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GENERATOR MECHANIC

ASSESSMENT PACKAGE

National Vocational Certificate Level 2

Version 1 - November, 2019

NAVTTC

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Islamabad, Pakistan

GENERATOR MECHANIC

ASSESSMENT PACKAGE

National Vocational Certificate Level 2

Version 1 - November, 2019

Instructions for Candidate (to be given by the Assessor before Assessment)

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300619**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify General Faults**	**Assessment Date (DD/MM/YY):**		

Candidate Details	Name……..…… Registration/Roll Number……..……
Guidance for Candidate	**To meet this standard, you are required to complete the following tasks within 40 min timeframe:** 1. **Assessment Task 1:** Check physical condition of Generator 2. **Assessment Task 2:** Take History of faulty Generator 3. **Assessment Task 3:** Check battery 4. **Assessment Task 4:** Check self-starter 5. **Assessment Task 5:** Check Alternator charger 6. **Assessment Task 6:** Check control Panel 7. **Assessment Task 7:** Document fault **And complete:** 1. **Knowledge assessment test (Written or Oral)** 2. **Portfolios at the time of assessment (if any)**
Minimum Evidence Required	**During a practical assessment, under observation by an assessor, you will complete:** **Task 1: Check physical condition of Generator** Performance Criteria 1: Check foundation and balance of Generator Performance Criteria 2: Check earthing of Generator Performance Criteria 3: Check canopy and exhaust of Generator Performance Criteria 4: Check power cable connections and circuit breaker Performance Criteria 5: Check leakage of lubricants, coolant and fuel **Task 2: Take History of faulty Generator** Performance Criteria 1: Examine log book Performance Criteria 2: Seek information from operator Performance Criteria 3: Prepare report of the faults **Task 3: Check Battery** Performance Criteria 1: Check charge of battery Performance Criteria 2: Check battery electrolytes and terminals Performance Criteria 3: Check battery leads

	Task 4: Check self-starter Performance Criteria 1: Check physical condition and connections of self-starter Performance Criteria 2: Check battery voltage on self – starter terminals **Task 5: Check Alternator charger** Performance Criteria 1: Check Generator belt Performance Criteria 2: Check Generator wires **Task 6: Check Control Panel** Performance Criteria 1: Checked AC/DC supply Performance Criteria 2: Checked fuses/breakers Performance Criteria 3: Checked parameters and wiring **Task 7: Document fault** Performance Criteria 1: Record faults in log book Performance Criteria 2: Report to supervisor **Portfolios required at the time of assessment (if any) for** Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

071300619 Identify General Faults

Candidate Details	Name: ……Registration/Roll Number: …… Candidate Signature:……
Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:……..Assessor's code:…….. Assessor Signature: ……

Assessment Summary (to be filled by the assessor)							
Activity	**Method**					**Result**	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Feedback to the candidate on assessment.

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Candidate Signature…….. Assessor Signature ……

Assessment Task 1	Description of assessment task 1 **Check physical condition of Generator**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Performance Criteria 1: Checked foundation and balance of Generator			
2.	Performance Criteria 2: Checked earthing of Generator			
3.	Performance Criteria 3: Checked canopy and exhaust of Generator			
4.	Performance Criteria 4: Checked power cable connections and circuit breakers			
5.	Performance Criteria 5: Checked leakage of lubricants, coolant and fuel			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 2	**Take History of faulty Generator**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Examined log book			
2	Performance Criteria 2: Seek information from operator			
3	Performance Criteria 3: Prepared report of the faults			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 3	**Check Battery**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Checked charge of battery			
2	Performance Criteria 2: Checked battery electrolytes and terminals			
3	Performance Criteria 3: Checked battery leads			
Competent ☐		**Not Yet Competent**		

Assessment Task 4	**Check self-starter**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Checked physical condition and connections of self-starter			
2	Performance Criteria 2: Checked battery voltage on self – starter terminals			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 5	**Check Alternator charger**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Checked Generator belt			
2	Performance Criteria 2: Checked Generator wires			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 6	**Check control Panel**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Checked AC/DC supply			
2	Performance Criteria 2: Checked fuses/breakers			
3	Performance Criteria 3: Checked parameters and wiring			
Competent ☐		**Not Yet Competent**		

Assessment Task 7	**Document fault**

During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Performance Criteria 1: Noted fault in log book			
2	Performance Criteria 2: Reported to supervisor			
Competent ☐		**Not Yet Competent ☐**		

Portfolio (if any)	**Description of portfolio**
Current☐ Sufficient ☐ Authentic☐ Valid ☐ Reliable ☐	

Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent ☐		Not Yet Competent ☐		

Knowledge Assessment

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300619**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify General Fault**	**Assessment Date (DD/MM/YY):** --/--/--		

Guidance for Candidate	**To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.**

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:..... Registration/Roll Number:……. Candidate Signature:..... .....
Written Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:..... ……Assessor's code:…….. Assessor Signature: ....

Feedback to the candidate on assessment.

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Candidate Signature……. Assessor Signature ……

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300619**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify General Fault**	**Assessment Date (DD/MM/YY):** --/--/--		

WRITTEN ASSESSMENT

Question	**Candidate's answer**
1 Describe foundation for Generator?	
2 Describe Importance of Generator balancing?	
3 Define Importance of earthing?	

Question	Candidate's answer
4 Explain Rating of power cables and circuit breakers?	
5 Define steps for physical checking of Generators?	
6 Describe log book focusing on all types of entries procedure?	
7 How to prepare report regarding faults?	

Question	Candidate's answer
8 Describe methods of battery charging (charging status of battery)?	
9 Define specific Gravity of Electrolyte?	
10 Describe function of battery leads and terminals?	
11 Define self –starter?	

Question	Candidate's answer
12 Describe types and functions of self-starter?	
13 Define battery charging alternator?	
14 Describe types of charging alternator?	
15 Explain functions of charging alternator?	

Question	Candidate's answer
16 Describe control panel and its functions?	
17 Define fuses and breakers?	
18 Describe measuring techniques of various gauges in control panel?	

Question	Candidate's answer
19 Describe techniques/procedure to update log book?	

Instructions for Candidate (to be given by the Assessor before Assessment)

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300620**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify Mechanical Faults**	**Assessment Date (DD/MM/YY):**		

Candidate Details	Name……..…… Registration/Roll Number……..……
Guidance for Candidate	**To meet this standard, you are required to complete the following tasks within 40 min timeframe:** 1. **Assessment Task 1:** Inspect and service lubrication system 2. **Assessment Task 2:** Inspect and service cooling system 3. **Assessment Task 3:** Inspect and service air intake system 4. **Assessment Task 4:** Inspect and service fuel system 5. **Assessment Task 5:** Inspect and service exhaust system 6. **Assessment Task 6:** Inspect safety equipment **And complete:** **3. Knowledge assessment test (Written or Oral)** **4. Portfolios at the time of assessment (if any)**
Minimum Evidence Required	**During a practical assessment, under observation by an assessor, you will complete:** **Task 1: Inspect and service lubrication system** Performance Criteria 1: Locate lubricant filling cap and drainage plug Performance Criteria 2: Check oil level of engine Performance Criteria 3: Adjust oil level Performance Criteria 4: Identify leakage and report to supervisor **Task 2: Inspect and service cooling system** Performance Criteria 1: Adopt appropriate safety measures Performance Criteria 2: Ensure unobstructed air flow of radiator Performance Criteria 3: Maintain coolant level Performance Criteria 4: Replace fan belts and hose pipe **Task 3: Inspect and service air intake system** Performance Criteria 1: Locate components to be inspected Performance Criteria 2: Check air service indicator Performance Criteria 3: Select appropriate tools/equipment Performance Criteria 4: Clean primary air filter Performance Criteria 5: Replace intake hoses and clamps

	Task 4: Inspect and service fuel system Performance Criteria 1: Locate components to be inspected Performance Criteria 2: Identify fuel gauges and level indicators Performance Criteria 3: Select appropriate tools Performance Criteria 4: Perform basic maintenance such as cleaning of fuel stain/fuel tank/ carburetor Performance Criteria 5: Identify service need defect and hazardous condition through visuals/physical inception Performance Criteria 6: Report fuel leakage and faults **Task 5: Inspect and service exhaust system** Performance Criteria 1: Locate components to be inspected Performance Criteria 2: Check Silencer shield Performance Criteria 3: Check blockage & leakage of Silencer Performance Criteria 4: Dismantle silencer **Task 6: Inspect safety equipment** Performance Criteria 1: Check and clean heat sensor Performance Criteria 2: Check oil pressure sensor Performance Criteria 3: Check and clean air sensor Performance Criteria 4: Check and clean RPM sensor **Portfolios required at the time of assessment (if any) for** Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

071300620 Identify Mechanical Faults

Candidate Details	Name: ……Registration/Roll Number: …… Candidate Signature:……
Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:……..Assessor's code:…….. Assessor Signature: ……

Assessment Summary (to be filled by the assessor)							
Activity	**Method**					**Result**	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Feedback to the candidate on assessment.

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Candidate Signature…….. Assessor Signature ……

Assessment Task 1	**Inspect and service lubrication system**

During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1.	Performance Criteria 1: Located lubricant filling cap and drainage plug			
2.	Performance Criteria 2: Checked oil level of engine			
3.	Performance Criteria 3: Adjusted oil level			
4	Performance Criteria 4: Identified leakage and reported to supervisor			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 2	**Inspect and service Cooling system**

During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Adopted appropriate safety measures			
2	Performance Criteria 2: Ensured unobstructed air flow of radiator			
3	Performance Criteria 3: Maintained coolant level			
4	Performance Criteria 4: Replaced fan belts and hoses pipe			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 3	**Inspect and service air intake system**

During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Located components to be inspected			
2	Performance Criteria 2: Checked air service indicator			
3	Performance Criteria 3: Selected appropriate tools/equipment			
4	Performance Criteria 4: Cleaned primary air filter			
5	Performance Criteria 5: Replaced intake hoses and clamps			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 4	**Inspect and service fuel system**			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Located components to be inspected			
2	Performance Criteria 2: Identified fuel gauges and level indicators			
3	Performance Criteria 3: Selected appropriate tools			
4	Performance Criteria 4: Performed basic maintenance such as cleaning of fuel stain			
5	Performance Criteria 5: Identified service need defect and hazardous condition through visuals/physical inception			
6	Performance Criteria 6: Reported fuel leakage and faults			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 5	**Inspect and service Exhaust system**			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Located components to be inspected			
2	Performance Criteria 2: Checked Silencer shield			
3	Performance Criteria 3: Checked blockage & leakage of Silencer.			
4	Performance Criteria 4: Dismantled silencer			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 6	**Inspect safety equipment**			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Checked and clean heat sensor			
2	Performance Criteria 2: Checked oil pressure sensor			
3	Performance Criteria 3: Checked and clean air sensor			
4	Performance Criteria 4: Checked and cleaned RPM sensor			
Competent ☐		**Not Yet Competent ☐**		

Portfolio (if any)	**Description of portfolio**
Current☐ Sufficient ☐ Authentic☐ Valid ☐ Reliable ☐	

Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent ☐		Not Yet Competent ☐		

Knowledge Assessment

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300620**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify Mechanical Fault**	**Assessment Date (DD/MM/YY):** --/--/--		

Guidance for Candidate	**To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.**

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:..... Registration/Roll Number:…….. Candidate Signature:..... .....
Written Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:..... ……Assessor's code:…….. Assessor Signature: ....

Feedback to the candidate on assessment.

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Candidate Signature……. Assessor Signature ……

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **071300620**	Level: 2	Version: 1 (2019)
Competency Standard Title: **Identify Mechanical Fault**	**Assessment Date (DD/MM/YY):** --/--/--		

WRITTEN ASSESSMENT

Question	Candidate's answer
20 Define lubricant and its importance?	
21 Describe lubricant grading?	
22 Define coolant?	

Question	Candidate's answer
23 Describe functions of Radiator?	
24 Define antifreeze solution?	
25 Describe importance of fan belts and house pipe?	
26 Describe functions of intake components of air intake system?	

Question	Candidate's answer
27 Describe checking techniques for air intake system?	
28 Differentiate between petrol, diesel and gas engines?	
29 Define types of fuel gauges?	
30 Define carburetor?	

Question	Candidate's answer
31 Describe different circuit of carburetor?	
32 Define silencer?	
33 Define Carbon Monoxide Ratio (COR)?	
34 Describe dismantling procedure of Silencer?	

Question	Candidate's answer
35 Define safety sensors?	

Instructions for Candidate (to be given by the Assessor before Assessment)

Title of Qualification: National Vocational Certificate level 3, In Generator Mechanic	CS Code: **071300623**	Level: 3	Version: 1 (2019)
Competency Standard Title: **Identify Electrical Faults**	**Assessment Date (DD/MM/YY):**		

Candidate Details	Name……..…… Registration/Roll Number……..……
Guidance for Candidate	**To meet this standard, you are required to complete the following tasks within 40 min timeframe:** 1. **Assessment Task 1:** Inspect and service Ignition system 2. **Assessment Task 2:** Inspect and service alternator 3. **Assessment Task 3:** Inspect and service display panel 4. **Assessment Task 4:** Inspect and service Governor /Actuator System 5. **Assessment Task 5:** Inspect and service Charging system 6. **Assessment Task 6:** Inspect and service warning system **And complete:** **5. Knowledge assessment test (Written or Oral)** **6. Portfolios at the time of assessment (if any)**
Minimum Evidence Required	**During a practical assessment, under observation by an assessor, you will complete:** **Task 1: Inspect and service Ignition system** Performance Criteria 1: Identify the tools and equipment Performance Criteria 2: Check DC power supply of ignition coil and distributor Performance Criteria 3: Check High Tension (HT) leads Performance Criteria 4: Check spark plug **Task 2: Inspect and service Alternator** Performance Criteria 1: Identify appropriate tools and equipment Performance Criteria 2: Check DC output voltage Performance Criteria 3: Check belt and connections of alternator **Task 3: Inspect and service display panel** Performance Criteria 1: Identify the tools and equipment Performance Criteria 2: Check gauges, circuit breakers, relays and wiring as per standard parameters

	Task 4: Inspect and service Governor /Actuator System Performance Criteria 1: Identify the tools and equipment Performance Criteria 2: Check actuator card supply Performance Criteria 3: Check magnetic pick up Performance Criteria 4: Check power supply on Actuator/Governor **Task 5: Inspect and service Charging system** Performance Criteria 1: Identify the tools and equipment Performance Criteria 2: Check battery power leads Performance Criteria 3: Check charging circuit of alternators **Task 6: Inspect and service warning system** Performance Criteria 1: Identify tools and equipment Performance Criteria 2: Check oil sensor Performance Criteria 3: Check temperature sensor Performance Criteria 4: Check fuel sensor Performance Criteria 5: Check over/under voltage module **Portfolios required at the time of assessment (if any) for** Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

071300623 Identify Electrical Faults

Candidate Details	Name: ……Registration/Roll Number: …… Candidate Signature:……
Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:……..Assessor's code:…….. Assessor Signature: ……

Assessment Summary (to be filled by the assessor)							
Activity	**Method**					**Result**	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Feedback to the candidate on assessment.

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Candidate Signature…….. Assessor Signature ……

Assessment Task 1	Inspect and service Ignition system			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1.	Performance Criteria 1: Identified the tools and equipment			
2.	Performance Criteria 2: Checked Direct Current (DC) power supply of ignition coil and distributor			
3.	Performance Criteria 3: Checked High Tension (HT) leads			
4.	Performance Criteria 4: Checked spark plug			
Competent ☐		**Not Yet Competent** ☐		

Assessment Task 2	Inspect and service Alternator			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Identified appropriate tools and equipment			
2	Performance Criteria 2: Checked DC output voltage			
3	Performance Criteria 3: Checked belt and connections of alternator			
Competent ☐		**Not Yet Competent** ☐		

Assessment Task 3	Inspect and service display panel			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Identified required tools and equipment			
2	Performance Criteria 2: Checked gauges, circuit breakers, relays and wiring as per standard parameters			
Competent ☐		**Not Yet Competent** ☐		

Assessment Task 4	Inspect and service Governor /Actuator System			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Identified the tools and equipment			
2	Performance Criteria 2: Checked Actuator card supply			
3	Performance Criteria 3: Checked Magnetic pick up			
4	Performance Criteria 4: Check power supply on Actuator/Governor			
Competent ☐		**Not Yet Competent** ☐		

Assessment Task 5	**Inspect and service charging system**

During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Identified appropriate tools and equipment			
2	Performance Criteria 2: Checked Battery power leads			
3	Performance Criteria 3: Check charging circuit of Alternator			
Competent ☐		**Not Yet Competent ☐**		

Assessment Task 6	**Inspect and service warning system**

During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1	Performance Criteria 1: Identified tools and equipment			
2	Performance Criteria 2: Checked Oil sensor			
3	Performance Criteria 3: Checked Temperature sensor			
4	Performance Criteria 4: Checked Fuel sensor			
5	Performance Criteria 5: Checked over/under load module			
Competent ☐		**Not Yet Competent ☐**		

Portfolio (if any)	**Description of portfolio**
Current☐ Sufficient ☐ Authentic☐ Valid ☐ Reliable ☐	

Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent ☐		Not Yet Competent ☐		

Knowledge Assessment

Title of Qualification: National Vocational Certificate level 3, In Generator Mechanic	CS Code: **071300623**	Level: 3	Version: 1 (2019)
Competency Standard Title: **Identify Electrical Faults**	**Assessment Date (DD/MM/YY):** --/--/--		

Guidance for Candidate	**To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.**

Assessors Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

Candidate Details	Name:..... Registration/Roll Number:……. Candidate Signature:..... .....
Written Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Assessor Name:..... ……Assessor's code:…….. Assessor Signature: ....

Feedback to the candidate on assessment.

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Candidate Signature……. Assessor Signature ……

Title of Qualification: National Vocational Certificate level 3, In Generator Mechanic	CS Code: **071300623**	Level: 3	Version: 1 (2019)
Competency Standard Title: **Identify Electrical Faults**	**Assessment Date (DD/MM/YY):** --/--/--		

WRITTEN ASSESSMENT

Question	Candidate's answer
36 Describe functions of ignition coil and distributor?	
37 Describe High Tension (HT) Leads?	
38 Describe different types of spark plug?	

Question	Candidate's answer
39 Describe cleaning /gauging procedure of spark plug?	
40 Describe functions of DC Supply given to alternator?	
41 Describe belt adjustment techniques?	
42 Describe function of various gauges on display panel?	

Question	Candidate's answer
43 Describe measuring techniques of various gauges on Control Panel?	
44 Describer function of Circuit breakers switches and Relays?	
45 Describe functions of Governor / Actuator, Actuator card, magnetic pick up sensor and power supply?	
46 Describe function of charging system?	

Question	Candidate's answer
47 Describe warning system?	
48 Define Oil, Temperature and Fuel sensors	
49 Describe Current, Voltage, and frequency due to under and over load conditions?	

Title of Qualification: National Vocational Certificate level 2, In Generator Mechanic	CS Code: **0713E&E19**	Level: 2	Version: 1 (2019)
Competency Standard Title: **National Vocational Certificate Level – 2 in Generator Mechanic**	**Assessment Date (DD/MM/YY):**		

Candidate Details	Name: ..... Registration/Roll Number: .....
Guidance for Candidate	**To meet this standard, you are required to complete the following activities within 03 Hrs. time frame (for practical demonstration & assessment):** ○ Identify general, mechanical and electrical faults in generator. **And complete:** **1. Knowledge assessment test (Written or Oral).** **2. Portfolios at the time of assessment (if any).**
Minimum Evidence Required	**During a practical assessment, under the observation by an assessor, you are required to "dismantle external and internal parts of engine and take safety measures during the whole process" by demonstrate the following criteria** 1. **Performance Criteria 1:** Check physical condition of Generator 2. **Performance Criteria 2:** Check battery 3. **Performance Criteria 3:** Check self-starter 4. **Performance Criteria 4:** Check alternator charger 5. **Performance Criteria 5:** Check control panel 6. **Performance Criteria 6:** Inspect and service Ignition system 7. **Performance Criteria 7:** Inspect and service warning system 8. **Performance Criteria 8:** Inspect and service Lubrication system 9. **Performance Criteria 9:** Inspect and service Fuel system 10. **Performance Criteria 10:** Inspect and service Cooling system
	Portfolios required at the time of assessment (if any) for Performance criteria for the evaluation of portfolio: Submit log book or activity record (practical journal, project, pictures etc.) completed during the training.

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	0713E&E19 National Vocational Certificate Level- 2 in Generator Mechanic
Purpose of Assessment	**Summative Assessment**
Assessment Task	• In the given context identify general, Mechanical and Electrical faults in Generator. • Knowledge Assessment

I can perform …….

Performance Criteria	**Yes**	**No**
Check physical condition of Generator		
Check battery		
Check self-starter		
Check alternator charger		
Check Control panel		
Inspect and service Ignition system		
Inspect and service warning system		
Inspect and service Lubrication system		
Inspect and service Fuel system		
Inspect and service Cooling system		

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide (to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

0713E&E19 National Vocational Certificate Level – 2 in Generator Mechanic

Candidate Details	Name: .....Registration/Roll Number: ..... Candidate's Signature:..... .....
Assessment Outcome	COMPETENT☐ NOT YET COMPETENT☐ Assessor Name:.....Assessor's code:..... Assessor's Signature: ....

Assessment Summary (to be filled by the assessor)							
Activity	**Method**					**Result**	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration							
Knowledge Assessment							
Other Requirement							

Feedback to the Candidate
Candidate's Signature_____ **Assessor's Signature** _____

Each Assessment Task (with performance criteria)				
Assessment Task		Description of assessment task **In the given context identify general, Mechanical and Electrical faults in Generator.**		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1	Checked physical condition of Generator			
2	Checked battery			
3	Checked self-starter			
4	Checked alternator charger			
5	Checked control panel			
6	Inspected and service Ignition system			
7	Inspected and service warning system			
8	Inspected and service Lubrication system			
9	Inspected and service Fuel system			
10	Inspected and service Cooling system			
Competent ☐		Not Yet Competent ☐		

Knowledge Assessment

Qualification	**0713E&E19 National Vocational Certificate Level – 2 in Generator Mechanic**
Purpose of Assessment	**Summative Assessment**
Candidate Details	Name: _____ Registration Number: _____Signature: _____
Assessment Outcome	**COMPETENT** ☐ **NOT YET COMPETENT** ☐ **Name of the Assessor**_____ **Assessor's code:** _____ **Signature:** _____

Portfolio (if any)	Description of portfolio
Current☐ Sufficient☐ Authentic☐ Valid☐ Reliable ☐	

Portfolio meet the following performance standards:		Yes	No	Remarks
1	Performance criteria for the evaluation of portfolio: Submitted log book or activity record (practical journal, project, pictures etc.) completed during the training.			
Competent ☐		Not Yet Competent ☐		

Feedback to the Candidate

Candidate's Signature_____ **Assessor's Signature** _____

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)		**Satisfactory**	**Not Satisfactory**
1.	Why fan belt is used?		
2.	Describe the importance of Generator balancing?	**Satisfactory**	**Not Satisfactory**
3.	Define steps for physical checking of Generator?	**Satisfactory**	**Not Satisfactory**
4.	Define specific gravity of electrolyte?	**Satisfactory**	**Not Satisfactory**

5.	Describe function of ignition coil and distributer.	**Satisfactory**	**Not Satisfactory**
6	Describe functions of various gauges on display panels.	**Satisfactory**	**Not Satisfactory**
7	Describe warning system?	**Satisfactory**	**Not Satisfactory**

	Define lubricants and its importance.	**Satisfactory**	**Not Satisfactory**
8			

National Vocational and Technical Training Commission (NAVTTC)

Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan
+92 51 9044 322
+92 51 9044 322
info@navttc.org
www.navttc.org