

DIABETES & ITS COMPLICATIONS

POST - TEST

Name :

City :

Email :

Q1. According to the latest data given by the International Diabetes Federation (IDF), the prevalence of diabetes is likely to reach an estimate of _____ by the year 2045.

- ☐ A) 629 million
- ☐ B) 640 million
- ☐ C) 540 million
- ☐ D) 720 million

Q2. By the time of clinical diagnosis of type 2 diabetes, about _____ of beta-cell function is lost.

- ☐ A) 10–20%
- ☐ B) 20–30%
- ☐ C) 50–80%
- ☐ D) 30–40%

Q3. All of the following form part of triumvirate in pathophysiology of type 2 diabetes, except:

- ☐ A) Beta-cell failure
- ☐ B) Insulin resistance in muscle
- ☐ C) Insulin resistance in liver
- ☐ D) Increased glucagon secretion by alpha-cells

Q4. According to recent ADA 2019 standards of medical care in diabetes, which of the following represent criteria for identification of prediabetes?

- ☐ A) FPG 100 mg/dL to 125 mg/dL
- ☐ B) 2-h PG in the 75-g OGTT 140 mg/dL to 199 mg/dL
- ☐ C) HbA1c 5.7–6.4%
- ☐ D) Any of the above

Q5. Which of the following is not included in the ADA 2019 criteria for the diagnosis of diabetes?

- ☐ A) FPG ≥ 126 mg/dL
- ☐ B) 2-h PG ≥ 200 mg/dL during OGTT
- ☐ C) A1c $\geq 6.5\%$
- ☐ D) A random plasma glucose ≥ 150 mg/dL in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis.

Q6. All of the following are correct for HbA1c testing, except:

- ☐ A) It provides an indirect measure of average blood glucose levels, and is equally appropriate to FPG and 2-h PG for diagnostic testing.
- ☐ B) Recent ADA 2019 recommendations mention HbA1c threshold value of $\geq 6.5\%$ for the diagnosis of diabetes
- ☐ C) This HbA1c cut-off ($\geq 6.5\%$) has high sensitivity, and can diagnose diabetes in more than 70% of the diabetes cases identified collectively using A1c, FPG, or 2-h PG.
- ☐ D) Advantages of A1c testing include convenience, applicability, reproducibility and standardization of measurement, which appear to have facilitated its wide-spread use.

Q7. Less stringent A1c goals ($< 8\%$) may be appropriate for all of the following patients with diabetes, except:

- ☐ A) Patients with long life expectancy
- ☐ B) Patients with history of severe hypoglycemia
- ☐ C) Patients with advanced micro or macrovascular complications
- ☐ D) Patients with long-standing diabetes having difficulty in achieving glycemic goal despite intensive management.

Q8. Pathway/s implicated in hyperglycemia and oxidative stress mediated development of diabetes complications include:

- ☐ A) Polyol pathway flux and overactive hexosamine pathway
- ☐ B) Protein kinase C activation
- ☐ C) Increased production of advanced glycation end products (AGEs)
- ☐ D) All of the above

Q9. Diabetes patients taking metformin should undergo vitamin B12 assessment:

- ☐ A) Annually
- ☐ B) Bi-monthly
- ☐ C) Quarterly
- ☐ D) Every six months

Q10. Benfotiamine, a thiamine derivative with anti-AGE effects, is a potential therapeutic adjuvant in the prevention and treatment of diabetes related vascular and neuronal complications. This may be partly attributable to which of the following property/properties of the molecule:

- ☐ A) Neurotropic
- ☐ B) Cardio and angioprotective
- ☐ C) Cytoprotective
- ☐ D) All of the above.

Signature:

Date:

For official use

Name of MR: HQ: