

**Example of the Role Model answer**

**Q1: Define the following key terms: (chose any four (4) ) -4 points**

**Insulin:**

*A hormone released from the  $\beta$ -cells of the pancreas that enables cells to metabolize and store glucose and other fuels.*

**Type 1 Diabetes Mellitus:**

*Type of diabetes that usually occurs in persons younger than 30 years of age but can occur at any age; previously known as insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes.*

**Q2: Fill in the Blanks with the Suitable Term: 3- points**

- 1- *Gestational diabetes mellitus (GDM) is defined as any degree of glucose intolerance with onset or first recognition during pregnancy.*
- 2- *Hypoglycemia can occur during, immediately after, or many hours after exercise.*

**Q3: True & false; correct the wrong statement : 3- points**

1- *When the blood vessel diameter is increased, the resistance and blood pressure increases too. ( F ) ..... **Decreased***

2- *Consuming a diet rich in potassium has been shown to lower blood pressure. ( T )  
.....*

**Q4: MCQ.s : 6- points**

1- Which of the following is NOT a microvascular disease associated with hyperglycemic patients?

- a. Retinopathy
- b. Neuropathy
- c. Nephropathy
- d. Peripheral vascular disease

2- If a patient with type 2 DM receives a nutrition prescription for a 2000 kcal diet, which of the following should be used?

- a. 50% carbohydrate, 20% protein, 30% fat
- b. 40% carbohydrate, 30% protein, 30% fat
- c. 20% carbohydrate, 40% protein, 40% fat
- d. A macronutrient distribution individualized based on the patient's metabolic profile

**Q5. Wright short note about the following: 4- points**

1- Wright a short note about Trans Fatty Acids.

*Trans-fatty acids are produced in the hydrogenation process used in the food industry to increase shelf life of foods and to make margarines, made from oil, firmer. The AHA recommends no more than 1% of calories (about 1-3 g/day) from trans-fatty acids. Most trans-fatty acids intake comes from particularly hydrogenated vegetable oils.*

**Q: Bonus Questions: (chose only one question to answer) – 2 points**

1- List six (6) important points in the Medical Nutrition Therapy (MNT) for Atherosclerosis.

**Nutrition Management**

- TLC dietary pattern – 7% kcal from SFA
- AHA dietary pattern -7% kcal from SFA
- DASH dietary pattern
- Weight reduction if needed
- Increase dietary fiber to 25-30 g/day or more.

- *Add stanols and sterols (2-3g/day) in multiple doses.*
- *Add omega-3 fats*
- *Add soy protein*
- *Add fruits and vegetables for antioxidants*
  - Reduce dietary cholesterol-<200 mg/day*