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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 |

|  |  |
| --- | --- |
| **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 Amperemeter |
| **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 Amperemeter |
| **Objective** | 1. Taruna memahami prosedur mengoperasikan alat ukur Amperemeter
2. Taruna dapat mengukur Arus AC dan DC
 |
| **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 AC dan DC Amperemeter
4. Set Panel pada nilai Arus Listrik AC tertentu
5. Set Panel pada nilai Arus Listrik DC tertentu
 |

**INITIAL INFORMATION**

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

| **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 Amperemeter |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | **Mengukur Arus listrik AC** |  |  |  |  |  |  |
| 1 |  | Set multimeter analog ke AC Amperemeter |  |  |  |  |  |  |
| 2 |  | Set Range / skala Amperemeter sesuai dengan arus listrik yang akan diukur |  |  |  |  |  |  |
| 3 |  | Lakukan pengukuran arus listrik AC pada panel yang telah di tentukan oleh dosen / Instruktur |  |  |  |  |  |  |
| 4 |  | Baca hasil pengukuran pada analog Amperemeter |  |  |  |  |  |  |
| 5 |  | Catat hasil pengukuran  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | **Mengukur Arus listrik DC** |  |  |  |  |  |  |
| 1 |  | Set multimeter analog ke DC Amperemeter |  |  |  |  |  |  |
| 2 |  | Set Range / skala Amperemeter sesuai dengan arus listrik yang akan diukur |  |  |  |  |  |  |
| 3 |  | Lakukan pengukuran arus listrik DC pada panel yang telah di tentukan oleh dosen / Instruktur |  |  |  |  |  |  |
| 4 |  | Baca hasil pengukuran pada analog Amperemeter |  |  |  |  |  |  |
| 5 |  | 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 amperemeter sebelum digunakan |  |  |
| 2 | Memahami prosedur penggunaan alat ukur Amperemeter |  |  |
| 3 | Lakukan pengukuran Arus Listrik pada panel yang telah disiapkan |  |  |
| 4 | Pembacaan Arus Listrik pada alat ukur Amperemeter 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 )**