



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

|                          |   |                         |               |
|--------------------------|---|-------------------------|---------------|
| <b>Department:</b>       | Laboratory and Blood Bank                     |                         |               |
| <b>Document:</b>         | Departmental Policy and Procedure             |                         |               |
| <b>Title:</b>            | Laboratory Training and Competency Assessment |                         |               |
| <b>Applies To:</b>       | All laboratory and blood bank staff           |                         |               |
| <b>Preparation Date:</b> | January 01, 2025                              | <b>Index No:</b>        | LB-DPP-003    |
| <b>Approval Date:</b>    | January 15, 2025                              | <b>Version :</b>        | 2             |
| <b>Effective Date:</b>   | February 15, 2025                             | <b>Replacement No.:</b> | LB-DPP-003(1) |
| <b>Review Date:</b>      | February 15, 2028                             | <b>No. of Pages:</b>    | 9             |

## 1. PURPOSE:

- 1.1 To provide a consistent method for assessing and assuring the competence of laboratory and blood bank staff members to perform his/her job according to defined expectations.

## 2. DEFINITONS:

- 2.1 **Competency:** the ability to use essential, not advanced, knowledge and skills to perform job skills to define expectation, assessing competence, it does not necessarily determine if an individual has high level of knowledge.
- 2.2 **Initial:** is training for employees who are new to the department.
- 2.3 **Retraining:** occurs when a person involved in the initial training or change training process cannot achieve competency.
- 2.4 **Checklist:** list of topics / items that a trainee will be required to become familiar with or learn within a specified period.

## 3. POLICY:

- 3.1 New employees must undergo training and orientation program in order to receive important information about the laboratory and blood bank work flow and procedures, basic policies, performance expectations, job descriptions, safety requirements etc.
- 3.2 Assessing the competence of laboratory and blood bank staff members to ensure that staff is competent to perform all assigned, technical duties is the principles of good manufacturing practice relevant to his work.
- 3.3 Competency will be assessed at defined intervals - during the individual's probationary period and annually thereafter. In addition, competence shall be assessed when new procedures are introduced, if errors are detected etc. At the end of the first year of employment a staff member will have had his/her competency assessed at least one.
- 3.4 The assessment shall measure compliance with defined, objective performance standards contained in job descriptions or other documents i.e. training checklists. Assessment criteria shall be developed in each section and approved by the section head. Each test type or procedure type or workstation that an employee performs/operates must be included in the annual assessment.
- 3.5 The supervisor will monitor the need/schedule for competency evaluations.
- 3.6 Documented evidence that staff is competent is required, i.e. they have met or exceeded the predefined, objective and measurable competence standards. The documentation of competence should include the following information: date of assessment, what was assessed, method of assessment, scoring / rating guidelines, and outcome of assessment. Documentation of evaluation results shall be maintained in the employee's personnel file.
- 3.7 Supervisory staff that performs technical work may be assessed by the section head or his designee.
- 3.8 The section head and supervisor are responsible for ensuring that employee competency assessment is performed as required by laboratory and blood bank department and hospital policy.
- 3.9 A documented corrective action plan outlining retraining and reassessment must be completed, should a staff member fail to meet the minimum competence criteria.



## 4. PROCEDURE:

### 4.1 Establishment of Performance Standards

- 4.1.1 The following components should be included during the individual's probationary period annual competency assessment as applicable:
  - 4.1.1.1 Knowledge, skills and ability to perform the job tasks.
  - 4.1.1.2 Ability to use equipment safely and effectively.
  - 4.1.1.3 Judgment, interpretive skills and problem solving abilities.
  - 4.1.1.4 Needs of patient age groups served by the department – age specific competencies.
  - 4.1.1.5 Compliance with Hospital, Department, Infection Control, and Safety Policies and Procedures.
- 4.1.2 For each critical task, the section head and supervisor will establish minimum standards necessary for competent performance. These are the criteria against which employees are to be judged during the assessment process. For assessment on instrumentation, check-off lists with predetermined and validated steps will be used.
- 4.1.3 Check-off lists, or similar documents, should be established which record the task, the criteria used to evaluate the employee's performance and the outcome of the assessment.
- 4.1.4 Failure to meet satisfactory performance will require corrective action plan by retraining, continuing education and reassessment before the employee is allowed to report out results from that procedure, test, or instrument e.g.:
  - 4.1.4.1 Procedure steps.
  - 4.1.4.2 Dealing with equipment (maintenance, software and calibration).
  - 4.1.4.3 Interpretation.
  - 4.1.4.4 Documentation.
  - 4.1.4.5 Time of performance.

### 4.2 Selection of Assessment Tools:

- 4.2.1 Direct Observation:
  - 4.2.1.1 The manual performance of critical tasks involving manual procedures, techniques or instrument operation should be assessed by the direct observation.
  - 4.2.1.2 A check-off list with the procedural steps listed will ensure a consistent and unbiased assessment.
- 4.2.2 Testing:
  - 4.2.2.1 This may involve previously tested properly preserved patient specimens, specimens from patients with known constituents or abnormalities duplicate testing, blind testing and/or previously reported internal or external proficiency samples.
- 4.2.3 Written/Oral Testing:
  - 4.2.3.1 Problem solving skills and theoretical knowledge may be assessed with the use of written and/or oral tests. Methods in this category include written exams, oral exams, oral queries and case studies.
  - 4.2.3.2 This may involve an evaluator who asks the employee questions regarding procedural steps, sample treatment, troubleshooting scenarios, specimen acceptability, timing, etc.
  - 4.2.3.3 Questions must be carefully phrased and explicit to avoid ambiguity and multiple possible answers.

### 4.3 Assessment Records:

- 4.3.1 Each general competency assessment subject will have predetermined criteria (acceptable standards of achievements). These assessments require 70% compliance for successful completion. Failure to meet this level will require retraining, and reassessment until successful completion is obtained.
- 4.3.2 Corrective action plans, and outcomes, developed in response of failure to meet the competency standards will be kept with the employee's competency assessment records.

- 4.3.3 Records of competency assessment and evaluation are maintained in the employee's personnel file or otherwise designated site for the time frame required by accrediting agencies and hospital policy.
- 4.3.1 Each general competency assessment subject will have predetermined criteria (acceptable standards of achievements). These assessments require 70% compliance for successful completion. Failure to meet this level will require retraining, and reassessment until successful completion is obtained.
- 4.4 In case of new machine or new method start up the employee will be trained by the installing company or under in charge and supervisor supervision, and if certified by training the certificate will be added to the employee file:
  - 4.4.1 When buying new equipment or optimizing efficiency with current instrumentation the manufacturer (company) support service personnel or trainers will deliver a training solution that meets the needs and the budget. It will improve the productivity of laboratory technologists and provide quality results.
  - 4.4.2 On-site training: This allows addressing the specific training needs. On-site training saves time and money, allow training more number of laboratory technicians at once and training the laboratory technicians on the new laboratory equipment they are expected to work with daily.
- 4.5 Laboratory personnel performing tests or tasks requiring colour discrimination undergo a colour discrimination test.

## **5. MATERIALS AND EQUIPMENT:**

- 5.1 Section Specific Employee Orientation / Training Checklist
- 5.2 Employee job Description
- 5.3 Procedural and / or Instrument Checklists
- 5.4 Written / Oral Examinations
- 5.5 Proficiency Records and Samples
- 5.6 Quality Control Records
- 5.7 Patient Samples and Results
- 5.8 Annual laboratory and Blood Bank training program list
- 5.9 Attendance sheet

## **6. RESPONSIBILITIES:**

- 6.1 Laboratory Director
- 6.2 Head of Department (HOD)
- 6.3 Supervisor of Department
- 6.4 Laboratory Quality Assurance Officer
- 6.5 Laboratory Education coordinator

## **7. APPENDICES:**

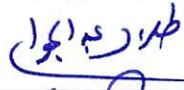
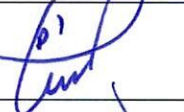


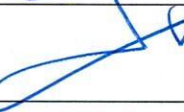

- 7.1 Orientation Check list
- 7.2 Competency Assessment Sheets
- 7.3 Colour discrimination test result form

## **8. REFERENCES:**

- 8.1 Training Verification for Laboratory Personnel; Approved Guideline; NCCLS Document GP21-A. The National Committee for Clinical Laboratory Standards, APR 2004.
- 8.2 College of American Pathologists, Laboratory Accreditation Program, Laboratory General Checklist.



## 9. APPROVALS:

|                     | Name                          | Title                              | Signature   | Date             |
|---------------------|-------------------------------|------------------------------------|---|------------------|
| <b>Prepared by:</b> | Dr. Talal Abdelgawad          | Clinical Pathologist               |  | January 01, 2025 |
| <b>Reviewed by:</b> | Dr. Kawther M. Abdou          | Consultant & Lab. Medical Director |  | January 05, 2025 |
| <b>Reviewed by:</b> | Ms. Noora Melfi Alanizi       | Laboratory & Blood Bank Director   |  | January 07, 2025 |
| <b>Reviewed by:</b> | Mr. Abdulelah Ayed Al Mutairi | QM&PS Director                     |  | January 09, 2025 |
| <b>Reviewed by:</b> | Dr. Tamer Mohamed Naguib      | Medical Director                   |  | January 12, 2025 |
| <b>Approved by:</b> | Mr. Fahad Hazam Alshammari    | Hospital Director                  |  | January 15, 2025 |

Kingdom of Saudi Arabia  
Hafar Al Batin Health Cluster  
Maternity and Children Hospital



المملكة العربية السعودية  
التجمع الصحي بحفر الباطن  
مستشفى الولادة والأطفال

### LABORATORY ORIENTATION / TRAINING

NAME: \_\_\_\_\_

POSITION: \_\_\_\_\_

COMPUTER NUMBER: \_\_\_\_\_

DATE: \_\_\_\_\_

| CRITERIA  | DATE | EMPLOYEE'S<br>ACKNOWLEDGEMENT | DONE BY |
|---|------|-------------------------------|---------|
| <b>INTRODUCTION</b>   |      |                               |         |
| 1. Introduction to co-workers   |      |                               |         |
| 2. Overview to the Facility and organizational chart  |      |                               |         |
| 3. Tour to the Facility and Department  |      |                               |         |
| 4. Departmental Functions and Organizational Chart  |      |                               |         |
| 5. Scope of service for section   |      |                               |         |
| <b>POLICY AND PROCEDURES</b>  |      |                               |         |
| 1. Policy and Procedures Manuals :  |      |                               |         |
| a. Administrative   |      |                               |         |
| b. Departmental   |      |                               |         |
| 2. Job Description (copy provided and one copy signed by the employee)  |      |                               |         |
| 3. Time Sheet, working hours, time in and out system  |      |                               |         |
| 4. Leave Request (Annual, Eid Holidays and Sick Leave Notification)   |      |                               |         |
| 5. General and specific duties  |      |                               |         |
| 6. Meetings/Committee   |      |                               |         |
| <b>PERFORMANCE IMPROVEMENT</b>  |      |                               |         |
| 1. Laboratory work – flow   |      |                               |         |
| 2. Laboratory Quality Control Monitoring and Improvement.   |      |                               |         |
| 3. Risk Management (Incident Reports)   |      |                               |         |
| <b>ENVIRONMENTAL OF CARE (EOC) AND SAFETY</b>   |      |                               |         |
| 1. Safety and Safe Practice.  |      |                               |         |
| 2. Fire Extinguishers, Alarm Pulls and Exits (RACE – PASS)  |      |                               |         |
| 3. Infection Control Practices (Hand Washing, Vaccination)  |      |                               |         |
| 4. Knowing everything about personal protective equipment (PPE), biological and chemical spill kits regarding its places and values |      |                               |         |
| <b>COMMUNICATION</b>  |      |                               |         |
| 1. Answering and operating telephone  |      |                               |         |
| 2. Important extensions   |      |                               |         |
| 3. Confidentiality (copy provided and one copy signed by the employee)  |      |                               |         |
| 4. Chain of command   |      |                               |         |
| 5. Work Schedules and on – call assignment  |      |                               |         |
| 6. Computer use, e-mail   |      |                               |         |
| 7. Use of photocopying machines   |      |                               |         |
| <b>EDUCATION</b>  |      |                               |         |
| 1. Schedule to attend General Orientation Program   |      |                               |         |
| 2. Mandatory Courses  |      |                               |         |
| 3. Availability of training program for each section in the department  |      |                               |         |
| 4. Saudi Commission Exam and Certification  |      |                               |         |
| 5. BLS Certification (Life Support)   |      |                               |         |
| <b>PERFORMANCE EVALUATION</b>   |      |                               |         |
| 60 Days Performance Evaluation  |      |                               |         |

EMPLOYEE'S SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

LABORATORY DIRECTOR NAME AND SIGNATURE: \_\_\_\_\_



Kingdom of Saudi Arabia  
Hafar Al Batin Health Cluster  
Maternity and Children Hospital



المملكة العربية السعودية  
التجمع الصحي بحفر الباطن  
مستشفى الولادة والأطفال

### COMPETENCY ASSESSMENT FOR LABORATORY TECHNICIAN/TECHNOLOGIST

Name: ..... Computer Number: ..... Date: .....  
Joining Date: ..... Laboratory Unit: ..... Head of Section: .....  
Competency Period: From: ..... To: .....  
Initial Competency: ..... Annual Competency: .....

#### Definitions:

1. Initial Competency : .....
2. Annual Competency: .....

#### Part I - DIRECT OBSERVATION OF PERFORMANCE

Observation scoring guide:

- 1= cannot perform skills independently      2= Requires some assistance  
3= Can perform skill independently      NA= Not Applicable

| Performance Elements  | 1 | 2 | 3 | NA |
|---|---|---|---|----|
| 1. Handles specimens properly   |   |   |   |    |
| 2. Complies with infection control and safety protocol                                      |   |   |   |    |
| 3. Run QC (quality control) by standard method  |   |   |   |    |
| 4. Verify QC in acceptable range  |   |   |   |    |
| 5. Operates instruments according to protocol   |   |   |   |    |
| 6. Performs instrument maintenance  |   |   |   |    |
| 7. Documents QC, Maintenance , troubleshooting and corrective actions according to policies |   |   |   |    |

Part I score

#### Part II- RECORD REVIEW

|  |  |  |  |  |
|--|--|--|--|--|
| 1. Review maintenance records filled by cited staff  |  |  |  |  |
| 2. Review QC records filled by cited staff           |  |  |  |  |
| 3. Review panic result records filled by cited staff |  |  |  |  |

Part II score

#### Part III - PRACTICAL EXAMINATION (using known patient results , external or internal QC materials)

1= unsatisfactory result      3= satisfactory result

| Review elements |  |  |
|-----------------|--|--|
| Sample 1        |  |  |
| Sample 2        |  |  |
| Sample 3        |  |  |

Part III score

#### Part IV - WRITTEN/ ORAL TEST (by head of section)

1= poor answers (<50%)    2= fair answers (50-75%)    3=good answers (75-95%)    4= Excellent (>95%)

|                             | 1 | 2 | 3 | 4 |
|-----------------------------|---|---|---|---|
| 1. Theoretical questions    |   |   |   |   |
| 2. Technique questions      |   |   |   |   |
| 3. Interpretation questions |   |   |   |   |
| 4. Problem solving problem  |   |   |   |   |

Part IV score



**COMPETENCY ASSESSMENT FOR LABORATORY  
TECHNICIAN/TECHNOLOGIST**

**TOTAL FINAL SCORE:**

|                                      |                |
|--------------------------------------|----------------|
| Less than 70%:                       | More than 70%: |
| Needs training (attach action plan): | Competent:     |
| <b>Supervisor Comments:</b>          |                |

|                                   | Name | Signature | Date |
|-----------------------------------|------|-----------|------|
| Head of Section                   |      |           |      |
| Head of Laboratory and Blood Bank |      |           |      |
| Employee:                         |      |           |      |



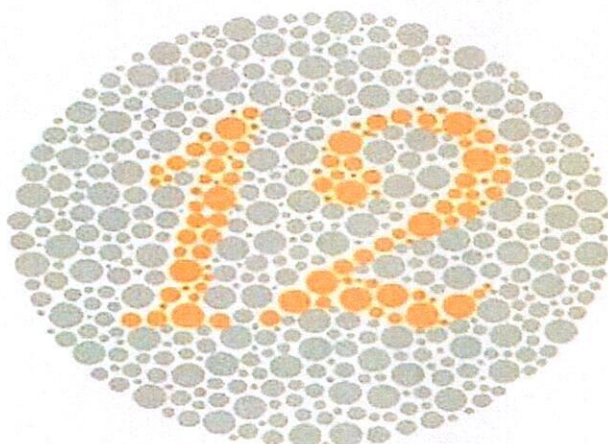
Kingdom of Saudi Arabia  
Hafar Al Batin Health Cluster  
Maternity and Children Hospital



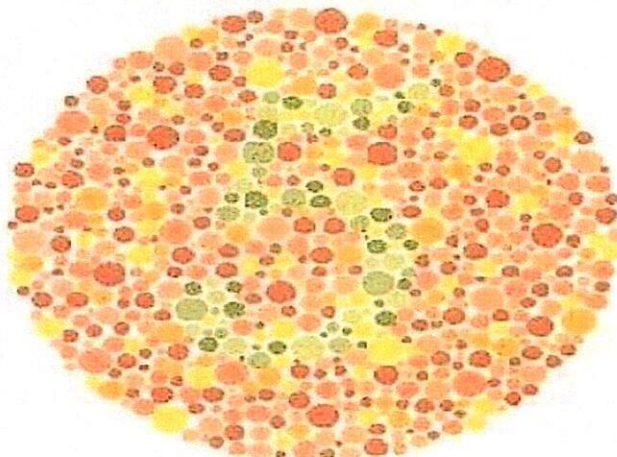
المملكة العربية السعودية  
التجمع الصحي بحفر الباطن  
مستشفى الولادة والأطفال

### COLOR BLIND TEST

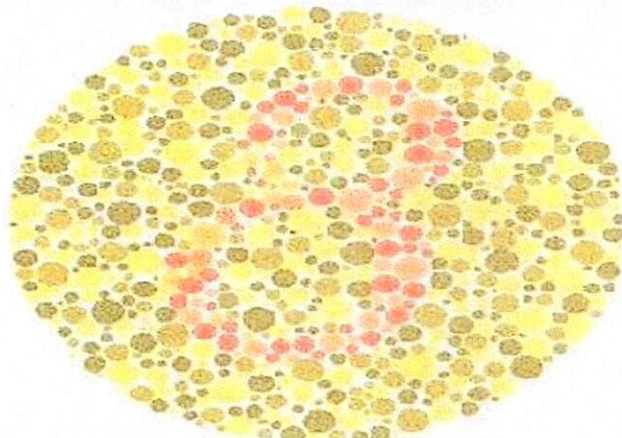
ISHIHARA COLOR BLINDNESS TEST PLATE 1



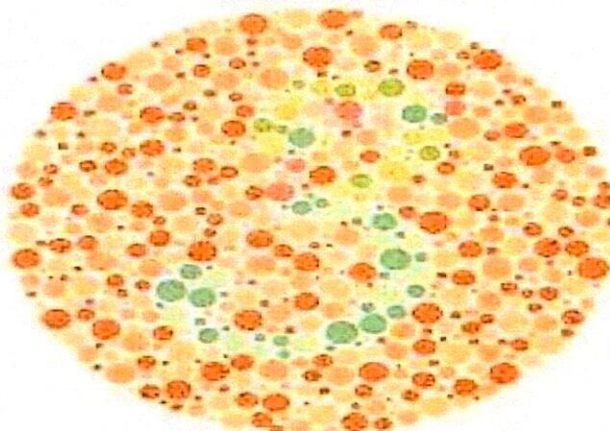
ISHIHARA COLOR BLINDNESS TEST PLATE 4



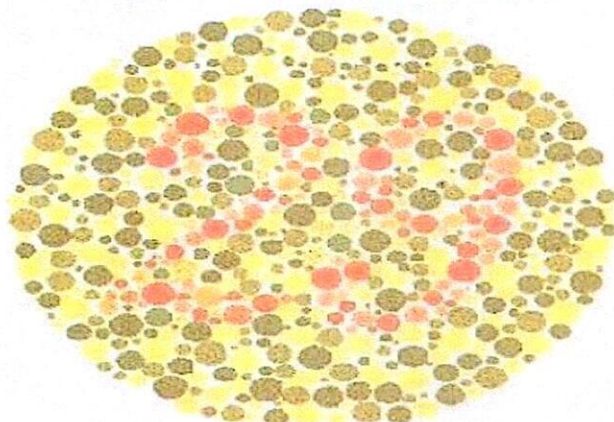
ISHIHARA COLOR BLINDNESS TEST PLATE 2



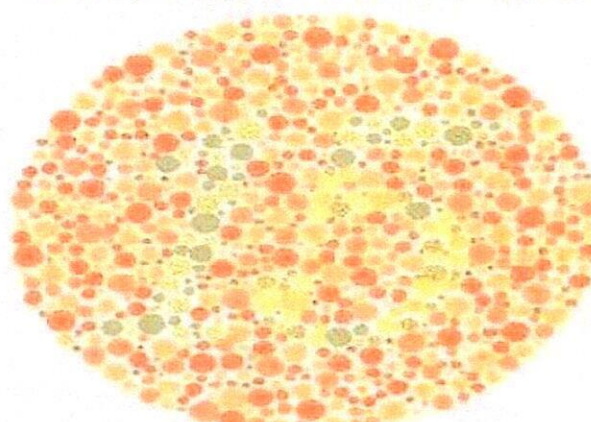
ISHIHARA COLOR BLINDNESS TEST PLATE 5



ISHIHARA COLOR BLINDNESS TEST PLATE 3



ISHIHARA COLOR BLINDNESS TEST PLATE 6

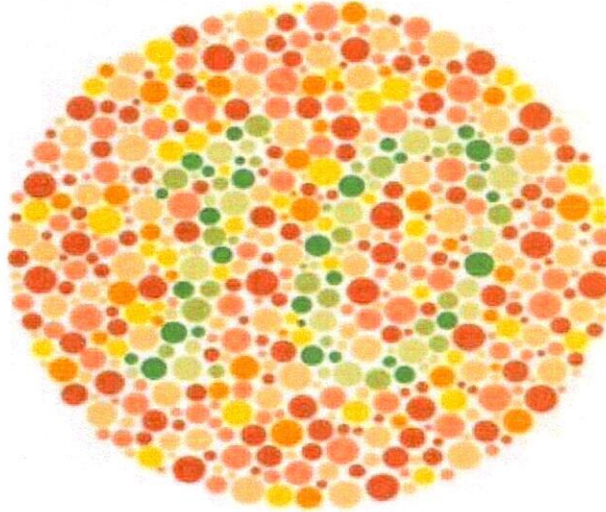






**COLOR BLIND TEST**

**ISHIHARA COLOR BLINDNESS TEST PLATE 7**



**ANSWERS:**

PLATE 1: \_\_\_\_\_ PLATE 3: \_\_\_\_\_ PLATE 5: \_\_\_\_\_ PLATE 7: \_\_\_\_\_

PLATE 2: \_\_\_\_\_ PLATE 4: \_\_\_\_\_ PLATE 6: \_\_\_\_\_

**NAME AND ID NUMBER**

**TITLE AND SECTION**

**DATE**

**MED. TECH.:** \_\_\_\_\_

**REVIEWED BY:** \_\_\_\_\_

**APPROVED BY:** \_\_\_\_\_