



SAUDI DIPLOMA TRAINING PROGRAM

BLOOD BANK DIPLOMA

Final Written Examination

Examination Format:

The Saudi subspecialty fellowship and diplomas final written examination shall consist of one paper with 80-120 Single Best Answer MCQs. Up to 10% unscored items can be added for pretesting purposes.

Passing Score:

The passing score is 70%. However, if the percentage of candidates passing the examination before final approval is less than 70%, the passing score must be lowered by one mark at a time aiming at achieving 70% passing rate or 65% passing score whichever comes first. Under no circumstances can the passing score be reduced below 65%.



Suggested References:

1. Harmening, D.M. (2012). Modern Blood Banking and Transfusion Practices (6th ed.). Philadelphia, PA: F.A.Davis Company.
2. Fung MK, Eder AF, Spitalnik SL, Westhoff CM (eds). Technical Manual. 19th. Bethesda, MD: AABB Press

Note:

This list is intended for use as a study aid only. SCFHS does not intend the list to imply endorsement of these specific references, nor are the exam questions necessarily taken solely from these sources.

Blueprint Outlines:

No.	Sections	Percentage
1	Blood Donor Management	15%
2	Aphaeresis	10%
3	Blood Components	15%
4	Transfusion-transmitted diseases (TTD)	10%
5	Basic and Advanced Immunohematology	25%
6	Special Transfusion Preparation and Management	15%
7	Organization and Management of Transfusion Services	5%
8	Continuous Quality Management	5%
Total		100%

Note:

- Blueprint distributions of the examination may differ up to +/-5% in each category.
- Percentages and content are subject to change at any time. See the SCFHS website for the most up-to-date information
- Research, Ethics, Professionalism, and Patient Safety are incorporated within various domains.

1- Blood Donor Management

- Selection of Allogeneic Blood Donors
- Autologous and directed donation
- Whole Blood Collection
- Adverse donor reactions
- Donor deferral and counseling

2- Aphaeresis

- Apheresis donor selection and monitoring
- Instruments and systems for donor apheresis collections
- Indications and management of therapeutic aphaeresis
- Principles and indications of hematopoietic stem cell transplantation
- Collection, processing, and storage of hematopoietic stem cell

3- Blood Components

- Blood component preparation
- Blood component handling, storage, and modification
- Blood component quality control

4- Transfusion-transmitted diseases (TTD)



- Principle of testing procedures (serology & NAT)
- Implications of reactive results (donor deferral, re-entry, and lookback)
- Transfusion-transmitted infectious viral and parasitic agents
- Bacterial contamination of blood components
- 5- Basic and Advanced Immunohematology**
- Basic immunology
- Antigen-antibody reaction
- Blood group genetics
- Blood group systems
- Pre-transfusion testing
- Antibody detection and identification
- Direct antiglobulin test (DAT)
- Platelet, HLA, and Granulocyte Antigens and antibodies
- 6- Special Transfusion Preparation and Management**
- Clinical indications of blood components transfusion
- Administration of blood components
- Components modification (e.g., irradiation, washing, freezing, and pathogen reduction)
- Hemostatic and thrombotic disorders
- Transfusion in Hemoglobinopathies
- Management of transfusion adverse reactions
- Massive transfusion
- Haemolytic disease of foetus and newborn (HDFN)
- Transfusion Support for Hematopoietic Stem Cell Transplant Recipients
- 7- Organization and Management of Transfusion Services**
- Management of blood banks and transfusion services
- Blood components Inventory management
- Blood Utilization Auditing
- Hemovigilance
- Management of facilities, work environment, and safety in blood bank
- Patient blood management (PBM)
- 8- Continuous Quality Management**
- Quality concepts (QC, QA, QM, and GMP)
- Quality Management System Essentials
- Process Improvement and the Quality Management System

Example Questions

EXAMPLE OF K2 QUESTIONS

Question 1

A 35-year-old woman presented to Emergency Department with a history of bleeding and severe anemia. The treating physician requested a transfusion of 2 units of red cells. Her ABO typing results are shown in the following blood bank tests (see lab results).

Blood Bank Test-1:

ABO Results			
Forward grouping (Patient Cells)		Reverse grouping (Patient Plasma)	
Anti-A	Anti-B	A1 cells	B cells
4+	0	1+	4+

Blood Bank Test-2:

Anti-A1 Lectin test		
Anti-A	Anti-A1 Lectin	Control
4+	0	0

What would be the most likely cause of this ABO discrepancy?

- A. A1 subgroup
- B. A2 subgroup
- C. Bombay phenotype
- D. Cold-reactive autoantibodies