TEST QUESTIONS

1. What health outcome is the major cause of death in patients with diabetes mellitus (DM)?
   - a. renal disease
   - b. cardiovascular disease
   - c. infectious diseases
   - d. diseases of the eye

2. What do the authors say is currently considered the best method for measuring time-averaged means of glycemia?
   - a. fasting plasma glucose
   - b. two-hour glucose tolerance test
   - c. random plasma glucose
   - d. HbA1c

3. What disease association(s) have past studies observed in type 2 DM patients with preserved renal function and glucose variability?
   - a. retinopathy
   - b. neuropathy
   - c. nephropathy
   - d. all of the above

4. Current literature regarding the effect on HbA1c variability and cardiovascular events in patients with type 2 DM is conflicting and limiting.
   - a. True
   - b. False

5. The study used extensive data from what source?
   - a. KMUHRD
   - b. KMHCRD
   - c. KFMHRD
   - d. KMHURD

6. The study population were patients with type 2 diabetes on hypoglycemic agents and with an HbA1c level of less than or equal to 6.5 percent.
   - a. True
   - b. False

7. What was the length of time that the patients were enrolled in the study?
   - a. six months
   - b. one year
   - c. three years
   - d. five years

8. Exclusion criteria included all but
   - a. HbA1c > 5.5 percent
   - b. use of insulin dependent and independent agents
   - c. mortality
   - d. type 1 diabetes

9. The study subjects were divided into two groups based on
   - a. glomerular filtration rate
   - b. prior history of a cardiovascular event
   - c. HbA1c level
   - d. none of the above

10. HbA1c variability was determined by
    - a. two HbA1c measurements
    - b. three HbA1c measurements
    - c. five HbA1c measurements
    - d. ten HbA1c measurements

11. The study investigated its subjects over a follow-up period of
    - a. 1.3 years
    - b. 3.3 years
    - c. 6.3 years
    - d. 9.3 years

12. Results of the study in subjects with an estimated GFR >/= 60 showed a lower risk of cardiovascular events with greater HbA1c variability.
    - a. True
    - b. False

13. The post hoc study, Diabetes Control and Complications Trial, concluded that
    - a. there are other risk factors besides HbA1c that contribute to the risk of complications
    - b. there are no other risk factors besides HbA1c that contribute to the risk of complications
    - c. renal function is the main dependent factor that contributes to risk of complications
    - d. none of the above

14. According to the study by Risso et al., a mechanism that causes cardiovascular damage by glycemia fluctuations is due to
    - a. retinopathy
    - b. lack of renal function
    - c. damage to endothelial cells
    - d. all of the above

15. One important finding in the present study is that cardiovascular variability is not observed in patients with
    - a. moderate-to-advanced chronic kidney disease (CKD)
    - b. normal renal function
    - c. severe retinopathy
    - d. none of the above

16. In patients with CKD, the prognostic role of HbA1c variability remains unclear because the HbA1c level may be altered by
    - a. anemia
    - b. the use of erythropoiesis-stimulating drugs
    - c. both a. and b.
    - d. age of patient

17. HbA1c formation is reduced in patients with CKD with a RBC shortened lifespan by
    - a. one to ten percent
    - b. 15 to 30 percent
    - c. 30 to 70 percent
    - d. 50 to 90 percent

18. Aggressive glycemic control in patients with CKD may be beneficial in cardiovascular disease prevention.
    - a. True
    - b. False