BMTCN® Test Content Outline

I. Foundations of Transplant - 19%
   A. Basic concepts of transplantation
      1. Hematopoietic cell lineage and function
      2. Immune system and function
      3. Histocompatibility
      4. Cellular goals of therapy (e.g., graft-versus-tumor effect, hematologic/immune reconstitution)
   B. Hematologic indications for transplantation (malignant and non-malignant)
   C. Types of transplants
      1. Autologous
      2. Allogeneic
         a. Matched related donors (MRDs)
         b. Matched unrelated donors (MURDs)
         c. Mismatched unrelated donors
         d. Umbilical cord
         e. Haploidentical
      3. CAR-T
   D. Sources of stem cells
      1. Peripheral blood
      2. Bone marrow
      3. Umbilical cord
   E. Recipient suitability and evaluation
   F. Recipient education
   G. Caregiver education
   H. Donor selection, care, and education

II. Transplant Process and Infusion - 17%
   A. Cellular therapy product collection and storage
   B. Stem cell transplant product mobilization, collection, harvest, and storage
   C. Conditioning / preparative regimens
      1. Intensity of therapy
      2. Chemotherapy
      3. Radiation therapy
      4. Biotherapy
      5. Immunotherapy
      6. Targeted therapies
   D. Management of acute complications related to preparative regimens
   E. Cellular infusion
      1. Fresh vs. cryopreserved
      2. Infusion management
      3. Hematologic compatibilities
   F. Cellular therapies (e.g., donor lymphocyte infusion, CAR T)
III. Early Post-Transplant Management and Education - 21%
   A. Immunosuppressive therapy
   B. Acute graft-versus-host disease (GVHD)
   C. Infection prevention and management
   D. Sepsis
   E. Hematologic (e.g., engraftment, pancytopenia, transfusion support)
   F. Immune reconstitution (e.g., engraftment syndrome, cytokine release syndrome)
   G. Nutritional support
   H. Acute system specific complications (e.g., veno-occlusive disease; gastrointestinal)
   I. Graft rejection or failure
   J. Chimerism
   K. Symptom management for alterations in physiologic function (e.g., pain, nausea, vomiting, fatigue)

IV. Late Post-Transplant Management and Education - 20%
   A. Chronic graft-versus-host disease (GVHD) (e.g., medical management, photopheresis)
   B. System-specific late effects (e.g., bronchiolitis obliterans, cataracts, infertility)
   C. Infection prevention and management (e.g., immunizations)
   D. Disease relapse
   E. Subsequent malignancy
   F. Follow-up care and milestone visits

V. Quality of Life - 11%
   A. Navigation and coordination throughout the continuum
   B. Psychosocial (e.g., coping, family and caregiver support)
   C. Health promotion and maintenance
   D. Sexuality
   E. Cultural and spiritual competence
   F. Survivorship
   G. Palliative care
   H. End-of-life care (e.g., hospice, legacy building)

VI. Professional Performance - 12%
   A. Standards of nursing care
   B. Standards of professional performance
      1. Patient and donor advocacy
      2. Education
      3. Evidence-based practice and research
      4. Quality improvement
      5. Communication
      6. Leadership
      7. Interdisciplinary collaboration
      8. Self-appraisal and professional development
      9. Resource utilization
10. Environmental health and safety (e.g., personal protective equipment, safe handling)

C. Ethical and legal considerations (e.g., informed consent, advance directives, confidentiality, professional boundaries, documentation)

D. Accreditation (e.g., FACT, The Joint Commission)

E. Self-care