inquiry as the primary intent is to display details without deriving data
- c. Combination as there is a user requirement to input and retrieve data
- d. External Input as the primary intent is to maintain an ILF

38. In order for management to recognise and award sales staff for achievement, there is a requirement to produce a 'top 5' list of salespeople for each quarter. Application 'X' reads the Invoice file and compares the sales achieved by each sales staff member:

‘Top 5 Salespeople’			‘Date: 99/99/99’
<u>Last Name</u>	<u>First Name</u>	<u>Initial</u>	
Nelson	Alexander	F	
Stewart	Hocking	A	
Simms	Colin	J	
Chalmers	Jack	R	
Price	Stephen	P	

Determine the type of transaction the list represents:

- a. External Output
- b. External Inquiry
- c. External Input
- d. External Interface File

39. Based upon question 38, state the number of DETs applicable to the elementary process:

- a. 1
- b. 2
- c. 3
- d. 4

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- 40. Based upon question 38, the 'top 5 salespeople' list is automatically triggered at the close of business on the last Friday of every quarter. Does the elementary process account for a DET that enters the application boundary and triggers the list?**
- a.* No
 - b.* Yes