

# Form B03

## Scheduled Maintenance Work Order

do



Quantum Medical Solutions sdn bhd  
transcending boundaries, transforming life

Format Ref: - QMS/TSD-022 Rev.01

Work Order No.	PWO365244	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	28/6/18
Clinic Name	Klinik Kesihatan Pesta / Kampung Ken.	Clinic Code	JHR015
BE No.	JHR002007	Distict	BATU PAHAT
BE Category	Microscopes, Light, Laboratory	WO Assigned to	Farhan
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input type="checkbox"/> New
BE Condition	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> BER Proposed	
Work Order Type	<input checked="" type="checkbox"/> Preventive Maintenance (PM)	<input type="checkbox"/> Third Party Calibration (TPC)	
	<input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Statutory Certification (SC)	

Reschedule Date	
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### 3E Third Party Calibration / Statutory Certification Details

Company Name		Cal / Cert Date	
Contact Number		Cal / Cert Expiry Date	

#### Action Taken

☒ PM / RI job done as per checklist. Unit tested functioning good & ready to use.

☐ Corrective Maintenance / ☐ Breakdown

BE Sticker Availability : ☒ Yes / ☐ NA

Remarks:

Manufacturer : Olympus  
Modal : CX31  
Serial No : 3604002

### Schedule Maintenance Execution Details

SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
	Farhan	28/6/18	1200	1300

#### Customer Remarks

NA.

<b>Engineer / Technician Signature</b> Name: MOHD NAJIB FARHAN B. ISMAIL Date: 28/6/18 BIOMEDICAL ENGINEER (012-396 7048) QUANTUM MEDICAL SOLUTIONS SDN. BHD.	<b>Customer Signature</b> Name: SITI NURASHIKIN MARJUNI Designation: Jurut. K. N. Makmal Perubatan U29 Date: Klinik Kesihatan Rengit Seal: Batu Pahat
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For Internal Use

First Verification  
QMS Circle Incharge

RAZILA BINTI MISKAN  
BIOMEDICAL ENGINEER

Final Verification  
QMS State Incharge





# KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist  
Microscopes, Light, Laboratory  
BE CODE : 15-156

CHECKLIST NO: CL-097-000  
REV.000

## PART 1 ASSET DETAILS

WORK ORDER NO ▶ PWO 365244 BE NO ▶ JHR002007  
MANUFACTURER ▶ Olympus MODEL ▶ UX51  
FREQUENCY ▶ 6 MONTHLY ( ) 12 MONTHLY ( ☒ ) PPM HOURS ▶ 1.00

## PART 2 SPECIAL PRECAUTION

If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it.

Wear appropriate Personnel Protection Equipment (PPE) during work.

Wear grounded electrostatic wristband when handling PCB or electronic components.

Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines.

Make sure the test equipment used are duly calibrated.

## PART 3 TEST APPARATUS

Tick ( ☒ ) where appropriate

NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON
	<u>TEESA005H</u>	ELECTRICAL SAFETY ANALYZER	<u>3226906</u>	<u>9/10/18</u>

## PART 4 QUALITATIVE TASKS

Tick ( ☒ ) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	( <input checked="" type="checkbox"/> )	( )	( )	11 Bulb - verify functionality	( <input checked="" type="checkbox"/> )	( )	( )
2 Mount/ Fasteners - verify physical integrity	( <input checked="" type="checkbox"/> )	( )	( )	12 Filter - verify integrity	( <input checked="" type="checkbox"/> )	( )	( )
3 Cables / AC Plug - verify integrity	( <input checked="" type="checkbox"/> )	( )	( )	13 Performing Test	( <input checked="" type="checkbox"/> )	( )	( )
4 Fittings/ Connectors - check all fittings/connectors	( <input checked="" type="checkbox"/> )	( )	( )	a. Binocular prism	( <input checked="" type="checkbox"/> )	( )	( )
5 Power Cord - verify proper insulation and integrity	( <input checked="" type="checkbox"/> )	( )	( )	b. Fine Focussing	( <input checked="" type="checkbox"/> )	( )	( )
6 Strain Relief - verify physical integrity at both ends of line cord	( <input checked="" type="checkbox"/> )	( )	( )	c. Coarse control movement	( <input checked="" type="checkbox"/> )	( )	( )
7 <del>Circuit Breaker</del> / Fuse - verify integrity of external circuit breaker and/or rating of external fuse	( <input checked="" type="checkbox"/> )	( )	( )	d. X-Y stage movement	( <input checked="" type="checkbox"/> )	( )	( )
8 Controls/Switches - verify proper operation of controls	( <input checked="" type="checkbox"/> )	( )	( )	e. Optional Module or accessories	( <input checked="" type="checkbox"/> )	( )	( )
9 Indicators /display - verify proper illumination and operation	( <input checked="" type="checkbox"/> )	( )	( )	f. Alignment of microscope	( <input checked="" type="checkbox"/> )	( )	( )
10 Brightness Control - verify functionality	( <input checked="" type="checkbox"/> )	( )	( )	g. Excitement filter	( <input checked="" type="checkbox"/> )	( )	( )
				h. Stage lever spring	( <input checked="" type="checkbox"/> )	( )	( )
				i. Optical component as below	( <input checked="" type="checkbox"/> )	( )	( )
				- Objective Lens	( <input checked="" type="checkbox"/> )	( )	( )
				- Field Diaphragm	( <input checked="" type="checkbox"/> )	( )	( )
				- Eyepiece	( <input checked="" type="checkbox"/> )	( )	( )
				- Condenser	( <input checked="" type="checkbox"/> )	( )	( )
				j. Substage Focus	( <input checked="" type="checkbox"/> )	( )	( )

Tick ( ☒ ) where appropriate

	DONE	NOT DONE **	NA		DONE	NOT DONE **	NA
1 Clean the Exterior	( <input checked="" type="checkbox"/> )	( )	( )	4 Check and Lubricate the Mechanical Part if necessary	( <input checked="" type="checkbox"/> )	( )	( )
2 Inspect/ Clean Interior of unit	( <input checked="" type="checkbox"/> )	( )	( )				
- Optic/prisms Lens	( <input checked="" type="checkbox"/> )	( )	( )				
- Mirror / Eyepiece	( <input checked="" type="checkbox"/> )	( )	( )				
3 Check/Replace****	( <input checked="" type="checkbox"/> )	( )	( )				
- Bulb	( <input checked="" type="checkbox"/> )	( )	( )				
- Filter and phase contrast	( <input checked="" type="checkbox"/> )	( )	( )				

Notes: \* For all Parts, NA is defined as NOT APPLICABLE  
\*\*If you have ticked 'NOT DONE', then justify in Part 8  
\*\*\* Choose Whichever Applicable



## KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist

Microscopes, Light, Laboratory

BE CODE : 15-156

CHECKLIST NO:CL-097-000  
REV.000

WORK ORDER NO ▶ PWD 365544

## PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS FAIL NA	
	Not Applicable						

## PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use :

Result :



IEC 60601

☐ IEC 61010☐ IEC 62353

PASS



FAIL



NA

## PART 8 NOTES



CORRECTIVE MAINTENANCE REQUIRED



FUNCTIONING



NOT FUNCTIONING

WORK ORDER NO ▶

NA

NEXT PPM DATE

Jun 19

PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.

COMPLETED BY:

DATE :

Fahar  
28/6/18



## Test Setup

Operator ID :  
 Calibration Tech : DINA  
 Calibration Date : 9/10/2017  
 Firmware Version : 2.08.01  
 Serial Number : 3226906  
 Date & Time : 06/28/2018 & 12:38pm  
 JOB Name :

## DUT Information

Equipment Number : JHR002007  
 Serial Number : 3E04002  
 Manufacturer : OLYMPUS  
 Model : CX31  
 Location : KK PESTA  
 Other :

## Template Information

Template Name : JHR002007  
 Pause after Power ON: NO  
 Power ON delay: 2  
 Test Speed: NORMAL  
 Halt on Test Failure: YES  
 Include Time: YES  
 Insulation Resistance \ 500V  
 Multi Enclosure Test : NO

Standard : IEC60601-1-2nd Ed  
 Pause before Power O NO  
 Power OFF delay: 0  
 Test Mode: AUTO  
 Multi PE Test: NO  
 Multi Resstore: WORST/LAST  
 Reverse Polarity: YES  
 Classification: II

## PLC Configuration-Applied part setup

AP Name AP Type AP Num

## ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Insulation Resistance				P
Mains to Non-Earth Accessible Conductive Par	999 MOhn	-		P
Mains Voltage				P
Live to Neutral	237.9 V	-	-	P
Equipment Current	0.0 A	-	-	P
Enclosure Leakage Current				P
Normal Condition	0.5 uA-OPI	100	-	P
Open Neutral	0.6 uA-OPI	500	-	P
Open Neutral- Reversed Mains	0.6 uA-OPI	500	-	P
Normal Condition- Reversed Mains	0.5 uA-OPI	100	-	P
Earth Leakage Current				P
Open Neutral	22.2 uA-OI	1000	-	P





Signature

MOHD NAJIB FARHAN B. ISMAIL  
BIOMEDICAL ENGINEER  
(012-396 7048)  
QUANTUM MEDICAL SOLUTIONS SDN. BHD.

