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| Departemen_Perhubungan.wmf | FORM SKENARIO LABORATORIUM/SIMULATOR/ WORKSHOP | Nomor Dokumen : FM.USW.01.02a |
| Tgl. Ditetapkan : 02 November 2015 |
| Revisi No : 02 |
| Tgl. Diberlakukan : 09 Januari 2017 |
| Made By : | Reviewer : |
| PIP SEMARANG | ANDY WAHYU HERMANTO, ST, MT | ADI OKTAVIANTO, S.T, M.M |
|  | Mengetahui |
|  | Kepala Unit Laboratorium, Simulator dan Workshop | Kepala Bagian Adminitrasi Akademik dan Ketarunaan |
|  |  |  |
|  | YUSTINA SAPAN, S.ST, MM | Capt. BHARTO ARI RAHARJO |

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| Type Facilities :* Laboratorium
* Simulator
* Other
 | Name Laboratorium/ Simulator/ Other :Electric and Electronic Laboratory |

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| **STCW Convention** | Electrical, electronic and control engineering at the operational level |
| **Function & Level** | Marine Engineering at The Operational Level (ATT : III / IV)\* |
| **Program**  | Penggunaan Alat Ukur Analog Ohmmeter |
| **Competence** | Monitor the operation of electrical, electronic and control systems |
| **REFERENSI STCW** |  STCW code table AIII/6 page 201 |
| **aim of Exercise** | Taruna mampu mengoperasikan alat ukur Ohmmeter |
| **Objective** | 1. Taruna memahami prosedur mengoperasikan alat ukur ohmmeter
2. Taruna dapat mengukur nilai hambatan atau resistance
 |
| **Exercise condition** | 1. Pengecekan alat ukur multimeter sebelum digunakan
2. Lakukan kalibrasi bila alat ukur belum sesuai dengan ketentuan
3. Baca dan pahami prosedur penggunaan alat ukur Ohmmeter
4. Siapkan komponen Resistor untuk pengukuran
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**INITIAL INFORMATION**

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| **Briefing** | 10 minutes |
| **Exercise Duration** | 30 minutes |
| **Debriefing** | 10 minutes |

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| **Criteria** | : |  |  |  |

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| **No** | **Time Frame (minutes)** | **Activity** | **Result** | **Weight** | **Mark** | **Actual Time** | **Remark** |
| **Y** | **N** |
|  |  | **Pendahuluan** |  |  |  |  |  |  |
| 1 |  | Siapkan alat ukur Multimeter |  |  |  |  |  |  |
| 2 |  | Pastikan alat ukur Multimeter dalam kondisi baik |  |  |  |  |  |  |
| 3 |  | Baca prosedur tentang penggunaan alat ukur Ohmmeter |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | **Mengukur Hambatan atau Resistance** |  |  |  |  |  |  |
| 1 |  | Set multimeter analog ke Ohmmeter |  |  |  |  |  |  |
| 2 |  | Set Range/skala Ohmmeter sesuai dengan Hambatan atau Resistance yang akan diukur |  |  |  |  |  |  |
| 3 |  | Lakukan kalibrasi pada Ohmmeter |  |  |  |  |  |  |
| 4 |  | Lakukan pengukuran Hambatan pada komponen Resistor yang ditentukan oleh dosen / instruktur |  |  |  |  |  |  |
| 5 |  | Baca hasil pengukuran pada analog multimeter |  |  |  |  |  |  |
| 6 |  | Catat hasil pengukuran |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | **Penutup** |  |  |  |  |  |  |
| 1 |  | Matikan alat ukur multimeter dengan mengarahkab pada posisi OFF |  |  |  |  |  |  |
| 2 |  | Simpan dan rapikan alat ukur multimeter |  |  |  |  |  |  |

\*Critical performance below must get record **“Yes”** mark will lead the final result to mark **FAIL**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Critical Performance** | **Y** | **N** |
| 1 | Siapkan alat ukur Ohmmeter sebelum digunakan |  |  |
| 2 | Memahami prosedur penggunaan alat ukur Ohmmeter  |  |  |
| 3 | Lakukan pengukuran Arus Listrik pada panel yang telah disiapkan |  |  |
| 4 | Pembacaan hambatan pada alat ukur ohmmeter analog |  |  |

**Time factor**

|  |  |  |  |
| --- | --- | --- | --- |
| <30 minutes = 1 | 31 – 40 minutes = 0.9 | 41 – 50 minutes = 0.8 | >50 minutes = 0.5 |

**Total Time : ………………minutes Time Factor : …………….**

**Total Score : Total Mark X Total Factor = …………… x ……………. = …………….**

**Final Result : PASS / FAIL ( Passing Grade = 70 )**