Analysis and Specifications Tables

5765

Business Equipment Technical Service

Training Sector

9 Electrotechnology

Reach for your Dreams

Québec

Analysis and Specifications Tables

5765

Business Equipment Technical Service

Traning Sector 9 Electrotechnology

Formation professionnelle et technique
et formation continue

Direction générale des programmes
et du développement

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DEVELOPMENT TEAM

Coordination and Revision	*René Brisson* Coordinator for sectoral training and engineering of vocational and technical training Ministère de l'Éducation
Design and Development	*Luc Grondin* Teacher in Office Equipment Maintenance Commission scolaire des Découvreurs
Technical Revision	*Nicole Gendron* Technical Consultant
Layout	*Hélène Bolduc* Secretary Ministère de l'Éducation
English Version	Direction de la production en langue anglaise Services à la communauté anglophone Ministère de l'Éducation

INTRODUCTION

This document presents program analysis tables, tables of specifications, and tables entitled *Information on the Evaluation*. The latter contain comments dealing specifically with the evaluation of each module and are intended for those responsible for developing examinations in the schools. This material should be applied when preparing examinations for the certification of studies.

SYNOPTIC TABLE

Number of modules: 21
Duration in hours: 1800
Number of credits: 120

Business Equipment Technical Service
Program code: 5765

CODE		TITLE OF MODULE	HOURS[1]	STATUS[2]
780 501	1	The Trade and the Training Process	15	L
780 519	2	Diagnosing a Malfunction in Electrical Circuits	150	L
780 523	3	Researching Information	45	L
780 535	4	Repairing and Adjusting Parts	75	L
780 543	5	Communicating in the Second Language	45	L
780 555	6	Diagnosing a Malfunction of Mechanical Origin	75	L
780 563	7	Establishing Communication Links	45	L
780 579	8	Diagnosing a Malfunction in Analogue Circuits	150	L
780 587	9	Servicing Operating Systems	105	L
780 599	10	Diagnosing a Malfunction in Digital Circuits	150	L
780 603	11	After-Sales Service on Multifunction Equipment	45	L
780 613	12	Professional Relationships	45	L
780 627	13	After-Sales Service on Microcomputers	105	L
780 639	14	After-Sales Service on Photocopiers	150	L
780 644	15	Interpretation of a Network Structure	60	L
780 656	16	After-Sales Service on Photocopier Peripherals	90	L
780 663	17	Administrative Tasks	45	L
780 676	18	After-Sales Service on Microcomputer Peripherals	90	L
780 689	19	After-Sales Service on Sales Registration Equipment	150	L
780 694	20	Remote Technical Support	60	L
780 707	21	Practicum in the Workplace	105	L

1. One credit corresponds to 15 hours of study.
2. Examinations are developed either by the Ministère (M) or locally by the educational institution (L).

PROGRAM: Business Equipment Technical Service **CODE:** 780 501

MODULE 1 – THE TRADE AND THE TRAINING PROCESS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

PARTICIPATION EVALUATION FORM

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **1 – THE TRADE AND THE TRAINING PROCESS** **CODE:** 780 501

EXPECTED OUTCOME: **To determine their suitability for the trade and the training process**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
PHASE 1: INFORMATION ON THE TRADE			
• Learning about the job market in the field of business equipment technical service: types of businesses and job prospects.	20	15	• Gather information on most of the topics to be covered.
• Learning about the nature and requirements of the job: tasks, working conditions, etc.	15	-	• Gather information on most of the topics to be covered.
• Presenting the information gathered and discussing as a group their views on the trade.	15	10	• Express their views on the trade during a group discussion, relating these views to the information they have gathered.
PHASE 2: PARTICIPATION IN THE TRAINING PROCESS			
• Discussing the skills, attitudes, aptitudes and knowledge required to practise the trade.	15	10	• Give their opinions on some of the requirements they will have to meet in order to practise the trade.
• Becoming familiar with the training process.	10	-	• Carefully review the documentation provided. • Listen attentively to the explanations given.
• Sharing their initial views on the trade.	10	10	• Express their views on the training program during a group discussion.
• Agreeing to observe the professional ethics of the trade.	5	10	• Agree to observe the professional ethics of the trade.

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **1 – THE TRADE AND THE TRAINING PROCESS** **CODE:** 780 501

EXPECTED OUTCOME: **To determine their suitability for the trade and the training process**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
PHASE 3: EVALUATION AND CONFIRMATION OF CAREER CHOICE • Producing a report in which they must state how their preferences, aptitudes and interests relate to the trade and evaluate their choice of program and career by comparing the aspects and requirements of the trade with their preferences, aptitudes and interests.	10	45	• Produce a brief report in which they: . sum up their preferences, interests and aptitudes and knowledge as well as their personal qualities . explain their choice of program and career by clearly relating these preferences, interests and aptitudes to the practice of the trade . explain why they choose to continue or abandon the training program

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **1 – THE TRADE AND THE TRAINING PROCESS** **CODE:** 780 501

EXPECTED OUTCOME: **To determine their suitability for the trade and the training process**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
PHASE 1: Information on the trade			
1. Gather information on most of the topics to be covered.	15	1.1 Present at least two types of businesses and their products.	5
		1.2 Provide information on the job prospects and remuneration.	5
		1.3 Provide information on the possibilities for advancement and transfer offered by the job.	5
2. Express their views on the trade during a group discussion, relating these views to the information they have gathered.	10	2.1 Present some advantages and disadvantages of the trade.	5
		2.2 Comment on certain requirements of the trade.	5
PHASE 2: Participation in the training process			
3. Give their opinions on some of the requirements they will have to meet in order to practise the trade.	10	3.1 Express their opinions on the usefulness of at least one skill, one aptitude or one concept considered important for practising the trade.	10
4. Express their views on the training program during a group discussion.	10	4.1 Using an example from the training program, the training process or the evaluation methods, identify a few similarities or a few differences between the example and the work situation of a business equipment technician.	10

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **1 – THE TRADE AND THE TRAINING PROCESS** **CODE:** 780 501

EXPECTED OUTCOME: **To determine their suitability for the trade and the training process**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
5. Agree to observe the professional ethics of the trade.	10	5.1 Agree to develop the attitudes needed to practise the trade.	10
PHASE 3: Evaluation and confirmation of career choice			
6. Produce a brief report in which they:	45	6.1 Describe their main preferences, interests and aptitudes.	10
- sum up their preferences, interests and aptitudes and knowledge as well as their personal qualities		6.2 Explain their choice of career with respect to the trade of business equipment technician by taking into account their preferences, interests and aptitudes.	20
- explain their choice of program and career by clearly relating these preferences, interests and aptitudes to the practice of the trade			
- explain why they choose to continue or abandon the training program		6.3 Justify their decision to continue or abandon the training program.	15

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 501 – THE TRADE AND THE TRAINING PROCESS (Module 1)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the evaluation is to assess the candidates' participation in activities designed to develop the competency *To determine their suitability for the trade and the training process.*

The teacher evaluates participation throughout the module using a participation evaluation form.

Evaluation is based on the candidates' participation in the various activities carried out individually or in large or small groups, and not on the results obtained.

The examination consists of three phases, undertaken at different stages of the module. Each phase is accompanied by specific instructions.

2. PHASES

PHASE 1: INFORMATION ON THE TRADE

This phase is divided into two components: gathering information on most of the topics to be covered and expressing their views on the trade during a group discussion, relating these views to the information they have gathered.

The candidates must:

- present two types of businesses and their products
- provide information on the job prospects and remuneration
- indicate the possibilities for advancement and transfer
- present the advantages and disadvantages of the trade
- comment on the requirements of the trade

PHASE 2: PARTICIPATION IN THE TRAINING PROCESS

Evaluation of this phase is based on the candidates' participation in group discussions on the requirements for practising the trade and on their views on the training program.

The candidates must:

- express their opinions on the usefulness of at least one skill, one aptitude or one concept considered important for practising the trade

- express their opinions on a few similarities or a few differences between the training program, the training process or the evaluation methods and the work situation of a business equipment technician

PHASE 3: EVALUATION AND CONFIRMATION OF CAREER CHOICE

Evaluation of this phase is based on the quality of the reports in which the candidates explained their choice of training program and career.

In their reports, the candidates must:

- explain their choice of career with respect to the trade of business equipment technician by taking into account their preferences, interests and aptitudes
- justify their decision to continue or abandon the training program

3. PASS/FAIL CONDITIONS

To pass the examination, the candidates must obtain 9 YESes out of a possible 11; successful completion of criterion component 5.1 is mandatory.

4. DURATION

Evaluation is carried out throughout the module.

PARTICIPATION EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program code:	5765
1 – The Trade and the Training Process	Module code:	780 501
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

PARTICIPATION COMPONENTS	RESULT YES	NO
PHASE 1: Information on the trade		
1. Gather information on most of the topics to be covered.		
1.1 Present at least two types of businesses and their products.	☐	☐
1.2 Provide information on the job prospects and remuneration.	☐	☐
1.3 Provide information on the possibilities for advancement and transfer offered by the job.	☐	☐
2. Express their views on the trade during a group discussion, relating these views to the information they have gathered.		
2.1 Present some advantages and disadvantages of the trade.	☐	☐
2.2 Comment on certain requirements of the trade.	☐	☐
PHASE 2: Participation in the training process		
3. Express their opinions on some of the requirements they will have to meet in order to practise the trade.		
3.1 Express their opinions on the usefulness of at least one skill, one aptitude or one concept considered important for practising the trade.	☐	☐
4. Express their views on the training program during a group discussion.		

PARTICIPATION COMPONENTS	RESULT YES	RESULT NO
4.1 Using an example from the training program, the training process or the evaluation methods, identify a few similarities or a few differences between the example and the work situation of a business equipment technician.	☐	☐
5. Agree to observe the professional ethics of the trade.		
5.1 Agree to develop the attitudes needed to practise the trade.	☐	☐
PHASE 3: Evaluation and confirmation of career choice		
6. Produce a report.		
6.1 Describe their main preferences, interests and aptitudes.	☐	☐
6.2 Explain their choice of career with respect to the trade of business equipment technician by taking into account their preferences, interests and aptitudes.	☐	☐
6.3 Justify their decision to continue or abandon the training program.	☐	☐
Total: /11		

PASS/FAIL CONDITIONS: 9 YESes out of 11, and a YES for component 5.1

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 519

MODULE: 2 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **2 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS** **CODE:** 780 519

EXPECTED BEHAVIOUR: **To diagnose a malfunction in electrical circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Become familiar with the nature of the electrical malfunction.	5	-	• Quality of the information gathered • Clear questions	P
Prepare the intervention.	5	-	• Choice of reference manuals • Choice of tools • Choice of instruments	P
Dismantle the equipment or a section of it.	5	-	• Observance of the dismantling sequence • Quality of the intervention	P
Interpret the charts and diagrams of electrical circuits.	10	10	• Interpretation of the charts and diagrams of electrical circuits	P
Verify the electrical circuits.	20	20	• Taking of measurements • Verification of the value of the components • Interpretation of the measurements taken	P
Process the information.	20	20	• Quality of information processing	P
Formulate hypotheses.	15	10	• Pertinence of the hypotheses	P
Identify the cause or causes of the malfunction.	15	25	• Identification of the cause or causes of the malfunction	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **2 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS** **CODE:** 780 519

EXPECTED BEHAVIOUR: **To diagnose a malfunction in electrical circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
		-		
Reassemble the equipment.	5		• Observance of the reassembly sequence	P
Diagnose a malfunction in electrical circuits.	-	15	• Compliance with instructions • Clean, orderly work area	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **2 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS** **CODE:** 780 519

EXPECTED BEHAVIOUR: **To diagnose a malfunction in electrical circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Interpret the charts and diagrams of electrical circuits.	PS	1. Interpretation of the charts and diagrams of electrical circuits	10	1.1 Choice of the appropriate chart	5
				1.2 Location of the correct section of the electrical circuit	5
Verify the electrical circuits.	PT/PS	2. Taking of measurements	5	2.1 Accurate measurements	5
		3. Verification of the value of the components	5	3.1 Correct verification of the value of the components	5
		4. Interpretation of the measurements taken	10	4.1 Correct interpretation of the measurements taken	10
Process the information.	PT	5. Quality of information processing	20	5.1 Accurate calculation of the voltage, current and resistance	10
				5.2 Accurate data analysis	10
Formulate hypotheses.	PT	6. Pertinence of the hypotheses	10	6.1 Logical relationship between the analysis and the malfunction	5
				6.2 Justification of the hypotheses explaining the cause or causes of the malfunction	5

* Str.: evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **2 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS** **CODE:** 780 519

EXPECTED BEHAVIOUR: **To diagnose a malfunction in electrical circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Identify the cause or causes of the malfunction.	PS	7. Identification of the cause or causes of the malfunction	25	7.1 Location of the faulty component or components on the plan	15
				7.2 Identification of the faulty component or components of the piece of business equipment	10
Diagnose a malfunction in electrical circuits.	PS	8. Compliance with instructions	5	8.1 Full compliance with instructions	5
		9. Clean, orderly work area	10	9.1 Clean, orderly work area	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 519 – DIAGNOSING A MALFUNCTION IN ELECTRICAL CIRCUITS (Module 2)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to diagnose a malfunction in electrical circuits, related to one or more components of a piece of business equipment that is electrically faulty. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to diagnose a malfunction in one or more electrical circuits of a piece of business equipment. The malfunction will have been previously caused by the teacher. The malfunction could be located in the DC (direct current) or AC (alternating current) section of the equipment. The candidates may have to disassemble the piece of equipment in order to access the faulty part of the electrical circuit.

Suggestions for types of electrical circuit malfunctions:

- direct current malfunction in a DC motor, a solenoid, etc.
- alternating current malfunction in the inlet section of the equipment (120 V, fuse, antistatic filter, etc.)
- alternating current malfunction in the transformer secondary

The various plans, charts, diagrams and reference manuals pertaining to the business equipment will be provided. The candidates will be required to use measuring instruments, tools and a scientific calculator.

On their work sheets, the candidates must:

- record the collected data
- present their analysis of the collected data
- indicate their hypotheses
- indicate their diagnosis of the electrical circuit malfunction

3. MATERIALS

The following is required for the examination:

- the plans, charts, diagrams and reference manuals for the business equipment
- the candidate's toolbox (including screwdrivers, a multimeter, a calculator and an oscilloscope)

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation “failed the summative examination.”

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
2 – Diagnosing a Malfunction in Electrical Circuits	Course Code:	780 519
Candidate's Name:_____		
School:_____	RESULT:	
Permanent code:_____	PASS	FAIL
Date of the examination:_____	☐	☐
Examiner's signature:_____		

OBSERVATION	YES	NO	RESULT
1. Interpretation of the charts and diagrams of electrical circuits			
1.1 Choice of the appropriate chart			0 or 5
1.2 Location of the correct section of the electrical circuit			0 or 5
2. Taking of measurements			
2.1 Accuracy of measurements:			0 or 5
• choice of the appropriate measuring instrument	☐	☐	
• proper adjustment of the measuring instrument			
• accurate measurements	☐	☐	
	☐	☐	
3. Verification of the value of the components			
3.1 Correct verification of the value of the components			0 or 5
4. Interpretation of the measurements taken			
4.1 Correct interpretation of the measurements taken			0 or 10

OBSERVATION			RESULT
	YES	NO	
5. Quality of information processing			
5.1 Accurate calculation of the voltage, current and resistance:			0 or 10
• correct application of Ohm's Law	☐	☐	
• accurate calculations	☐	☐	
5.2 Accurate data analysis:			0 or 10
• comparison of the measurements taken with the estimates	☐	☐	
• justification of the differences	☐	☐	
6. Pertinence of the hypotheses			
6.1 Logical relationship between the analysis and the malfunction			0 or 5
6.2 Justification of the hypotheses explaining the cause or causes of the malfunction			0 or 5
7. Identification of the cause or causes of the malfunction			
7.1 Location of the faulty component or components on the chart:			0 or 15
• correct interpretation of the symbols	☐	☐	
• identification of the faulty component or components	☐	☐	
7.2 Identification of the faulty component or components of the piece of business equipment:			
• identification of the faulty component or components	☐	☐	0 or 10
8. Compliance with instructions			
8.1 Full compliance with instructions			0 or 5

OBSERVATION			RESULT
	YES	NO	
9. Clean, orderly work area			
9.1 Clean, orderly work area			0 or 10
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
		Total:	/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 523

MODULE: 3 – RESEARCHING INFORMATION

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **3 – RESEARCHING INFORMATION** **CODE:** 780 523

EXPECTED BEHAVIOUR: **To research technical information**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Specify the purpose of the research.	5	-	• Identification of the purpose of the research	P
Select sources of information.	10	-	• Selection of sources of information • Credibility of sources of information	P
Consult sources of information.	40	30	• Use of sources of information • Selection of information	P
Consult resource persons.	10	-	• Choice of resource persons to consult • Quality of communication	P
Process the information.	15	30	• Compiling of information • Filing of information	P
Record the information.	20	30	• Organization of information recorded • Saving of information recorded	P
Research technical information.	-	10	• Observance of the laws and regulations related to acquiring information	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **3 – RESEARCHING INFORMATION** **CODE:** 780 523

EXPECTED BEHAVIOUR: **To research technical information**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Consult sources of information.	PS	1. Use of sources of information	15	1.1 Efficient research on the Internet	15
	PT	2. Selection of information	15	2.1 Collection of relevant information	15
Process the information.	PT	3. Compiling of information	15	3.1 Choice of an appropriate format for the information compiled	15
	PT	4. Filing of information	15	4.1 Logical filing of information	15
Record the information.	PT	5. Organization of information recorded	15	5.1 Use of a logical organization method	15
	PT	6. Saving of information recorded	15	6.1 Correct saving of information recorded	10
				6.2 Quality of the work sheet	5
Research technical information.	PT	7. Observance of the laws and regulations related to acquiring information	10	7.1 Observance of the laws and regulations related to acquiring information	10

* Evaluation strategy PT: product PS: process

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 523 – RESEARCHING INFORMATION (Module 3)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to research technical information. The length of the examination should not exceed two hours.

2. EXAMINATION PROCEDURE

The candidates will be required to research information using a microcomputer and the Internet. They will also be required to download and save this information. Lastly, they will be required to record the information gathered using a software suite.

Suggestions for types of technical information to research:

- information on the configuration of office or microcomputer equipment
- information on a technical malfunction
- information on programs (e.g. antivirus software, program updates, software registration)
- information on microcomputer or business equipment specifications

On their work sheets, the candidates must:

- indicate the resources they used to find the information
- write down the addresses of the Web sites where they found the information
- indicate where they saved the information
- indicate the types of information gathered using a software suite:
  - spreadsheet software
  - word-processing software
  - database software
  - presentation software

3. MATERIALS

The following is required for the examination:

- a microcomputer
- access to the Internet

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
3 – Researching Information	Course Code:	780 523
Candidate's name:_____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT
1. Use of sources of information			
1.1 Efficient research on the Internet:			0 or 15
• browser correctly configured	☐	☐	
• use of appropriate search tools			
• use of advanced search options	☐	☐	
• use of correct keywords			
	☐	☐	
Error tolerance: 1 error			
	☐	☐	
2. Selection of information			
2.1 Collection of relevant information:			0 or 15
• information consistent with the request	☐	☐	
3. Compiling of information			
3.1 Choice of an appropriate format for the information compiled			0 or 15

OBSERVATION			RESULT
	YES	NO	
4. Filing of information			
4.1 Logical filing of information:			0 or 15
• creation of a location for filing the information	☐	☐	
• filing of information in the right location	☐	☐	
5. Organization of information recorded			
5.1 Use of a logical organization method:			0 or 15
• observance of the directory structure	☐	☐	
6. Saving of information recorded			
6.1 Correct saving of the information recorded:			0 or 10
• reliable data storage medium	☐	☐	
• appropriate data storage medium	☐	☐	
6.2 Quality of the work sheet:			0 or 5
• clear presentation of data	☐	☐	
• use of correct terminology	☐	☐	
7. Observance of the laws and regulations related to acquiring information			
7.1 Observance of the laws and regulations related to acquiring information			0 or 10
	Total:		/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **4 – REPAIRING AND ADJUSTING PARTS** **CODE:** 780 535

EXPECTED BEHAVIOUR: **To repair and adjust parts**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Machine parts.	30	35	• Production of a sketch • Application of machining techniques	P
Assemble parts.	20	20	• Application of assembly techniques	P
Weld and desolder components.	35	35	• Application of welding and desoldering techniques • Quality of the work	P
Repair the panels, doors or housing of a piece of equipment.	15	-	• Assessment of the task • Choice of materials • Application of techniques • Quality of the finished product	P
Repair and adjust parts.	-	10	• Observance of occupational health and safety regulations • Clean, orderly work area	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **4 – REPAIRING AND ADJUSTING PARTS** **CODE:** 780 535

EXPECTED BEHAVIOUR: **To repair and adjust parts**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Machine parts.	PT/PS	1. Production of a sketch	10	1.1 Quality of the sketch	10
		2. Application of machining techniques	25	2.1 Careful selection and preparation of the tools	5
				2.2 Application of the recommended methods, procedures and techniques	5
				2.3 Quality of the machining	15
Assemble parts.	PS/PT	3. Application of assembly techniques	20	3.1 Choice of the appropriate fastening devices	5
				3.2 Observance of the correct assembly sequence	5
				3.3 Strength of the assembled product	5
				3.4 Proper adjustment of the assembled parts	5
Weld and desolder components.	PS/PT	4. Application of welding and desoldering techniques	10	4.1 Careful selection and preparation of tools	5
				4.2 Application of the recommended methods, procedures and techniques	5

* Evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **4 – REPAIRING AND ADJUSTING PARTS** **CODE:** 780 535

EXPECTED BEHAVIOUR: **To repair and adjust parts**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Repair and adjust parts.	PS	5. Quality of the work	25	5.1 Quality of the welds	15
				5.2 Observance of instructions	10
		6. Clean, orderly work area	10	6.1 Clean, orderly work area	10

* Evaluation strategy PT: product PS: process

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 535 – REPAIRING AND ADJUSTING PARTS (Module 4)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to repair and adjust business equipment parts. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to repair and adjust a business equipment part. They will also be required to make a sketch of a part, apply machining, welding and desoldering techniques, as well as assemble and adjust the part.

The following tools will be provided:

- a file
- a saw
- a drilling machine
- a grinder
- drills and screw taps
- a welding and desoldering station

The candidates will be required to make a sketch of the part to be machined on their work sheets.

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers, snap hooks, adjustment gauges, etc.)
- the plans, schemas, diagrams and reference manuals for the piece of business equipment
- various materials used for machining or welding and desoldering
- office equipment for assembling the machined part
- materials specific to the welding and desoldering station

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation "failed the summative examination."

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
4 – Repairing and Adjusting Parts	Course Code:	780 535
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

	OBSERVATION	YES	NO	RESULT
1.	**Production of a sketch**			
1.1	Quality of the sketch:			0 or 10
	• accuracy of the sketch of the part to be machined	☐	☐	
	• observance of proportions • good representation of details	☐	☐	
		☐	☐	
2.	**Application of machining techniques**			
2.1	Careful selection and preparation of the tools:			0 or 5
	• appropriate choice of tools	☐	☐	
	• proper adjustment of tools	☐	☐	
2.2	Application of the recommended methods, procedures and techniques:			0 or 5
	• correct use of tools	☐	☐	
	• observance of the work sequence	☐	☐	

OBSERVATION				RESULT
		YES	NO	
2.3	Quality of the machining:			0 or 15
	• conformity of the machined part with the sketch	☐	☐	
	• compliance with the manufacturer's specifications	☐	☐	
3.	**Application of assembly techniques**			
3.1	Choice of the appropriate fastening devices			0 or 5
3.2	Observance of the correct assembly sequence			0 or 5
3.3	Strength of the assembled product			0 or 5
3.4	Proper adjustment of the assembled parts:			0 or 5
	• compliance with manufacturer's specifications	☐	☐	
4.	**Application of welding and desoldering techniques**			
4.1	Careful selection and preparation of the tools:			0 or 5
	• appropriate choice of tools	☐	☐	
	• proper adjustment of tools	☐	☐	
4.2	Application of the recommended methods, procedures and techniques:			0 or 5
	• correct use of tools	☐	☐	
	• observance of the work sequence	☐	☐	
5.	**Quality of the work**			
5.1	Quality of the welds:			0 or 15
	• compliance with welding standards	☐	☐	
	• observance of the limitations of the components			
	• proper welding of the welds	☐	☐	
5.2	Observance of instructions	☐	☐	0 or 10

OBSERVATION	RESULT
YES NO	
6. Clean, orderly work area	
6.1 Clean, orderly work area	0 or 10
PASS/FAIL CONDITIONS	
Observed all of the occupational health and safety regulations. ☐ ☐	
Total:	/100
Minimum performance standard: 80 points	

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 543

MODULE: 5 – COMMUNICATING IN THE SECOND LANGUAGE

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

PARTICIPATION EVALUATION FORM

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **5 – COMMUNICATING IN THE SECOND LANGUAGE** **CODE:** 780 543

EXPECTED OUTCOME: **To communicate in the second language**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
PHASE 1: INFORMATION ON COMMUNICATING IN THE SECOND LANGUAGE			
• Learning about the basic principles of effective communication.	10	15	• Gather information on most of the topics to be covered.
• Learning about proper telephone etiquette.	5	-	• Listen attentively to the explanations given.
• Evaluating their degree of proficiency in the second language.	5	-	• Agree to evaluate their degree of proficiency in the second language.
• Gathering information about the second language in order to: . distinguish characteristics of the mother tongue from those of the second language . associate English terms with French ones . recognize verb tenses . recognize the difference in sentence structure between the two languages . interpret idiomatic expressions	10	30	• Perform different tasks allowing them to gain knowledge about terminology, syntax, verbs and idiomatic expressions.
PHASE 2: PARTICIPATION IN THE PROCESS OF COMMUNICATING IN THE SECOND LANGUAGE			

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **5 – COMMUNICATING IN THE SECOND LANGUAGE** **CODE:** 780 543

EXPECTED OUTCOME: **To communicate in the second language**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
• Summarizing excerpts from technical manuals, instruction booklets, catalogues, etc.	5	15	• Summarize excerpts from manuals using dictionaries and reference materials.
• Introducing themselves.	10	-	• Introduce themselves.
• Providing technical information.	10	-	• Provide technical information.
• Participating in group discussions.	10	25	• Participate in group discussions.
• Holding a telephone conversation.	10	-	• Endeavour to use communication techniques correctly. • Apply the rules of telephone etiquette. • Answer a telephone call from a customer. • Telephone a supplier.
PHASE 3: EVALUATION OF THEIR ABILITY TO COMMUNICATE IN THE SECOND LANGUAGE			
• Describing ways of improving their ability to communicate in the second language.	10	-	• List ways of improving their ability to communicate in the second language.
• Evaluating their progress relating to: . interpretation of verbal and written messages . expression of ideas	15	15	• Accept feedback on their communication skills with respect to their use of appropriate terminology and correct sentence structure, their capacity to adapt their flow of speech to the situation, and the clearness of their accent. • Assess their ability to interpret verbal and written messages. • Evaluate their ability to express ideas.

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **5 – COMMUNICATING IN THE SECOND LANGUAGE** **CODE:** 780 543

EXPECTED OUTCOME: **To communicate in the second language**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
PHASE 1: Information on communicating in the second language			
1. Gather information on most of the topics to be covered.	15	1.1 Learn to what extent the second language is used in the trade.	5
		1.2 Learn about the degree of proficiency in the second language that is required to practise the trade.	5
		1.3 Learn about the importance of having a basic knowledge of the second language in order to practise the trade.	5
2. Perform different tasks allowing them to gain knowledge about terminology, syntax, verbs and idiomatic expressions.	30	2.1 Carry out relevant research on the trade using the different sources of technical information.	5
		2.2 Practise matching technical terms in the second language with those in the mother tongue.	5
		2.3 Practise using correct syntax.	5
		2.4 Practise distinguishing the grammatical characteristics of the second language.	5
		2.5 Practise distinguishing the spoken characteristics of the second language.	5
		2.6 Practise identifying the idiomatic expressions in a conversation conducted in the second language.	5

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **5 – COMMUNICATING IN THE SECOND LANGUAGE** **CODE:** 780 543

EXPECTED OUTCOME: **To communicate in the second language**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
PHASE 2: Participating in the process of communicating in the second language			
3. Summarize excerpts from manuals using dictionaries and reference materials.	15	3.1 Associate the terms used to designate objects with the function of the objects.	10
		3.2 Translate technical texts.	5
4. Participate in group discussions.	25	4.1 Show an interest in group discussions.	10
		4.2 Use technical expressions specific to the trade.	5
		4.3 Communicate their ideas.	10
PHASE 3: Evaluation of their ability to communicate in the second language			
5. Assess their ability to interpret verbal and written messages.	15	5.1 Assess their ability to interpret the main ideas in second-language communication.	5
		5.2 Identify their strengths and weaknesses in second-language communication.	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 543 – COMMUNICATING IN THE SECOND LANGUAGE (Module 5)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the evaluation is to assess the candidates' participation in activities designed to develop the competency *To communicate in the second language.*

The teacher evaluates participation throughout the module using a participation evaluation form.

Evaluation is based on the candidates' participation in the various activities carried out individually or in large or small groups, and not on the results obtained.

The examination consists of three phases, undertaken at different stages of the module. Each phase is accompanied by specific instructions.

2. PHASES

PHASE 1: INFORMATION ON COMMUNICATING IN THE SECOND LANGUAGE

This phase is divided into two components: gathering information on most of the topics to be covered, and performing different tasks allowing them to gain knowledge about terminology, syntax, verbs and idiomatic expressions.

The candidates must:

- explore the use of the second language in the trade
- carry out relevant research on the trade using various sources of technical information
- match technical terms in the second language with those in the mother tongue
- distinguish the characteristics of the second language

PHASE 2: PARTICIPATION IN THE PROCESS OF COMMUNICATING IN THE SECOND LANGUAGE

Evaluation of this phase is based on the candidates' participation in the following activities: summarizing excerpts from manuals using dictionaries and reference material, and participating in group discussions centring around learning activities related to the trade.

The candidates must:

- associate the terms used to designate objects with the function of the objects
- translate technical texts
- show an interest in group discussions
- use technical expressions specific to the trade

PHASE 3: EVALUATION OF THEIR ABILITY TO COMMUNICATE IN THE SECOND LANGUAGE

Evaluation of this phase is based on the quality of the candidates' assessment of their mastery of the second language.

The candidates must:

- assess their ability to interpret the main ideas in second-language communication
- identify their strengths and weaknesses in second-language communication

3. PASS/FAIL CONDITIONS

To pass the examination, the candidates must obtain 13 YESes out of a possible 16.

4. DURATION

Evaluation takes place throughout the module.

PARTICIPATION EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
5 – Communicating in the Second Language	Course Code:	780 543
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

PARTICIPATION COMPONENTS	RESULT YES	RESULT NO
PHASE 1: Information on communicating in the second language		
1. Gather information on most of the topics to be covered.	☐	☐
1.1 Learn to what extent the second language is used in the trade.		
1.2 Learn about the degree of proficiency in the second language that is required to practise the trade.	☐	☐
1.3 Learn about the importance of having a basic knowledge of the second language in order to practise the trade.	☐	☐
2. Perform different tasks allowing them to gain knowledge about terminology, syntax, verbs and idiomatic expressions.	☐	☐
2.1 Carry out relevant research on the trade using the different sources of technical information.		
2.2 Practise matching technical terms in the second language with those in the mother tongue.	☐	☐
2.3 Practise using correct syntax.	☐	☐
2.4 Practise distinguishing the grammatical characteristics of the second language.	☐	☐
2.5 Practise distinguishing the spoken characteristics of the second language.	☐	☐
2.6 Practise identifying the idiomatic expressions in a conversation conducted in the second language.	☐	☐

PARTICIPATION COMPONENTS	RESULT YES	RESULT NO
PHASE 2: Participation in the process of communicating in the second language		
3. Summarize excerpts from manuals using dictionaries and reference materials.		
3.1 Associate the terms used to designate objects with the function of the objects.	☐	☐
3.2 Translate technical texts.	☐	☐
4. Participate in group discussions.		
4.1 Show an interest in group discussions.	☐	☐
4.2 Use technical expressions specific to the trade.	☐	☐
4.3 Communicate their ideas.	☐	☐
PHASE 3: Evaluation of their ability to communicate in the second language		
5. Assess their ability to interpret verbal and written messages.		
5.1 Assess their ability to interpret the main ideas in second-language communication.	☐	☐
5.2 Identify their strengths and weaknesses in second-language communication.	☐	☐
Total:		/16
PASS/FAIL CONDITIONS: 13 YESes out of 16		

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **6 – DIAGNOSING A MALFUNCTION OF MECHANICAL ORIGIN** **CODE:** 780 555

EXPECTED BEHAVIOUR: **To diagnose a malfunction of mechanical origin**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Become familiar with the nature of the mechanical malfunction.	5	-	• Quality of the information gathered • Clear questions	P
Prepare the intervention.	5	-	• Choice of reference manuals • Choice of tools • Choice of instruments	P
Dismantle the equipment or a section of it.	10	15	• Observance of the dismantling sequence • Clean, orderly work area	P
Verify the mechanisms.	20	10	• Careful examination • Taking of measurements	P
Process the information.	15	15	• Quality of information processing	P
Formulate hypotheses.	15	10	• Pertinence of the hypotheses	P
Identify the cause or causes of the malfunction.	20	40	• Identification of the cause or causes of the malfunction	P
Reassemble the equipment.	10	10	• Observance of the reassembly sequence	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **6 – DIAGNOSING A MALFUNCTION OF MECHANICAL ORIGIN** **CODE:** 780 555

EXPECTED BEHAVIOUR: **To diagnose a malfunction of mechanical origin**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Dismantle the equipment or a section of it.	PS	1. Observance of the dismantling sequence	5	1.1 Observance of the dismantling sequence	5
		2. Clean, orderly work area	10	2.1 Clean, orderly work area	10
Verify the mechanisms.	PS/PT	3. Careful examination	5	3.1 Gathering of relevant data based on observation	5
		4. Taking of measurements	5	4.1 Accurate measurements	5
Process the information.	PT	5. Quality of information processing	15	5.1 Accurate force and speed ratios	5
				5.2 Correct analysis of the data gathered	10
Formulate hypotheses.	PT	6. Relevance of the hypotheses	10	6.1 Logical relationship between the analysis and the malfunction	5
				6.2 Justification of the hypotheses explaining the cause or causes of the malfunction	5
Identify the cause or causes of the malfunction.	PS	7. Identification of the cause or causes of the malfunction	40	7.1 Exact location of the faulty part or parts on the plan	20
				7.2 Accurate location of the faulty part or parts of the office equipment	20

* Evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **6 – DIAGNOSING A MALFUNCTION OF MECHANICAL ORIGIN** **CODE:** 780 555

EXPECTED BEHAVIOUR: **To diagnose a malfunction of mechanical origin**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Reassemble the equipment.	PS	8. Observance of the reassembly sequence	10	8.1 Observance of the reassembly sequence	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 555 – DIAGNOSING A MALFUNCTION OF MECHANICAL ORIGIN (Module 6)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to diagnose a malfunction in the mechanism of a piece of office equipment which is mechanically faulty. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to diagnose a malfunction in the mechanism of a piece of office equipment. The malfunction will have been previously caused by the teacher. The malfunction may be due to one or more faulty parts or to one or several mechanical adjustments. In order to access the faulty part of the mechanical section, the candidates may have to disassemble a section of the equipment.

Suggestions for types of mechanical malfunctions:

- malfunction due to a mechanical adjustment
- drive malfunction
- malfunction due to the synchronization of the mechanical parts
- malfunction due to wear and lubrication of parts

The various plans, schemas, diagrams and reference manuals pertaining to the business equipment will be provided. The candidates will be required to use measuring instruments, tools and a scientific calculator.

On their work sheets, the candidates must:

- record the collected data
- present their analysis of the collected data
- indicate their hypotheses
- indicate their diagnosis of the mechanical malfunction

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers, snap hooks, adjustment gauges, etc.)
- plans, schemas, diagrams and reference manuals for the business equipment

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation "failed the summative examination."

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
6 – Diagnosing a Malfunction of Mechanical Origin	Course Code:	780 555
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			RESULT
	YES	NO	
1. Observance of the dismantling sequence			
1.1 Observance of the dismantling sequence			0 or 5
2. Clean, orderly work area			
2.1 Clean, orderly work area			0 or 10
3. Careful examination			
3.1 Gathering of relevant data based on observation:			0 or 5
• data relative to the malfunction	☐	☐	
4. Taking of measurements			
4.1 Accurate measurements:			0 or 5
• choice of the appropriate measuring instrument	☐	☐	
• accurate measurements	☐	☐	

OBSERVATION			RESULT
	YES	NO	
5. Quality of information processing			
5.1 Accurate force and speed ratios:			0 or 5
• accurate verification of allowances and tolerance values	☐	☐	
5.2 Correct analysis of the data gathered:			0 or 10
• correct interpretation of adjustments	☐	☐	
• accurate comparison of potentially faulty parts and new parts			
• accurate interpretation of mechanical principles	☐	☐	
	☐	☐	
6. Relevance of the hypotheses			
6.1 Logical relationship between the analysis and the malfunction			0 or 5
6.2 Justification of the hypotheses explaining the cause or causes of the malfunction			0 or 5
7. Identification of the cause or causes of the malfunction			
7.1 Exact location of the faulty part or parts on the plan:			0 or 20
• correct interpretation of the symbols			
• location of the faulty part or parts	☐	☐	
	☐	☐	
7.2 Accurate location of the faulty part or parts of the office equipment:			0 or 20
• location of the faulty part or parts	☐	☐	
• correct identification of the faulty adjustment or adjustments			
	☐	☐	
8. Observance of the reassembly sequence			
8.1 Observance of the reassembly sequence			0 or 10
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
	Total:		/100
Minimum performance standard: 80 points			

780 555

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 563

MODULE: 7 – ESTABLISHING COMMUNICATION LINKS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **7 – ESTABLISHING COMMUNICATION LINKS** **CODE:** 780 563

EXPECTED BEHAVIOUR: **To establish communication links**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Interpret the technical documentation, schemas and plans.	10	-	• Interpretation of the technical documentation, schemas and plans	P
Assemble the cables and connectors.	40	55	• Selection of cables and connectors • Compliance with the connection schemas • Quality of the assembly	P
Make the connections.	5	15	• Verification of the compatibility of the material • Location of the connection • Connection of the equipment • Clean, orderly work area	P
Configure the material.	25	-	• Accurate adjustment of the logical parameters of the communication link • Accurate adjustment of the physical parameters of the communication link	P
Carry out testing.	20	30	• Verification of the communication link	P
Establish communication links.	-	-	• Compliance with standards • Reliability of communication links	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **7 – ESTABLISHING COMMUNICATION LINKS** **CODE:** 780 563

EXPECTED BEHAVIOUR: **To establish communication links**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Assemble the cables and connectors.	PS/PT	1. Selection of cables and connectors	25	1.1 Choice of the appropriate cables	10
				1.2 Choice of the appropriate connectors, taps and receptacles	15
		2. Quality of the assembly	30	2.1 Strength of the junctions	15
				2.2 Quality of the work	15
Make the connections.	PT/PS	3. Connection of the equipment	10	3.1 Quality of the connection	10
		4. Clean, orderly work area	5	4.1 Clean, orderly work area	5
Carry out testing.	PS/PT	5. Verification of the communication link	30	5.1 Effective use of the appropriate tools	15
				5.2 Accurate interpretation of the results of the test	15

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 563 – ESTABLISHING COMMUNICATION LINKS (Module 7)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to establish communication links. The length of the examination should not exceed two hours.

2. EXAMINATION PROCEDURE

The candidates will be required to establish a communication link between different pieces of office equipment with an external communication link, and to test that the link works.

Suggestions for communication links:

- link between two microcomputers
- link between a microcomputer and a peripheral
- link through series, parallel, USB, network and infrared ports

The various plans, schemas, diagrams and reference manuals required to establish the communication link will be provided. The candidates will be required to use testing instruments and tools.

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including a screwdriver, a multimeter, a soldering iron, a wire stripper and cutting pliers)
- crimping tools
- equipment required to establish the communication link
- plans, schemas, diagrams and reference manuals for the business equipment

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation "failed the summative examination."

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
7 – Establishing Communication Links	Course Code:	780 563
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT
1. Selection of cables and connectors			
1.1 Choice of the appropriate cables:			0 or 10
• choice of the appropriate cables for the type of communication	☐	☐	
• choice of the appropriate cables to connect the equipment	☐	☐	
1.2 Choice of the appropriate connectors, taps and receptacles:			0 or 15
• choice of the appropriate connectors, taps and receptacles for the type of communication	☐	☐	
2. Quality of the assembly			
2.1 Strength of the junctions			0 or 15 0 or 15
2.2 Quality of the work:	☐	☐	
• correct assembly	☐	☐	
• perfect correspondence between the pins and the connectors			

OBSERVATION	YES	NO	RESULT
3. Connection of the equipment			
3.1 Quality of the connection:			0 or 10
• consistency of the connections	☐	☐	
• connection to the appropriate communication ports	☐	☐	
4. Clean, orderly work area			
4.1 Clean, orderly work area			0 or 5
5. Verification of the communication link			
5.1 Effective use of the appropriate tools:			0 or 15
• appropriate choice of tools	☐	☐	
• correct use of the testing tools	☐	☐	
5.2 Accurate interpretation of the results of the test:			0 or 15
• standard rate of transfer	☐	☐	
• absence of communication errors	☐	☐	
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
Minimum performance standard: 80 points	Total:		/100

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 579

MODULE: 8 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **8 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS** **CODE:** 780 579

EXPECTED BEHAVIOUR: **To diagnose a malfunction in analogue circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Become familiar with the nature of the analogue electronic malfunction.	5	-	• Relevance of the information gathered • Clear questions	P
Prepare the intervention.	5	-	• Choice of reference manuals • Choice of tools • Choice of instruments	P
Dismantle the equipment or a section of it.	5	-	• Observance of the dismantling sequence • Quality of the intervention	P
Interpret the charts and schemas of analogue circuits.	10	10	• Interpretation of the charts and schemas of analogue circuits of office equipment	P
Verify the analogue circuits.	20	15	• Taking of measurements • Verification of the value of the components • Interpretation of the measurements taken	P
Process the information.	20	20	• Quality of information processing	P
Formulate hypotheses.	15	15	• Relevance of the hypotheses	P
Identify the cause or causes of the malfunction.	15	30	• Identification of the cause or causes of the malfunction	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **8 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS** **CODE:** 780 579

EXPECTED BEHAVIOUR: **To diagnose a malfunction in analogue circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Reassemble the equipment.	5	-	• Application of the reassembly sequence	P
Diagnose a malfunction in analogue circuits.	-	10	• Clean, orderly work area	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **8 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS** **CODE:** 780 579

EXPECTED BEHAVIOUR: **To diagnose a malfunction in analogue circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Interpret the charts and schemas of analogue circuits.	PS	1. Interpretation of the charts and schemas of analogue circuits of office equipment	10	1.1 Choice of the appropriate schema	5
				1.2 Location of the correct section of the analogue circuit	5
Verify the analogue circuits.	PT/PS	2. Taking of measurements	15	2.1 Accurate measurements	5
		3. Verification of the value of the components		3.1 Correct verification of the value of the components	5
		4. Interpretation of the measurements taken		4.1 Correct interpretation of the measurements taken	5
Process the information.	PT	5. Quality of information processing	20	5.1 Accurate calculations associated with the measurements taken	10
				5.2 Correct analysis of the data gathered	10
Formulate hypotheses.	PT	6. Relevance of the hypotheses	15	6.1 Logical relationship between the analysis and the malfunction	5
				6.2 Justification of the hypotheses explaining the cause or causes of the malfunction	10
Identify the cause or causes of the malfunction.	PS	7. Identification of the cause or causes of the malfunction.	30	7.1 Location of the faulty component or components on the plan	10

* Evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **8 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS** **CODE:** 780 579

EXPECTED BEHAVIOUR: **To diagnose a malfunction in analogue circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
				7.2 Identification of the faulty component or components of the office equipment	20
Diagnose a malfunction in analogue circuits.	PS	8. Clean, orderly work area	10	8.1 Clean, orderly work area	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 579 – DIAGNOSING A MALFUNCTION IN ANALOGUE CIRCUITS (Module 8)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to diagnose a malfunction in analogue circuits, related to one or more components of a piece of business equipment that is electrically faulty. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to diagnose a malfunction in one or more analogue circuits. The malfunction will have been previously caused by the teacher. The malfunction could be located in the linear power supply, the switched-mode power supply or any other section in the piece of equipment containing analogue electronic components. In order to access the faulty part of the analogue electronic circuit, the candidates may have to disassemble a section of the equipment.

Suggestions for types of analogue electronic circuit malfunctions:

- malfunction in the power supply circuit
- amplification malfunction
- malfunction in the switching circuit

The various plans, schemas, diagrams and reference manuals pertaining to the business equipment will be provided. The candidates will be required to use measuring instruments, tools and a scientific calculator.

On their work sheets, the candidates must:

- record the collected data
- present their analysis of the collected data
- indicate their hypotheses
- indicate their diagnosis of the analogue electronic circuit malfunction

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers, a multimeter, an oscilloscope and a calculator)
- plans, schemas, diagrams and reference manuals for the business equipment

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation "failed the summative examination."

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
8 – Diagnosing a Malfunction in Analogue Circuits	Course Code:	780 579
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			RESULT
	YES	NO	
1. Interpretation of the charts and schemas of analogue circuits of office equipment			
1.1 Choice of the appropriate schema			0 or 5
1.2 Location of the correct section of the analogue circuit			0 or 5
2. Taking of measurements			
2.1 Accurate measurements:			0 or 5
• choice of the appropriate measuring instrument	☐	☐	
• proper adjustment of the measuring instrument			
• accurate measurements	☐	☐	
	☐	☐	
3. Verification of the value of the components			
3.1 Correct verification of the value of the components			0 or 5
4. Interpretation of the measurements taken			
4.1 Correct interpretation of the measurements taken:			0 or 5
• consistent analysis of the measurements	☐	☐	

OBSERVATION			RESULT
		YES NO	
5.	**Quality of information processing**		
5.1	Accurate calculations associated with the measurements taken:		0 or 10
	• proper application of the laws and theorems • accurate calculations	☐ ☐ ☐ ☐	
5.2	Correct analysis of the data gathered:		0 or 10
	• comparison between the measurements taken and the estimates • justification of the differences	☐ ☐ ☐ ☐	
6.	**Relevance of the hypotheses**		
6.1	Logical relationship between the analysis and the malfunction		0 or 5 0 or 10
6.2	Justification of the hypotheses explaining the cause or causes of the malfunction		
7.	**Identification of the cause or causes of the malfunction**		
7.1	Location of the faulty component or components on the plan:		0 or 10
	• correct interpretation of the symbols • location of the faulty component or components	☐ ☐ ☐ ☐	
7.2	Identification of the faulty component or components of the business equipment:		0 or 20
	• location of the faulty component or components • identification of the part number of the component or components	☐ ☐ ☐ ☐	
8.	**Clean, orderly work area**		
8.1	Clean, orderly work area		0 or 10

780 579

OBSERVATION			RESULT
	YES	NO	
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
	Total:		/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 587

MODULE: 9 – SERVICING OPERATING SYSTEMS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **9 – SERVICING OPERATING SYSTEMS** **CODE:** 780 587

EXPECTED BEHAVIOUR: **To service operating systems**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Disk management.	25	45	• Disk preparation • Disk management	P
Customize the computer environment.	20	20	• Adaptation of the graphical interface	P
Run programs and commands in text mode.	25	-	• Identification of utility commands • Correct interpretation of the result of the run • Use of utility commands and software	P
Install drivers.	30	25	• Installation of drivers	P
Service operating systems.	-	10	• Optimization of the intervention	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **9 – SERVICING OPERATING SYSTEMS** **CODE:** 780 587

EXPECTED BEHAVIOUR: **To service operating systems**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Disk management.	PT	1. Disk preparation	25	1.1 Correct parameterization for the type of operating system	25
		2. Disk management	20	2.1 Correct adjustment of the start-up parameters of the system	20
Customize the computer environment.	PT	3. Adaptation of the graphical interface	20	3.1 Adaptation consistent with the user's parameters	10
				3.2 Adaptation consistent with multiuser profiles	10
Install drivers.	PT	4. Installation of drivers	25	4.1 Appropriate choice of drivers	15
				4.2 Correct verification of the installation	10
Service operating systems.	PT	5. Optimization of the intervention	10	5.1 Optimization of the intervention	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 587 – SERVICING OPERATING SYSTEMS (Module 9)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to service microcomputer operating systems. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to service an operating system according to the teacher's instructions.

Suggestions for types of interventions to carry out on operating systems:

- preparing the hard disk, installing an operating system, customizing a single-user environment, customizing a multiuser environment, installing drivers
- installing several operating systems
- configuring start-up files for several operating systems

The different operating systems, drivers, programs and technical documents will be provided.

3. MATERIALS

The following is required for the examination:

- a computer workstation including a screen, a keyboard, hard disks, diskettes, a mouse and a CD-ROM reader

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

All of the criterion components will be evaluated at the candidates' workstations at the end of the examination.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
9 – Servicing Operating Systems	Course Code:	780 587
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT
1. Disk preparation			
1.1 Correct parameterization for the type of operating system:			0 or 25
• appropriate file system	☐	☐	
• sufficient space • appropriate partitioning	☐	☐	
	☐	☐	
2. Disk management			
2.1 Correct adjustment of the start-up parameters of the system:			0 or 20
• start-up of requested operating system	☐	☐	
• proper configuration of start-up files	☐	☐	
3. Adaptation of the graphical interface			
3.1 Adaptation consistent with the user's parameters:			0 or 10
• correct start-up parameters	☐	☐	
• appropriate customization of taskbar • correct configuration of menus	☐	☐	
	☐	☐	

OBSERVATION	YES	NO	RESULT
3.2 Adaptation consistent with multiuser profiles:			
• correct configuration of access	☐	☐	0 or 10
4. Installation of drivers			
4.1 Appropriate choice of drivers:			0 or 15
• compatibility of drivers with peripherals	☐	☐	
• appropriate version of drivers	☐	☐	
4.2 Correct verification of the installation:			0 or 10
• absence of error message at start-up	☐	☐	
• installation consistent with data provided	☐	☐	
• optimal functioning of peripherals	☐	☐	
5. Optimization of the intervention			
5.1 Optimization of the intervention			0 or 10
	Total:		/100

Minimum performance standard: 80 points

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **10 – DIAGNOSING A MALFUNCTION IN DIGITAL CIRCUITS** **CODE:** 780 599

EXPECTED BEHAVIOUR: **To diagnose a malfunction in digital circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Become familiar with the nature of the digital electronic malfunction.	5	-	• Quality of the information gathered • Clear questions	P
Prepare the intervention.	5	-	• Choice of reference manuals • Choice of tools • Choice of instruments	P
Dismantle the equipment or a section of it.	5	-	• Observance of the dismantling sequence • Quality of the intervention	P
Interpret the charts and diagrams of digital circuits.	10	10	• Interpretation of the charts and diagrams of digital circuits	P
Verify the digital circuits.	20	15	• Taking of measurements • Verification of the value of the components • Interpretation of the measurements taken	P
Process the information.	20	20	• Quality of information processing	P
Formulate hypotheses.	15	15	• Pertinence of the hypotheses	P
Identify the cause or causes of the malfunction.	15	30	• Identification of the cause or causes of the malfunction	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **10 – DIAGNOSING A MALFUNCTION IN DIGITAL CIRCUITS** **CODE:** 780 599

EXPECTED BEHAVIOUR: **To diagnose a malfunction in digital circuits**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Reassemble the equipment.	5	-	• Application of the reassembly sequence	P
Diagnose a malfunction in digital circuits.	-	10	• Clean, orderly work area	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **10 – DIAGNOSING A MALFUNCTION IN DIGITAL CIRCUITS** **CODE:** 780 599

EXPECTED BEHAVIOUR: **To diagnose a malfunction in digital circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Interpret the charts and diagrams of digital circuits.	PS	1. Interpretation of the charts and diagrams of digital circuits	10	1.1 Chose the appropriate chart	5
				1.2 Located the section of the digital circuit in question	5
Verify the digital circuits.	PT/PS	2. Taking of measurements	5	2.1 Accurate measurements	5
		3. Verification of the value of the components	5	3.1 Correctly verified the value of the components	5
		4. Interpretation of the measurements taken	5	4.1 Correctly interpreted the measurements taken	5
Process the information.	PT	5. Quality of information processing	20	5.1 Accurate calculations associated with the measurements taken	10
				5.2 Correct analysis of the data gathered	10
Formulate hypotheses.	PT	6. Relevance of the hypotheses.	15	6.1 Logical relationship between the analysis and the malfunction	5
				6.2 Justification of the hypotheses explaining the cause or causes of the malfunction	10
Identify the cause or causes of the malfunction.	PS	7. Identification of the cause or causes of the malfunction	30	7.1 Location of the faulty component or components on the plan	10
				7.2 Identification of the faulty component or components of the office equipment	20

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **10 – DIAGNOSING A MALFUNCTION IN DIGITAL CIRCUITS** **CODE:** 780 599

EXPECTED BEHAVIOUR: **To diagnose a malfunction in digital circuits**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Diagnose a malfunction in digital circuits.	PS	8. Clean, orderly work area	10	8.1 Clean, orderly work area	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 599 – DIAGNOSING A MALFUNCTION IN DIGITAL CIRCUITS (Module 10)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to diagnose a malfunction in digital circuits, related to one or more electronic components of a piece of faulty business equipment. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to diagnose a malfunction in one or more digital electronic circuits. The malfunction will have been previously caused by the teacher. The malfunction could be located in the input or output section of the microcontrollers or any other section of the equipment containing digital electronic components. In order to access the faulty part of the digital electronic circuit, the candidates may have to disassemble a section of the equipment.

Suggestions for types of digital electronic circuit malfunctions:

- sensor malfunction
- step motor control malfunction
- irregularity in the equipment's operating sequence
- malfunction in the input or output of the microcontrollers
- malfunction in the keyboard driver

The various plans, schemas, diagrams, timing diagrams, logic diagrams and reference manuals pertaining to the business equipment will be provided. The candidates will be required to use measuring instruments, tools and a scientific calculator.

On their work sheets, the candidates must:

- record the collected data
- present their analysis of the collected data
- indicate their hypotheses
- indicate their diagnosis of the digital electronic circuit malfunction

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers, a multimeter, an oscilloscope and a calculator)
- plans, schemas, diagrams, timing diagrams, logic diagrams and reference manuals for the business equipment

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate a candidate's examination if the candidate does not observe all of the occupational health and safety rules. In this case, the candidate will receive the notation "failed the summative examination."

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
10 – Diagnosing a Malfunction in Digital Circuits	Course Code:	780 599
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT:
1. Interpretation of the charts and diagrams of digital circuits			
1.1 Choice of the appropriate chart			0 or 5
1.2 Location of the section of the digital circuit in question			0 or 5
2. Taking of measurements			
2.1 Accurate measurements:			0 or 5
• choice of the appropriate measuring instrument	☐	☐	
• proper adjustment of the measuring instrument			
• accurate measurements	☐	☐	
	☐	☐	
3. Verification of the value of the components			
3.1 Correct verification of the value of the components			0 or 5

OBSERVATION	YES	NO	RESULT:
4. Interpretation of the measurements taken			
4.1 Correct interpretation of the measurements taken			0 or 5
5. Quality of information processing			
5.1 Accurate calculations associated with the measurements taken:			0 or 10
• correct application of logic functions	☐	☐	
• accurate interpretation of logic sequences	☐	☐	
5.2 Correct analysis of the data gathered:			0 or 10
• accurate comparison of the logic functions with the expected functioning of the equipment	☐	☐	
• accurate comparison of the logic sequences with the expected functioning of the equipment	☐	☐	
6. Relevance of the hypotheses			
6.1 Logical relationship between the analysis and the malfunction			0 or 5
6.2 Justification of the hypotheses explaining the cause or causes of the malfunction			0 or 10
7. Identification of the cause or causes of the malfunction			
7.1 Located the faulty component or components on the plan:			0 or 10
• correct interpretation of symbols	☐	☐	
• location of the faulty component or components	☐	☐	

OBSERVATION	YES	NO	RESULT:
7.2 Identification of the faulty component or components of the business equipment:			0 or 20
• location of the faulty component or components	☐	☐	
• identification of the part number of the component or components	☐	☐	
8. Clean, orderly work area			
8.1 Clean, orderly work area			0 or 10
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
	Total:		/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: **Business Equipment Technical Service** **CODE:** 780 603

MODULE: **11 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT**

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **11 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT** **CODE:** 780 603

EXPECTED BEHAVIOUR: **To provide after-sales service on multifunction equipment**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	-	• Interpretation of the service request	P
Plan the work.	10	20	• Preparation of the intervention	P
Install a piece of multifunction equipment.	40	50	• Verification of the work area • Activation • Configuration of the equipment	P
Repair a piece of multifunction equipment.	15	-	• Gathering of information • Assessment of the condition of the multifunction equipment • Accurate diagnosis • Estimate of repair costs • Problem solving • Verification of the functioning of the equipment	P
Service a piece of multifunction equipment.	20	-	• Observance of the manufacturer's specifications • Decision making with respect to adjustments to be made • Servicing of the multifunction equipment • Disposal of toxic products	P
Write up a service report.	10	10	• Quality of the service report	P

* P: Practical examination T: Theory examination

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **11 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT** **CODE:** 780 603

EXPECTED BEHAVIOUR: **To provide after-sales service on multifunction equipment**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Provide after-sales service on multifunction equipment.	-	20	• Observance of occupational health and safety regulations • Clean, orderly work area • Optimal working order of the multifunction equipment	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **11 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT** **CODE:** 780 603

EXPECTED BEHAVIOUR: **To provide after-sales service on multifunction equipment**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Plan the work.	PS	1. Preparation of the intervention	20	1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question	5
				1.2 Choice of the appropriate tools	5
				1.3 Correct determination of the task sequence	10
Install a piece of multifunction equipment.	PS	2. Verification of the work area	5	2.1 Careful verification of the work area	5
		3. Activation	35	3.1 Carrying out of the automatic verification tests	5
				3.2 Installation of utility software in the microcomputer	10
				3.3 Correct connection of the equipment to the microcomputer	10
				3.4 Verification of the functioning of the equipment	10
		4. Configuration of the equipment	10	4.1 Configuration of the equipment in accordance with the customer's request	10
Write up a service report.	PT	5. Quality of the service report.	10	5.1 Accuracy of the information	5

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **11 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT** **CODE:** 780 603

EXPECTED BEHAVIOUR: **To provide after-sales service on multifunction equipment**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
				5.2 Quality of the language and the presentation	5
Provide after-sales service on multifunction equipment.	PS/PT	6. Observance of occupational health and safety regulations	5	6.1 Observance of all of the occupational health and safety regulations	5
		7. Clean, orderly work area	5	7.1 Clean, orderly work area	5
		8. Optimal working order of the multifunction equipment	10	8.1 Functioning of all the functions of the equipment according to the specifications	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 603 – AFTER-SALES SERVICE ON MULTIFUNCTION EQUIPMENT (Module 11)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on multifunction equipment. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to activate a piece of multifunction equipment. They must:

- configure the equipment according to specific needs
- install the programs or drivers necessary for its operation
- connect the equipment to a microcomputer
- check that all of the functions of the equipment are working properly

The various plans, schemas, diagrams and reference manuals pertaining to the multifunction equipment will be provided. A working telephone line will also be made available. The candidates will be required to use measuring instruments and tools.

On their work sheets, the candidates must:

- record the equipment data (brand, model, serial number, etc.)
- record the data relative to the programs or drivers installed
- record the programming data
- indicate the type of connection used, etc.

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers and a multimeter)
- plans, schemas, diagrams and reference manuals for the multifunction equipment
- a piece of multifunction equipment
- a microcomputer with communication ports (e.g. series, parallel, USB)

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
11 – After-Sales Service on Multifunction Equipment	Course Code:	780 603
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			**RESULT**
	YES	NO	
1. Preparation of the intervention			
1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question:			0 or 5
• choice of the appropriate manuals	☐	☐	
• choice of the appropriate schemas	☐	☐	
1.2 Choice of the appropriate tools			0 or 5
1.3 Correct determination of the task sequence			0 or 10
2. Verification of the work area			
2.1 Careful verification of the work area:			0 or 5
• verification of the conformity of the power supply	☐	☐	
• verification of the presence of a functional communication link	☐	☐	

OBSERVATION			RESULT
	YES	NO	
3. Activation			
3.1 Carrying out of the automatic verification tests:			0 or 5
• verification of the working order of the multifunction equipment	☐	☐	
3.2 Installation of utility software:			0 or 10
• installation of the appropriate drivers	☐	☐	
• installation of the appropriate utility software	☐	☐	
3.3 Correct connection of the equipment to the microcomputer:			0 or 10
• choice of the appropriate cable	☐	☐	
• connection of the cable to the appropriate communication port			
• secure connection	☐	☐	
3.4 Verification of the functioning of the equipment:	☐	☐	0 or 10
• accurate verification of the communication	☐	☐	
• accurate verification of the functioning of the equipment	☐	☐	
4. Configuration of the equipment			
4.1 Configuration of the equipment in accordance with the customer's request			0 or 10
5. Quality of the service report			
5.1 Accuracy of the information:			0 or 5
• information consistent with the installation	☐	☐	
5.2 Quality of the language and the presentation:			0 or 5
• quality of the English	☐	☐	
• clear presentation	☐	☐	

OBSERVATION	RESULT
YES NO	
6. Observance of occupational health and safety regulations	
6.1 Observance of all of the occupational health and safety regulations	0 or 5
7. Clean, orderly work area	
7.1 Clean, orderly work area	0 or 5
8. Optimal working order of the multifunction equipment	
8.1 Functioning of all the functions of the equipment according to specifications	0 or 10
Total:	/100
Minimum performance standard: 80 points	

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 613

MODULE: 12 – PROFESSIONAL RELATIONSHIPS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

PARTICIPATION EVALUATION FORM

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **12 – PROFESSIONAL RELATIONSHIPS** **CODE:** 780 613

EXPECTED OUTCOME: **To establish professional relationships**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
PHASE 1: INFORMATION ON PROFESSIONAL RELATIONSHIPS			
• Gathering information on the rules of professional ethics specific to the trade, such as portraying a positive image of the company, showing concern for confidentiality, demonstrating tact, dressing appropriately, having respect for customers, and keeping a clean, orderly toolbox.	15	15	• Gather information on most of the topics to be covered.
• Learning about different types of customers.	5	-	• Learn about different types of customers. • Consult information sources.
• Learning about discussion and negotiation techniques.	5	-	• Learn about discussion and negotiation techniques.
PHASE 2: PARTICIPATION IN THE COMMUNICATION PROCESS			
• Starting to reflect on the way they interact with others.	15	-	• Analyze their way of communicating.
• Discussing the importance of effective communication in establishing harmonious professional relationships.	5	15	• Give their opinion during discussions.
• Identifying methods of reassuring customers.	5	-	• Identify methods of reassuring customers.
• Analyzing methods of reducing stress.	5	-	• Analyze methods of reducing stress.

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **12 – PROFESSIONAL RELATIONSHIPS** **CODE:** 780 613

EXPECTED OUTCOME: **To establish professional relationships**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
• Applying basic communication techniques when introducing themselves, interpreting the needs of customers, providing explanations, consulting resource persons, and negotiating with suppliers; for example, active listening, feedback and empathy, etc.	15	20	• Participate in activities.
PHASE 3: EVALUATION OF THEIR BEHAVIOUR AND ATTITUDES			
• Indicating the steps they could take to improve the way they communicate in the workplace.	10	25	• Agree to assess their relationships with others.
• Indicating the steps they could take to reduce stress in the workplace.	5	-	• Present steps that could be taken to reduce stress and avoid conflicts in the workplace.
• Assessing their personal strengths and weaknesses in terms of their ability to: . avoid conflicts . apply effective communication techniques . respect others . create a climate of confidence	10	25	• Present a written assessment of their way of communicating.
• Evaluating their ability to observe professional ethics.	5	-	• Give their opinion on their ability to observe professional ethics.

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **12 – PROFESSIONAL RELATIONSHIPS** **CODE:** 780 613

EXPECTED BEHAVIOUR: **To establish professional relationships**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
PHASE 1: Information on professional relationships			
1. Gather information on most of the topics to be covered.	15	1.1 Learn about the rules of professional ethics.	5
		1.2 Learn about the importance of observing the rules of professional ethics.	5
		1.3 Draw up a list of possible difficult situations involving different players in the trade.	5
PHASE 2: Participation in the communication process			
2. Give their opinion during discussions.	15	2.1 Express their ideas clearly.	15
3. Participate in activities.	20	3.1 Actively participate in learning situations involving fictitious customers.	10
		3.2 Play the defined roles during the activities.	5
		3.3 Apply communication techniques during the learning situations.	5
PHASE 3: Evaluation of their behaviour and attitudes			
4. Agree to assess their relationships with others.	25	4.1 Assess their relationships with others.	10
		4.2 Present solutions that would permit them to improve their professional relationships.	15

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **12 – PROFESSIONAL RELATIONSHIPS** **CODE:** 780 613

EXPECTED BEHAVIOUR: **To establish professional relationships**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS	Wgt. %
5. Present a written assessment of their way of communicating.	25	5.1 Indicate how the course has influenced their way of communicating.	10
		5.2 Identify their strengths and weaknesses in establishing professional relationships.	15

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 613 – PROFESSIONAL RELATIONSHIPS (Module 12)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the evaluation is to assess the candidates' participation in activities designed to develop the competency *To establish professional relationships.*

The teacher evaluates participation throughout the module using a participation evaluation form.

Evaluation is based on the candidates' participation in the various activities carried out individually or in large or small groups, and not on the results obtained.

The examination consists of three phases, undertaken at different stages of the module. Each phase is accompanied by specific instructions.

2. PHASES

PHASE 1: INFORMATION ON PROFESSIONAL RELATIONSHIPS

The candidates will be required to gather information on most of the topics to be covered.

The candidates must:

- search for information on the rules of professional ethics that apply to the trade
- search for information on the importance of observing the rules of professional ethics and on the consequences of not observing them
- draw up a list of difficult situations that may arise and that involve different players in the trade:
  - customers
  - other technicians
  - sales personnel
  - employees in the administrative department
  - employers, etc.

PHASE 2: PARTICIPATION IN THE COMMUNICATION PROCESS

Evaluation of this phase is divided into two components. The candidates must state their opinions during the discussions and participate in the activities.

The candidates must:

- clearly express their ideas
- actively participate in the role-playing activities
- play their defined roles during the activities

The role-playing activities must be prepared and guided in such a way that all the candidates can actively

participate in them and have the opportunity to express themselves.

PHASE 3: EVALUATION OF THEIR BEHAVIOUR AND ATTITUDES

Evaluation of this phase is based on the quality of the candidates' self-assessment of their professional relationships and the steps they must take to improve these relationships.

This self-assessment consists in writing up a report in which the candidates must:

- assess the quality of their relationships with others
- present solutions that will allow them to improve their professional relationships
- state how the course has influenced their way of communicating
- identify their strengths and weaknesses with respect to establishing professional relationships

3. PASS/FAIL CONDITIONS

To pass the examination, the candidates must obtain 9 YESes out of a possible 11.

4. DURATION

Evaluation takes place throughout the module.

PARTICIPATION EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
12 – Professional Relationships	Course Code:	780 613
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

PARTICIPATION COMPONENTS	RESULT YES	NO
PHASE 1: Information on professional relationships		
1. Gather information on most of the topics to be covered.		
1.1 Learn about the rules of professional ethics.	☐	☐
1.2 Learn about the importance of observing the rules of professional ethics.	☐	☐
1.3 Draw up a list of possible difficult situations involving different players in the trade.	☐	☐
PHASE 2: Participation in the communication process		
2. Give their opinion during discussions.		
2.1 Express their ideas clearly.	☐	☐
3. Participate in activities.		
3.1 Actively participate in learning situations involving fictitious customers.	☐	☐
3.2 Play the defined roles during the activities.	☐	☐
3.3 Apply communication techniques during the learning situations.	☐	☐

PARTICIPATION COMPONENTS	RESULT YES NO
PHASE 3: Evaluation of their behaviour and attitudes	
4. Agree to assess their relationships with others.	
4.1 Assess their relationships with others.	☐ ☐
4.2 Present solutions that would permit them to improve their professional relationships.	☐ ☐
5. Present a written assessment of their way of communicating.	
5.1 Indicate how the course has influenced their way of communicating.	☐ ☐
5.2 Identify their strengths and weaknesses in establishing professional relationships.	☐ ☐
Total:	/11
PASS/FAIL CONDITIONS: 9 YESes out of 11	

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **13 – AFTER-SALES SERVICE ON MICROCOMPUTERS** **CODE:** 780 627

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputers**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	-	• Interpretation of the service request	P
Plan the work.	5	15	• Preparation of the intervention	P
Prepare a microcomputer.	15	-	• Interpretation of technical manuals • Choice of location • Installation of the components of the microcomputer • Installation of the operating system or systems • Configuration of the microcomputer • Observance of occupational health and safety regulations	P
Install a microcomputer.	15	-	• Verification of the power supply • Connection of the peripherals • Performance of service tests • Installation of the customer's software • Relationship with the customer	P
Repair a microcomputer.	35	60	• Assessment of the condition of the microcomputer • Accurate diagnosis • Saving of data • Problem solving	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **13 – AFTER-SALES SERVICE ON MICROCOMPUTERS** **CODE:** 780 627

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputers**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Service a microcomputer.	10	-	• Use of utility programs required for hard disk management • Cleaning of the microcomputer	P
Update a microcomputer.	10	-	• Replacement of the hardware components • Replacement of the software • Replacement of the BIOS	P
Write up a service report.	5	10	• Quality of the service report	P
Provide after-sales service on microcomputers.	-	15	• Optimal working order of the microcomputers • Customer satisfaction	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **13 – AFTER-SALES SERVICE ON MICROCOMPUTERS** **CODE:** 780 627

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputers**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Plan the work.	PS	1. Preparation of the intervention	15	1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question	5
				1.2 Choice of the appropriate utility software	5
				1.3 Correct determination of the task sequence	5
Repair a microcomputer.	PT/PS	2. Assessment of the condition of the microcomputer	10	2.1 Accuracy of the test results	10
		3. Accurate diagnosis	15	3.1 Accuracy of the diagnosis	15
		4. Saving of data	15	4.1 Correct saving of the data	15
		5. Problem solving	20	5.1 Observance of the problem-solving procedure	5
				5.2 Correct solution to the problem	15
Write up a service report.	PT	6. Quality of the service report	10	6.1 Accurate information	5
				6.2 Quality of the language and the presentation	5

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **13 – AFTER-SALES SERVICE ON MICROCOMPUTERS** **CODE:** 780 627

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputers**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Provide after-sales service on microcomputers.	PT/PS	7. Optimal working order of the microcomputers	10	7.1 Functioning of the components of the microcomputer according to specifications	10
		8. Customer satisfaction	5	8.1 Customer satisfaction	5

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 627 – AFTER-SALES SERVICE ON MICROCOMPUTERS (Module 13)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on microcomputers. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to provide after-sales service of a microcomputer with a malfunction. The malfunction will have been previously caused by the teacher. The malfunction could be related to the hardware or to the software.

Suggestions for types of malfunctions:

- malfunction in the power supply circuit
- malfunction in the configuration of the motherboard
- malfunction related to an interface card
- malfunction in the hard disk

The various plans, schemas, diagrams and reference manuals for the microcomputer and its internal components will be provided. The candidates must make sure not to damage the customer's data on the hard disk. They will be required to use utility software and tools.

In their service reports, the candidates must:

- record the collected data
- present their analysis of the collected data
- indicate their diagnosis
- indicate the repair

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers, a multimeter and an oscilloscope)
- plans, schemas, diagrams and reference manuals for the microcomputer and its internal components
- different media for storing data

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
13 – After-Sales Service on Microcomputers	Course Code:	780 627
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			RESULT
	YES	NO	
1. Preparation of the intervention			
1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question:			0 or 5
• appropriate choice of manuals	☐	☐	
• appropriate choice of schemas	☐	☐	
1.2 Choice of the appropriate utility software			0 or 5
1.3 Correct determination of the task sequence			0 or 5
2. Assessment of the condition of the microcomputer			
2.1 Accuracy of the test results:			0 or 10
• tests on the hardware	☐	☐	
• tests on the software	☐	☐	
3. Accurate diagnosis			
3.1 Accuracy of the diagnosis:			0 or 15
• logical links between the symptom and the cause	☐	☐	

OBSERVATION			RESULT
		YES NO	
4.	**Saving of data**		
4.1	Correct saving of the data:		0 or 15
	• choice of the appropriate media for saving the data • all the data saved	☐ ☐ ☐ ☐	
5.	**Problem solving**		
5.1	Observance of the problem-solving procedure		0 or 5
5.2	Correct solution to the problem:		0 or 15
	• necessary corrections made • conclusive tests carried out • customer's data restored	☐ ☐ ☐ ☐ ☐ ☐	
6.	**Quality of the service report**		
6.1	Accurate information:		0 or 5
	• information consistent with the repair	☐ ☐	
6.2	Quality of the language and the presentation:		0 or 5
	• quality of the English • clear presentation	☐ ☐ ☐ ☐	
7.	**Optimal working order of the microcomputers**		
7.1	Functioning of the components of the microcomputer according to specifications		0 or 10
8.	**Customer satisfaction**		
8.1	Customer satisfaction		0 or 5
		Total:	/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

* Evaluation strategy PT: product PS: process

PROGRAM: Business Equipment Technical Service **CODE:** 780 639

MODULE: 14 – AFTER-SALES SERVICE ON PHOTOCOPIERS

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **14 – AFTER-SALES SERVICE ON PHOTOCOPIERS** **CODE:** 780 639

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopiers**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	10	• Interpretation of the service request	P
Plan the work.	5	10	• Preparation of the intervention	P
Install a photocopier.	15	-	• Choice of location • Configuration according to customers' needs • Test execution • Activation • Communication with the customer	P
Repair a photocopier.	50	60	• Gathering of all the information • Assessment of the condition of the photocopier • Accurate diagnosis • Problem solving	P
Service a photocopier.	10	-	• Adjustment of the image quality and colours • Lubrication of the parts • Cleaning of the photocopier and its parts • Disposal of toxic products	P
Recondition a photocopier.	10	-	• Condition of the photocopier	P
Write up a service report.	5	10	• Quality of the service report	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **14 – AFTER-SALES SERVICE ON PHOTOCOPIERS** **CODE:** 780 639

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopiers**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Provide after-sales service on photocopiers.	-	10	• Optimal working order of the photocopiers • Clean, orderly work area	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **14 – AFTER-SALES SERVICE ON PHOTOCOPIERS** **CODE:** 780 639

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopiers**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Receive a service request.	PS	1. Interpretation of the service request	10	1.1 Consideration of the counter readings	5
				1.2 Correct determination of the type of intervention required	5
Plan the work.	PS	2. Preparation of the intervention	10	2.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question	5
				2.2 Choice of the appropriate tools and instruments	5
Repair a photocopier.	PT/PS	3. Gathering of all the information	5	3.1 Gathering of relevant data in the service book	5
		4. Assessment of the condition of the photocopier	10	4.1 Accuracy of the test results	10
		5. Accurate diagnosis	20	5.1 Accuracy of the diagnosis	20
		6. Problem solving	25	6.1 Application of the problem-solving procedure	5
				6.2 Correct solution to the problem	20
Write up a service report.	PT	7. Quality of the service report	10	7.1 Accuracy of the information	5
				7.2 Quality of the language and the presentation	5
Provide after-sales service on photocopiers.	PT/PS	8. Optimal working order of the photocopiers	5	8.1 Functioning of all the parts of the photocopier according to specifications	5
		9. Clean, orderly work area	5	9.1 Clean, orderly work area	5

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **14 – AFTER-SALES SERVICE ON PHOTOCOPIERS** **CODE:** 780 639

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopiers**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 639 – AFTER-SALES SERVICE ON PHOTOCOPIERS (Module 14)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on photocopiers. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

Evaluation is based on providing after-sales service on a photocopier featuring one or more malfunctions. The malfunction will have been previously caused by the teacher. The malfunction could be mechanical, electrical, electronic, optical or colour-related.

Suggestions for types of malfunctions:

- malfunction of the paper feed
- malfunction related to the quality of the copies
- optical malfunction
- electronic malfunction

The various plans, schemas, diagrams and reference manuals pertaining to the photocopier will be provided. The candidates will be required to use measuring instruments and tools.

In their service reports, the candidates must:

- give the counter reading
- indicate the type of intervention
- record the collected data
- present their analysis of the collected data
- indicate their diagnosis
- describe the repair

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox
- the plans, schemas, diagrams and reference manuals for the photocopier
- a digital photocopier

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The teacher will immediately terminate the candidate's examination if the candidate does not observe all the occupational health and safety rules. In this case, the notation "failed the summative examination" will appear in the candidate's record.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
14 – After-Sales Service on Photocopiers	Course Code:	780 639
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT
1. Interpretation of the service request			
1.1 Consideration of counter readings			0 or 5
1.2 Correct determination of the type of intervention required			0 or 5
2. Preparation of the intervention			
2.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question:			0 or 5
• choice of the appropriate manuals	☐	☐	
• choice of the appropriate schemas	☐	☐	
2.2 Choice of the appropriate tools and instruments			0 or 5
3. Gathering of all the information			
3.1 Gathering of relevant data in the service book			0 or 5
4. Assessment of the condition of the photocopier			
4.1 Accuracy of the test results:			0 or 10
• test related to the quality of the copies	☐	☐	
• mechanical tests			
• optical tests	☐	☐	
• electronic tests	☐	☐	
	☐	☐	
	☐	☐	

OBSERVATION			RESULT
	YES	NO	
5. Accurate diagnosis			
5.1 Accuracy of the diagnosis			0 or 20
6. Problem solving			
6.1 Application of the problem-solving procedure			0 or 5
6.2 Correct solution to the problem			0 or 20
7. Quality of the service report			
7.1 Accuracy of the information			0 or 5
7.2 Quality of the language and the presentation:			0 or 5
• quality of the English	☐	☐	
• clear presentation	☐	☐	
8. Optimal working order of the photocopiers			
8.1 Functioning of all the parts of the photocopier according to specifications:			0 or 5
• conclusive tests	☐	☐	
9. Clean, orderly work area			
9.1 Clean, orderly work area			0 or 5
PASS/FAIL CONDITIONS			
Observed all of the occupational health and safety regulations.	☐	☐	
	Total:		/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 644

MODULE: 15 – INTERPRETATION OF A NETWORK STRUCTURE

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **15 – INTERPRETATION OF A NETWORK STRUCTURE** **CODE:** 780 644

EXPECTED BEHAVIOUR: **To interpret a customer's network structure**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Communicate with the network administrator.	10	20	• Relevant questions • Interpretation of main ideas • Active listening • Courtesy	T
Read the documents.	60	80	• Interpretation of the functioning of the network hardware • Interpretation of the logic underlying the network • Interpretation of the network plans and schemas	T
Inspect the equipment.	15	-	• Inspection of the network environment • Gathering of information	T
Compile the information.	15	-	• Compilation of the information • Reproduction of the network structure	T

TABLE OF SPECIFICATIONS – THEORY EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **15 – INTERPRETATION OF A NETWORK STRUCTURE** **CODE:** 780 644

EXPECTED BEHAVIOUR: **To interpret a customer's network structure**

EVALUATION FOCUSES	THEMES OF KNOWLEDGE	Wgt. %	KNOWLEDGE COMPONENTS	Wgt. %	No. of Items
Communicate with the network administrator.	1. Interpretation of main ideas	20	1.1 Interpretation of the terminology	5	1
			1.2 Interpretation of general information on the network	10	2
			1.3 Interpretation of the concept of protocol stacks	5	1
Read the documents.	2. Interpretation of the functioning of the network hardware	30	2.1 Matching of the hardware with the layers of the reference model	15	3
			2.2 Matching of the standards with the layers of the reference model	15	3
	3. Interpretation of the logic underlying the network	30	3.1 Recognition of the structure of IP addresses	15	3
			3.2 Interpretation of routing tables	15	3
	4. Interpretation of the network plans and schemas	20	4.1 Identification of the usual symbols used in schemas and plans	10	2
			4.2 Recognition of the network topology	10	2

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 644 – INTERPRETATION OF A NETWORK STRUCTURE (Module 15)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

A theory examination is used for the evaluation of this module. The suggested length of the examination is two hours. The minimum performance standard is 15 correct answers out of a possible 20.

2. EXAMINATION PROCEDURE

The examination will consist of 20 multiple-choice or short essay questions. Learning situations, digital images, technical documentation on the network components, in English or French, as well as network plans and schemas will be used. The examination may be written by all the candidates at the same time.

Depending on the learning situations, the candidates will be provided with customer data and the necessary technical documentation.

The learning situations must allow the candidates to demonstrate their ability to apply their knowledge in order to interpret a customer's network structure. The network equipment used in the learning situations will be that considered to be the most widely used at the time the examination is being written.

On the basis of the situations described, the candidates must:

- recognize the different network structures
- recognize the different network topologies
- distinguish among different network hardware
- be familiar with reference models
- distinguish among the characteristics of transmission media
- be familiar with communication protocols
- analyze an address structure
- identify symbols
- identify the network's capacities
- analyze the application of standards

3. MATERIALS

The following is required for the examination:

- a computer workstation
- a calculator

780 644

4. SPECIAL INSTRUCTIONS

Course notes are not allowed.

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **16 – AFTER-SALES SERVICE ON PHOTOCOPIER PERIPHERALS** **CODE:** 780 656

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopier peripherals**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	15	• Interpretation of the service request	P
Plan the work.	5	10	• Preparation of the intervention	P
Install the photocopier peripherals.	20	50	• Verification of the work area • Activation • Configuration according to customers' needs	P
Repair the photocopier peripherals.	50	-	• Gathering of information • Assessment of the condition of the peripherals • Accurate diagnosis • Problem solving • Verification of the functioning of the equipment • Observance of occupational health and safety regulations	P
Service the photocopier peripherals.	15	-	• Lubrication of the parts • Replacement of the parts • Cleaning of the peripherals	P
Write up a service report.	5	10	• Quality of the service report	P
Provide after-sales service on photocopier peripherals.	-	15	• Optimal working order of the photocopier peripherals • Customer satisfaction	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **16 – AFTER-SALES SERVICE ON PHOTOCOPIER PERIPHERALS** **CODE:** 780 656

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopier peripherals**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **16 – AFTER-SALES SERVICE ON PHOTOCOPIER PERIPHERALS** **CODE:** 780 656

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopier peripherals**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Receive a service request.	PT	1. Interpretation of the service request	15	1.1 Accurate determination of the type of intervention	15
Plan the work.	PT/PS	2. Preparation of the intervention	10	2.1 Appropriate choice of manuals and schemas for the equipment in question	5
				2.2 Choice of the appropriate tools	5
Install the photocopier peripherals.	PS	3. Verification of the work area	10	3.1 Proper verification of the work area	10
	PS	4. Activation	30	4.1 Correct connection of the peripherals to the photocopier	10
				4.2 Execution of automatic verification tests	10
				4.3 Verification of the functioning of the peripherals	10
	PS	5. Configuration according to customers' needs	10	5.1 Proper configuration of the peripherals according to the customer's needs	10
Write up a service report.	PT	6. Quality of the service report	10	6.1 Accuracy of the information	5

* Evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **16 – AFTER-SALES SERVICE ON PHOTOCOPIER PERIPHERALS** **CODE:** 780 656

EXPECTED BEHAVIOUR: **To provide after-sales service on photocopier peripherals**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
				6.2 Quality of the language and the presentation	5
Provide after-sales service on photocopier peripherals.	PT	7. Optimal working order of the photocopier peripherals	10	7.1 Functioning of the photocopier peripherals according to specifications	10
	PS	8. Customer satisfaction	5	8.1 Customer satisfaction	5

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 656 – AFTER-SALES SERVICE ON PHOTOCOPIER PERIPHERALS (Module 16)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on photocopier peripherals. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to install photocopier peripherals.

Suggestions for types of peripherals to install:

- sorter or finisher
- two-sided output unit
- two-sided output automatic document feeder
- large-capacity cassette
- image processing unit
- auditron
- coin slot, etc.

The various plans, schemas, diagrams and reference manuals for the photocopier peripherals and for the photocopier will be provided. The candidates will be required to use measuring instruments and tools.

In their service reports, the candidates must:

- record the equipment data (brand, model, serial number, etc.)
- record the programming data
- indicate the type of connection used, etc.

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox
- the plans, schemas, diagrams and reference manuals for the photocopier peripherals
- the plans, schemas, diagrams and reference manuals for the photocopier
- peripherals to install
- a digital photocopier

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

The examination consists of a learning situation involving a service request. The candidate receives a written request to install photocopier peripherals for a customer. The peripherals will be in perfect working order. The examiner plays the role of the customer.

Once the candidates install the peripherals, they demonstrate how the peripherals work and ask the customer (the examiner) if everything is satisfactory.

At this point, the examiner will request a modification of the peripheral settings.

Suggestions for modifications:

- default setting for the paper size
- default setting for activating the sorter
- default setting for the stapling finisher, etc.

The candidates must be able to meet the customer’s new request satisfactorily.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
16 – After-Sales Service on Photocopier Peripherals	Course Code:	780 656
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			**RESULT**
	YES	NO	
1. Interpretation of the service request			
1.1 Accurate determination of the type of intervention			0 or 15
2. Preparation of the intervention			
2.1 Appropriate choice of manuals and schemas for the equipment in question:			0 or 5
• choice of the appropriate manuals	☐	☐	
• choice of the appropriate schemas	☐	☐	
2.2 Choice of the appropriate tools			0 or 5
3. Verification of the work area			
3.1 Proper verification of the work area:			0 or 10
• verification of the compliance of the power supply	☐	☐	
• verification of the presence of a functional communication link	☐	☐	

OBSERVATION			RESULT
	YES	NO	
4. Activation			
4.1 Correct connection of the peripherals to the photocopier:			0 or 10
• safe connection	☐	☐	
• observance of the procedure	☐	☐	
4.2 Execution of automatic verification tests:			0 or 10
• execution of all the verification tests	☐	☐	
• observance of the procedure	☐	☐	
4.3 Verification of the functioning of the peripherals:			0 or 10
• verification of communication between the peripherals and the photocopier	☐	☐	
• verification of all the peripheral components	☐	☐	
• functioning in accordance with the specifications	☐	☐	
5. Configuration according to customers' needs			
5.1 Proper configuration of the peripherals according to the customer's needs:			0 or 10
• configuration of the working parameters of the peripherals	☐	☐	
• configuration of the working parameters of the photocopier	☐	☐	
6. Quality of the service report			
6.1 Accuracy of the information			0 or 5
6.2 Quality of the language and the presentation:			0 or 5
• quality of the English	☐	☐	
• clear presentation	☐	☐	

OBSERVATION		RESULT
	YES NO	
7. Optimal working order of the photocopier peripherals		
7.1 Functioning of the photocopier peripherals according to specifications		0 or 10
8. Customer satisfaction		
8.1 Customer satisfaction:		0 or 5
• clear explanation to the customer • openness to customer's questions • openness to customer's requirements	☐ ☐ ☐ ☐ ☐ ☐	
	Total:	/100
Minimum performance standard: 80 points		

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **17 – ADMINISTRATIVE TASKS** **CODE:** 780 663

EXPECTED BEHAVIOUR: **To perform administrative tasks**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Keep an up-to-date inventory.	20	30	• Use of a database or a spreadsheet • Inventory management • Verification of the parts received	P
Keep an up-to-date list of customers.	10	-	• Use of software • Filing of information	P
Keep an up-to-date agenda.	20	-	• Use of an electronic agenda • Compiling of the information entered into the electronic agenda • Clear recording of the data • Time management	P
Prepare time sheets and expense accounts.	25	30	• Use of spreadsheet and word-processing software • Accurate recording of the data	P
Prepare invoices.	25	25	• Accurate recording of the data • Accurate calculation of taxes	P
Perform administrative tasks.	-	15	• Quality of the written language	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **17 – ADMINISTRATIVE TASKS** **CODE:** 780 663

EXPECTED BEHAVIOUR: **To perform administrative tasks**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Keep an up-to-date inventory.	PT	1. Inventory management	20	1.1 Accurate management of the inventory of parts and tools	10
				1.2 Meticulous updating of the inventory	10
		2. Verification of the parts received	10	2.1 Proper verification of the parts received	5
				2.2 Meticulous updating of outstanding items	5
Prepare time sheets and expense accounts.	PT	3. Use of spreadsheet software	20	3.1 Efficient use of spreadsheet software	15
				3.2 Saving of all the data in the spreadsheet	5
		4. Use of word-processing software	10	4.1 Efficient use of word-processing software	10
Prepare invoices.	PT	5. Accurate recording of the data	15	5.1 Accurate recording of the customer's contact information	5
				5.2 Accurate description of items	10
		6. Accurate calculation of taxes	10	6.1 Accurate calculation of taxes	10

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **17 – ADMINISTRATIVE TASKS** **CODE:** 780 663

EXPECTED BEHAVIOUR: **To perform administrative tasks**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Perform administrative tasks.	PT	7. Quality of the written language	15	7.1 Quality of the English	10
				7.2 Observance of the rules of professional ethics	5

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 663 – ADMINISTRATIVE TASKS (Module 17)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to perform administrative tasks. The length of the examination should not exceed two hours.

2. EXAMINATION PROCEDURE

The examination consists in performing administrative tasks. The candidate must:

- perform administrative operations on a computerized database: modifications, requests, data input, verification of quantities, etc.
- prepare customized invoices in the customer's name
- calculate the totals before and after taxes

3. MATERIALS

The following is required for the examination:

- a software suite
- a computer workstation
- an existing database
- a parts inventory

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
17 – Administrative Tasks	Course Code:	780 663
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS ☐	FAIL ☐
Date of examination: _____		
Examiner's signature: _____		

OBSERVATION	YES	NO	**RESULT**
1. Inventory management			
1.1 Accurate management of the inventory of parts and tools:			0 or 10
• accurate identification of parts and tools	☐	☐	
• proper verification of correspondence between the parts and their manufacturer's reference numbers	☐	☐	
1.2 Meticulous updating of the inventory:			0 or 10
• verification of available quantities	☐	☐	
• list of items to order	☐	☐	
2. Verification of the parts received			
2.1 Proper verification of the parts received:			0 or 5
• accuracy of quantities • correct number	☐	☐	
• accurate description	☐	☐	
	☐	☐	
2.2 Meticulous updating of outstanding items			0 or 5
3. Use of spreadsheet software			

OBSERVATION		RESULT
	YES NO	
3.1 Efficient use of spreadsheet software		0 or 15
3.2 Saving of all the data in the spreadsheet		0 or 5
4. Use of word-processing software		
4.1 Efficient use of word-processing software		0 or 10
5. Accurate recording of the data		
5.1 Accurate recording of the customer's contact information:		0 or 5
• customer identification • address • customer reference number	☐ ☐ ☐ ☐ ☐ ☐	
5.2 Accurate description of items:		0 or 10
• price • quantity • identification • parts to credit	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
6. Accurate calculation of taxes		
6.1 Accurate calculation of taxes		0 or 10
7. Quality of the written language		
7.1 Quality of the English		0 or 10
7.2 Observance of the rules of professional ethics		0 or 5
	Total:	/100
Minimum performance standard: 80 points		

Comments: _____

780 663

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **18 – AFTER-SALES SERVICE ON MICROCOMPUTER PERIPHERALS** **CODE:** 780 676

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputer peripherals**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	-	• Interpretation of the service request	P
Plan the work.	5	10	• Preparation of the intervention	P
Install the microcomputer peripherals.	15	-	• Gathering of information • Interpretation of technical manuals • Verification of the work area • Activation • Configuration according to customers' needs • Verification of the functioning of the equipment	P
Repair the microcomputer peripherals.	50	70	• Assessment of the condition of the peripherals • Accurate diagnosis • Problem solving • Reconfiguration of the microcomputer	P
Service the microcomputer peripherals.	10	_	• Adjustment of parts • Cleaning of the peripherals	P
Write up a service report.	5	10	• Quality of the service report	P
Provide after-sales service on microcomputer peripherals.	10	10	• Optimal working order of the microcomputer peripherals	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **18 – AFTER-SALES SERVICE ON MICROCOMPUTER PERIPHERALS** **CODE:** 780 676

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputer peripherals**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **18 – AFTER-SALES SERVICE ON MICROCOMPUTER PERIPHERALS** **CODE:** 780 676

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputer peripherals**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Plan the work.	PS	1. Preparation of the intervention	10	1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question	5
				1.2 Choice of the appropriate tools	5
Service the microcomputer peripherals.	PT/PS	2. Assessment of the condition of the peripherals	10	2.1 Accuracy of the data gathered during the visual inspection	5
				2.2 Precision of the results obtained during system tests	5
		3. Accurate diagnosis	20	3.1 Accuracy of the diagnosis	20
		4 Problem solving	25	4.1 Applied the problem-solving procedure	10
				4.2 Correct solution to the problem	15
		5. Reconfiguration of the microcomputer	15	5.1 Optimal working order of the microcomputer	15
Write up a service report.	PT	6. Quality of the service report	10	6.1 Accuracy of the information	5
				6.2 Quality of the language and the presentation	5
Provide after-sales service on microcomputer peripherals.	PT	7. Optimal working order of the microcomputer peripherals	10	7.1 Functioning of the microcomputer peripherals according to specifications	10

* Evaluation strategy PT: product PS: process

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **18 – AFTER-SALES SERVICE ON MICROCOMPUTER PERIPHERALS** **CODE:** 780 676

EXPECTED BEHAVIOUR: **To provide after-sales service on microcomputer peripherals**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 676 – AFTER-SALES SERVICE ON MICROCOMPUTER PERIPHERALS (Module 18)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on microcomputer peripherals. The length of the examination should not exceed three hours.

2. EXAMINATION PROCEDURE

The candidates will be required to repair microcomputer peripherals.

Suggestions for peripherals to repair:

- printer
- monitor
- scanner
- keyboard, pointing device
- any other external peripheral

The various plans, schemas, diagrams and reference manuals pertaining to the microcomputer peripherals will be provided. The task will require the use of measuring instruments and tools.

In their service reports, the candidates must:

- record the data on the peripheral and the microcomputer (brand, model, serial number, etc.)
- record the data on the peripheral drivers
- record the data on the operating system
- indicate the type of connection used, etc.

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox
- plans, schemas, diagrams and reference manuals for the microcomputer peripherals
- the peripheral to be repaired
- a microcomputer

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
18 – After-Sales Service on Microcomputer Peripherals	Course Code:	780 676
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			**RESULT**
	YES	NO	
1. Preparation of the intervention			
1.1 Appropriate choice of the manuals and schemas pertaining to the equipment in question:			0 or 5
• choice of the appropriate manuals	☐	☐	
• choice of the appropriate schemas	☐	☐	
1.2 Choice of the appropriate tools			0 or 5
2. Assessment of the condition of the peripherals			
2.1 Accuracy of the data gathered during the visual inspection			0 or 5
2.2 Precision of the results obtained during system tests			0 or 5
3. Accurate diagnosis			
3.1 Accuracy of the diagnosis			0 or 20

OBSERVATION		RESULT
	YES NO	
4. Problem solving		
4.1 Application of the problem-solving procedure		0 or 10
4.2 Correct solution to the problem		0 or 15
• necessary corrections made • execution of conclusive tests	☐ ☐ ☐ ☐	
5. Reconfiguration of the microcomputer		
5.1 Optimal working order of the microcomputer		0 or 15
• adjustment of the operational parameters of the peripherals • updating of drivers	☐ ☐ ☐ ☐	
6. Quality of the service report		
6.1 Accuracy of the information:		0 or 5
• information in accordance with the installation	☐ ☐	
6.2 Quality of the language and the presentation:		0 or 5
• quality of the English • clear presentation	☐ ☐ ☐ ☐	
7. Optimal working order of the microcomputer peripherals		
7.1 Functioning of the microcomputer peripherals according to specifications		0 or 10
Minimum performance standard: 80 points	Total:	/100

Comments: _____

_____

_____

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **19 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT** **CODE:** 780 689

EXPECTED BEHAVIOUR: **To provide after-sales service on sales registration equipment**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	5	-	• Interpretation of the service request	P
Plan the work.	5	10	• Preparation of the intervention	P
Prepare the equipment in the workshop.	30	70	• Interpretation of technical manuals • Assembly in accordance with the manufacturer's specifications • Connection of the cables • Installation of the software • Configuration of the equipment	P
Install the sales registration equipment.	15	-	• Verification of the power supply • Observance of the activation procedure • Test execution • Clear explanations with respect to the operations	P
Repair the sales registration equipment.	20	-	• Gathering of information • Assessment of the condition of the equipment • Accurate diagnosis • Cost estimate • Problem solving • Reconfiguration of the equipment • Verification of the functioning of the equipment	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **19 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT** **CODE:** 780 689

EXPECTED BEHAVIOUR: **To provide after-sales service on sales registration equipment**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Service the sales registration equipment.	10	-	• Adjustment of the parts • Lubrication of the parts • Cleaning of the equipment	P
Recondition the sales registration equipment.	10	-	• Observance of dismantling and reassembly techniques • Replacement of the parts • Updating of the software	P
Write up a service report.	5	10	• Quality of the service report	P
Provide after-sales service on sales registration equipment.	-	10	• Optimal working order of the sales registration equipment	P

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **19 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT** **CODE:** 780 689

EXPECTED BEHAVIOUR: **To provide after-sales service on sales registration equipment**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **19 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT** **CODE:** 780 689

EXPECTED BEHAVIOUR: **To provide after-sales service on sales registration equipment**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Plan the work.	PS	1. Preparation of the intervention	10	1.1 Obtained the necessary materials for the intervention	5
				1.2 Correct determination of the task sequence	5
Prepare the equipment in the workshop.	PT/PS	2. Interpretation of technical manuals	5	2.1 Accurate identification of the relevant information	5
		3. Assembly in accordance with the manufacturer's specifications	5	3.1 Quality of the assembly	5
		4. Connection of the cables	10	4.1 Proper selection of the cables	5
				4.2 Quality of the connections	5
		5. Installation of the software	30	5.1 Appropriate choice of drivers	10
				5.2 Correct choice of software	5
				5.3 Proper verification of the installation	15
		6. Configuration of the equipment	20	6.1 Configuration in accordance with the customer's request	10

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **19 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT** **CODE:** 780 689

EXPECTED BEHAVIOUR: **To provide after-sales service on sales registration equipment**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
				6.2 Tolerance for equipment breakdowns	10
Write up a service report.	PT	7 Quality of the service report	10	7.1 Accuracy of the information	5
				7.2 Quality of the language and the presentation	5
Provide after-sales service on sales registration equipment.	PT	8 Optimal working order of the sales registration equipment	10	8.1 Functioning of all the components of the sales registration equipment according to specifications	10

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 689 – AFTER-SALES SERVICE ON SALES REGISTRATION EQUIPMENT (Module 19)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide after-sales service on sales registration equipment. The length of the examination should not exceed three hours. Seven or more candidates may be evaluated at the same time.

2. EXAMINATION PROCEDURE

The candidates will be required to provide after-sales service on sales registration equipment. Of all of the module's activities, the preparation of the equipment prior to delivery to the customer was chosen for the summative evaluation. The operating system is already installed on the computers.

Elements to include in the preparation of the equipment:

- assembly of the equipment
- selection and connection of cables
- installation of peripheral drivers
- installation of the software
- configuration in accordance with the customer's request
- breakdown tolerance test

The various plans, schemas, diagrams and reference manuals for the sales registration equipment will be provided.

In their service reports, the candidates must:

- indicate the equipment installed
- indicate the operating systems, software and drivers installed
- give relevant information on the configuration of the equipment
- describe all other work done

3. MATERIALS

The following is required for the examination:

- the candidate's toolbox (including screwdrivers and a multimeter)
- plans, schemas, diagrams and reference manuals for the sales registration equipment
- sales registration equipment
- data on the customer's request

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
19 – After-Sales Service on Sales Registration Equipment	Course Code:	780 689
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION	YES	NO	RESULT
1. Preparation of the intervention			0 or 5
1.1 Obtained the necessary materials for the intervention:	☐	☐	
• choice of the appropriate manuals • choice of the appropriate schemas • choice of the tools • gathering of all of the customer's data	☐	☐	
1.2 Correct determination of the task sequence	☐	☐	0 or 5
2. Interpretation of technical manuals			
2.1 Accurate identification of the relevant information			0 or 5
3. Assembly in accordance with the manufacturer's specifications			
3.1 Quality of the assembly:			0 or 5
• complete assembly of the elements • compliance with standards	☐	☐	
	☐	☐	

OBSERVATION	YES	NO	RESULT
4. Connection of the cables			
4.1 Proper selection of the cables:			0 or 5
• appropriate length	☐	☐	
• appropriate type of cables	☐	☐	
• appropriate type of connector	☐	☐	
4.2 Quality of the connections:			0 or 5
• choice of appropriate communication ports	☐	☐	
• strength of the junctions	☐	☐	
• connection of all the peripherals	☐	☐	
• proper grounding	☐	☐	
5. Installation of the software			
5.1 Appropriate choice of drivers:			0 or 10
• choice of an appropriate driver version	☐	☐	
5.2 Correct choice of software:			0 or 5
• compatibility of the software with the operating system	☐	☐	
• appropriate software version	☐	☐	
5.3 Proper verification of the installation:			0 or 15
• no error message	☐	☐	
• proper functioning of all the peripherals	☐	☐	
• equipment output according to specifications	☐	☐	
6. Configuration of the equipment			
6.1 Configuration in accordance with the customer's request:			0 or 10
• correct parameterization of the peripherals	☐	☐	
• programming of specific functions	☐	☐	

OBSERVATION			RESULT
	YES	NO	
	☐	☐	
6.2 Tolerance for equipment breakdowns:			0 or 10
• correct configuration of the emergency power supply	☐	☐	
• correct configuration of saving procedures	☐	☐	
7. Quality of the service report			
7.1 Accuracy of the information:			0 or 5
• information in accordance with the preparation request	☐	☐	
7.2 Quality of the language and the presentation:			0 or 5
• quality of the English	☐	☐	
• clear presentation	☐	☐	
8. Optimal working order of the sales registration equipment			
8.1 Functioning of all the components of the sales registration equipment according to specifications			0 or 10
	Total:		/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 694

MODULE: 20 – REMOTE TECHNICAL SUPPORT

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

EVALUATION FORM

PROGRAM ANALYSIS (BEHAVIOURAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **20 – REMOTE TECHNICAL SUPPORT** **CODE:** 780 694

EXPECTED BEHAVIOUR: **To provide remote technical support**

POSSIBLE FOCUSES	Lrn. %	Eval. %	OBSERVABLE ASPECTS OR THEMES OF KNOWLEDGE	P* or T
Receive a service request.	10	20	• Interpretation of the service request	P
Communicate with the customer.	10	-	• Active listening • Relevant questions • Visualization of the malfunction	P
Install the remote troubleshooting software, if necessary.	25	-	• Choice of software • Observance of the installation procedure	P
Solve the problem.	45	65	• Gathering of all the information • Analysis of the malfunction • Accurate diagnosis • Application of the solution	P
Communicate with the customer.	10	-	• Clear, precise instructions • Verification of the customer's understanding	P
Provide remote technical support.	-	15	• Optimal working order of the equipment	P

TABLE OF SPECIFICATIONS – PRACTICAL EXAMINATION

PROGRAM: **Business Equipment Technical Service**

MODULE: **20 – REMOTE TECHNICAL SUPPORT** **CODE:** 780 694

EXPECTED BEHAVIOUR: **To provide remote technical support**

EVALUATION FOCUSES	Str.*	OBSERVABLE ASPECTS	Wgt. %	CRITERION COMPONENTS	Wgt. %
Receive a service request.	PS	1. Interpretation of the service request	20	1.1 Correct determination of the type of intervention required	20
Solve the problem.	PS	2. Gathering of all the information	10	2.1 Gathering of the relevant data	10
		3. Analysis of the malfunction	15	3.1 Comparison with a working model	15
		4. Accurate diagnosis	20	4.1 Accuracy of diagnosis	20
		5. Application of the solution	20	5.1 Application of the problem-solving procedure	10
				5.2 Correct solution to the problem	10
Provide remote technical support.	PT	6. Optimal working order of the equipment	15	6.1 Functioning of the equipment according to the specifications	15

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 694 – REMOTE TECHNICAL SUPPORT (Module 20)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the examination is to evaluate the candidates' ability to provide remote technical support. The length of the examination should not exceed two hours. Seven or more candidates may be evaluated at the same time.

2. EXAMINATION PROCEDURE

The candidates will be required to provide remote technical support to a customer who placed a service call to report a malfunction with a piece of business equipment. They will also be required to communicate with the customer and, using a computer with remote troubleshooting software installed, access the customer's business equipment.

Types of technical support:

- software configuration
- hardware configuration
- data retrieval
- demonstration of how a program or a piece of business equipment works, etc.

3. MATERIALS

The following is required for the examination:

- a computer with remote troubleshooting software installed
- a telephone system
- plans, schemas, diagrams and reference manuals for the office equipment
- network communication

4. SPECIAL INSTRUCTIONS

Course notes are allowed.

EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
20 – Remote Technical Support	Course Code:	780 694
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

OBSERVATION			RESULT
	YES	NO	
1. Interpretation of the service request			
1.1 Correct determination of the type of intervention required			0 or 20
2. Gathering of all the information			0 or 10
2.1 Gathering of the relevant data:			
• identification of the type of equipment	☐	☐	
• identification of the configuration			
• identification of the user of the equipment	☐	☐	
	☐	☐	
3. Analysis of the malfunction			0 or 15
3.1 Comparison with a working model			
4. Accurate diagnosis			
4.1 Accuracy of diagnosis			0 or 20
5. Application of the solution			
5.1 Application of the problem-solving procedure			0 or 5

OBSERVATION			RESULT
	YES	NO	
5.2 Correct solution to the problem:			0 or 15
• corrections	☐	☐	
• execution of conclusive tests	☐	☐	
6. Optimal working order of the equipment			
6.1 Functioning of the equipment according to the specifications			0 or 15
		Total:	/100
Minimum performance standard: 80 points			

Comments: _____

_____

_____

PROGRAM: Business Equipment Technical Service **CODE:** 780 707

MODULE: 21 – PRACTICUM IN THE WORKPLACE

PROGRAM ANALYSIS TABLE

TABLE OF SPECIFICATIONS

INFORMATION ON THE EVALUATION

PARTICIPATION EVALUATION FORM

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **21 – PRACTICUM IN THE WORKPLACE** **CODE:** 780 707

EXPECTED OUTCOME: **To enter the work force**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
PHASE 1: PREPARATION FOR THE PRACTICUM IN THE WORKPLACE			
• Learning about the terms and conditions of the practicum.	1	-	• Learn about how the practicum is organized and the responsibilities assigned to trainees.
• Preparing a list of companies likely to accept trainees.	3	10	• Participate in finding a company. • Prepare a list of companies.
• Learning about the policies of the company.	1	-	• Learn about the policies of the company.
• Writing a résumé and a cover letter.	3	-	• Write a résumé and a cover letter.
• Communicating with company personnel in charge of the practicum.	1	-	• Organize a visit to the host company. • Meet with a representative of the company with a view to obtaining a practicum position.
PHASE 2: INTEGRATION INTO THE WORKPLACE			
• Observing the work context: socioeconomic environment in terms of the product and the market, professional associations, organizational structure, equipment, changing technology, working conditions, professional relationships, health and safety, etc.	15	5	• Carefully observe the work context and organization.

PROGRAM ANALYSIS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **21 – PRACTICUM IN THE WORKPLACE** **CODE:** 780 707

EXPECTED OUTCOME: **To enter the work force**

LEARNING CONTEXT	Lrn. %	Eval. %	PARTICIPATION INDICATORS
• Performing or participating in various occupational tasks.	65	55	• Actively participate in performing various occupational tasks. • Follow the company's instructions with respect to activities, work schedules, etc.
• Taking note of their observations in a practicum log.	5	-	• Gather information about the workplace.
PHASE 3: EVALUATION			
• Producing a brief report of their observations, the tasks carried out, and the resemblances and differences between the classroom and the workplace.	3	20	• Produce a report.
• Participating in the evaluation of their practicum with the teaching personnel and the person responsible in the company.	1	5	• Participate in the evaluation of the practicum.
• Discussing the accuracy of their perception of the trade.	1	5	• Compare their perception of the trade before the practicum with their perception after the practicum. • Explain to the teacher their perception of themselves as workers based on the evaluation report provided by the company representative.
• Participating in the evaluation of the practicum with other trainees.	1	-	• Share with other students their experiences in the workplace.

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **21 – PRACTICUM IN THE WORKPLACE** **CODE:** 780 707

EXPECTED BEHAVIOUR: **To enter the work force**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS		Wgt. %
PHASE 1: Preparation for the practicum in the workplace				
1. Participate in finding a company.	5	1.1	Identify, in order of preference, possible practicum locations that meet their predetermined selection criteria.	5
PHASE 2: Integration into the workplace				
2. Carefully observe the work context and organization.	5	2.1	Adopt professional behaviour.	5
3. Actively participate in performing various occupational tasks.	50	3.1	Carry out their work according to the established methods, techniques and standards.	25
		3.2	Learn about the techniques used to provide after-sales service for the business equipment.	20
		3.3	Make an effort to observe the company's occupational health and safety rules.	5
4. Follow the company's instructions with respect to activities, work schedules, etc.	5	4.1	Agree to follow the company's instructions with respect to activities, work schedules, etc.	5
PHASE 3: Evaluation				
5. Produce a report.	20	5.1	Provide information on their observations.	5
		5.2	List the main tasks and operations carried out, and specify the nature of their participation.	10

TABLE OF SPECIFICATIONS (SITUATIONAL OBJECTIVE)

PROGRAM: **Business Equipment Technical Service**

MODULE: **21 – PRACTICUM IN THE WORKPLACE** **CODE:** 780 707

EXPECTED BEHAVIOUR: **To enter the work force**

PARTICIPATION INDICATORS	Wgt. %	CRITERION COMPONENTS		Wgt. %
		5.3	Make a list of what appear to be their strengths and weaknesses.	5
6. Participate in the evaluation of the practicum.	5	6.1	Identify the positive and the negative points by giving examples from the practicum.	5
7. Explain to the teacher their perception of themselves as workers based on the evaluation report provided by the company representative.	10	7.1	Compare their list with the content of the evaluation report provided by the supervisor in the workplace.	5
		7.2	Comment on the similarities and the differences.	5

BUSINESS EQUIPMENT TECHNICAL SERVICE (5765)

780 707 – PRACTICUM IN THE WORKPLACE (Module 21)

INFORMATION ON THE EVALUATION

1. INFORMATION AND INSTRUCTIONS

The purpose of the evaluation is to verify the candidates' participation in the workplace practicum.

A final evaluation by criterion component will be made only at the end of the corresponding phase in the learning situation.

Evaluation of the candidates' participation is based on the information gathered at different times during the learning activities and on their participation in the activities in the workplace.

It is important to clearly indicate to the candidates the type of information to be gathered and presented in a group discussion. Regardless of the medium and conventions used to record the information, the evaluation should not focus on the accuracy, quality or presentation of the information; instead, the evaluation will be based on the candidates' efforts to compile sufficient, relevant information on all the topics to be covered and to organize this information so that it can be used during the group discussion.

The candidates are evaluated on whether or not they have attained the objectives for each of the criterion components evaluated.

The module lasts 105 hours, 15 of which are reserved for preparing the practicum in class and assessing it at the end.

The candidates will spend 90 hours in the workplace.

2. PHASES

PHASE 1: PREPARATION FOR THE PRACTICUM IN THE WORKPLACE

The candidates will be required to participate in looking for a company that accepts trainees.

As part of their research, the candidates must:

- determine their selection criteria of possible practicum locations
- establish an order of preference

PHASE 2: INTEGRATION INTO THE WORKPLACE

This task is divided into two components: after carefully observing the work context and the work organization, the candidates actively participate in carrying out different trade-related activities and follow the company's instructions.

During the activities, the candidates must:

- adopt professional behaviour
- carry out their work according to the established methods, techniques and standards
- learn about the techniques used to provide after-sales service for the business equipment
- make an effort to observe the company's occupational health and safety rules
- agree to follow the company's instructions with respect to activities, work schedules, etc.

PHASE 3: EVALUATION

Evaluation of this phase focuses on the candidates' participation in evaluating the practicum, the quality of their reports and their explanations to the teacher concerning their perceptions of themselves as workers, based on the evaluation report provided by the company representative.

In their reports, the candidates must:

- provide information on the topics they were required to observe
- list the main tasks and operations carried out, and specify the nature of their participation
- identify the positive and the negative points by giving examples from the practicum
- make a list of what appear to be their strengths and weaknesses
- compare their list with the content of the evaluation report provided by the workplace supervisor
- comment on the similarities and the differences

3. PASS/FAIL CONDITIONS

To pass the examination, the candidates must obtain 10 YESes out of a possible 12; successful completion of criteria 3.1 and 5.2 is mandatory, as well as attendance throughout the practicum.

4. DURATION

Evaluation takes place throughout the module.

PARTICIPATION EVALUATION FORM

BUSINESS EQUIPMENT TECHNICAL SERVICE	Program Code:	5765
21 – Practicum in the Workplace	Course Code:	780 707
Candidate's name: _____		
School: _____	RESULT:	
Permanent code: _____	PASS	FAIL
Date of examination: _____	☐	☐
Examiner's signature: _____		

PARTICIPATION COMPONENTS	RESULT YES	RESULT NO
PHASE 1: Preparation for the practicum in the workplace		
1. Participate in finding a company.		
1.1 Identify, in order of preference, possible practicum locations that meet their predetermined selection criteria.	☐	☐
PHASE 2: Integration into the workplace		
2. Carefully observe the work context and organization.		
2.1 Adopt professional behaviour.	☐	☐
3. Actively participate in performing various occupational tasks.		
3.1 Carry out their work according to the established methods, techniques and standards.	☐	☐
3.2 Learn about the techniques used to provide after-sales service for the business equipment.	☐	☐
3.3 Make an effort to observe the company's occupational health and safety rules.	☐	☐

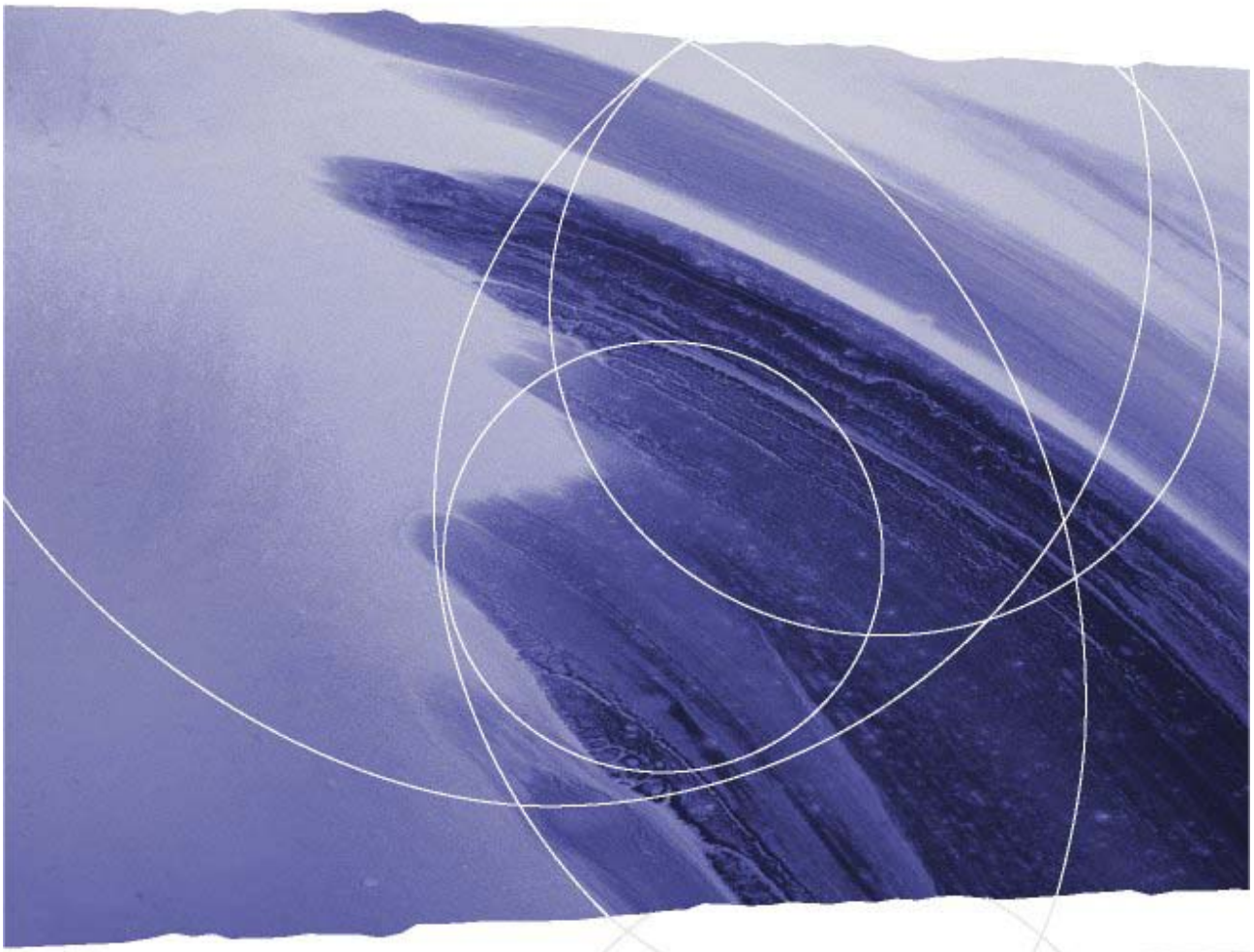
PARTICIPATION COMPONENTS	RESULT YES	NO
4. Follow the company's instructions with respect to activities, work schedules, etc.		
4.1 Agree to follow the company's instructions with respect to activities, work schedules, etc.	☐	☐
PHASE 3: Evaluation		
5. Produce a report.		
5.1 Provide information on their observations.	☐	☐
5.2 List the main tasks and operations carried out, and specify the nature of their participation.	☐	☐
5.3 Make a list of what appear to be their strengths and weaknesses.	☐	☐
6. Participate in the evaluation of the practicum.		
6.1 Identify the positive and the negative points by giving examples from the practicum.	☐	☐
7. Explain to the teacher their perception of themselves as workers based on the evaluation report provided by the company representative.		
7.1 Compare their list with the content of the evaluation report provided by the supervisor in the workplace.	☐	☐
7.2 Comment on the similarities and the differences.	☐	☐
Total:	/12	

PASS/FAIL CONDITIONS: 10 YESes out of 12, and a YES for criteria 3.1 and 5.2

Comments: _____

_____

_____



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