

**THE TN.DR.MGR MEDICAL UNIVERSITY**  
**REFRESHER COURSE IN DIABETOLOGY**  
**ASSESSMENT TEST –JUNE 2016**

**Time : 1 Hour**

**Marks : 60**

**Multiple choice questions**

1. Hyperglycemia induced tissue damage is due to all except
  - A. Increased Aldose reductase activity.
  - B. Increased formation of advanced glycation end products.
  - C. Increased formation of reactive oxygen species.
  - D. Decreased Protein kinase C activation.
2. First stage in Diabetic Nephropathy is
  - A. Silent stage
  - B. Incipient stage
  - C. Hyperfiltration stage
  - D. Microalbuminuria stage
3. True about diabetic retinopathy is
  - A. Affects primarily arteries and arterioles
  - B. Pregnancy can improve DR
  - C. Hypertension contributes to progression
  - D. ACE inhibitors do not retard the progress
4. Self Monitoring of Blood Glucose (SMBG) is not recommended for -
  - A. Pregnancy
  - B. Intensive phase of Tuberculosis treatment
  - C. Acute illness
  - D. Brittle Diabetes
5. Lactic acidosis means a serum lactate level of
  - A. > 5mmol / L
  - B. > 3 mmol / L
  - C. > 1 mmol / L
  - D. > 0.5 mmol / L

6. Options in Management of Uremic stage of Diabetic Nephropathy are all except
- A. Hemodialysis
  - B. Protein restriction
  - C. Renal Transplantation
  - D. Peritoneal dialysis
7. Treatment of choice in vitreous haemorrhage
- A. Vitrectomy
  - B. Photocoagulation
  - C. Anti VEGF drugs
  - D. PKC inhibitors
8. Hypoglycemia unawareness is seen in
- A. Gestational Diabetes Mellitus
  - B. Long standing Type 1 Diabetes Mellitus
  - C. Diabetes with liver disease
  - D. Diabetes patients while sleeping
9. Key features of dyslipidemia in Type 2 Diabetes Mellitus are:
- A. Increased small dense low-density lipoprotein cholesterol (LDL)
  - B. Increased triglycerides
  - C. Low High-Density Lipoprotein cholesterol (HDL)
  - D. All of the above
10. Which of these statements is not true with regard to combination therapy?
- A. Statin can be combined with fibrates to treat mixed dyslipidemia
  - B. Among fibrates, fenofibrate is preferred to gemfibrozil when used as combined therapy with statin
  - C. Among fibrates, gemfibrozil is preferred to fenofibrate when used as combined therapy with statin.
  - D. None of the above.
- 11 . Post hypoglycemic hyperglycemia is seen in
- A. Brittle diabetes
  - B. Dawn phenomenon
  - C. NPH insulin effect wearing off
  - D. Somogyi phenomenon.

12. Mechanisms of tissue damage in diabetic neuropathy are all except
- A. Polyol sorbitol pathway
  - B. Free fatty acids accumulation
  - C. Myoinositol pathway
  - D. Advanced glycation end products.
13. First sensation lost in Diabetic peripheral sensory neuropathy is
- A. Touch
  - B. Position
  - C. Vibration
  - D. Pain
14. Drug not useful in acute symptomatic relief of painful neuropathy is
- A. Pregabalin
  - B. Tramadol
  - C. Epalrestat
  - D. Topical capsaicin
15. Earliest ophthalmological evidence of Diabetic Retinopathy is
- A. Soft exudates
  - B. Hard exudates
  - C. Microaneurysm
  - D. Venous beading
16. Which is not a feature of Diabetic Neuropathy foot
- A. Cracks and ulcers
  - B. Weak peripheral pulses
  - C. Loss of touch and pain sensation
  - D. Deformity of foot
17. Which of the following is decreased in obesity
- A. TNF -Alpha
  - B. Resistin
  - C. Leptin
  - D. Adiponectin

18. Symmetric peripheral polyneuropathy can occur in
- A. Insulin neuritis
  - B. Painful autonomic neuropathy
  - C. Diabetic sensorimotor polyneuropathy
  - D. All of the above.
19. Regarding glycemic control and monitoring in Diabetic patients with Tuberculosis which is false?
- A. Insulin is a must in both intensive and continuation phase.
  - B. Increased dose of OHAs may be needed because of interaction with rifampicin.
  - C. Patients with microvascular complications need close monitoring.
  - D. Addition of pyridoxine is recommended.
20. Basic underlying mechanism in NAFLD is?
- A. Insulin resistance
  - B. Increased fat intake in diet
  - C. Preexisting hepatitis
  - D. Familial tendency.
21. Fructosamine – false is
- A. Indicates the glycemic status of last 1-3 weeks
  - B. Not useful in GDM
  - C. Not influenced by anaemia and hypoproteinemia
  - D. Normal value is upto 2.8 mmol/L
22. First line drug in diabetes and systemic hypertension coexisting condition is
- A. Diuretics
  - B. Calcium channel blockers
  - C. ACE Inhibitors/ARB
  - D. ARB + diuretics
23. Gestational glucose intolerance is a postprandial blood sugar value of (in mg/dL)
- A. 120-140
  - B. 140-199
  - C. 120-199
  - D. 90-140

24. Antidiabetic drug which is safely used in pregnancy but lacking large studies for clinical use is
- A. Glipizide
  - B. Sitagliptin
  - C. Saroglitazar
  - D. Glyburide
25. Which disease has proven association with diabetes
- A. Hepatitis-B
  - B. AIDS
  - C. TB
  - D. Pneumococcal infection
26. Test to differentiate psychogenic and organic causes of erectile dysfunction is
- A. Papaverin injection test
  - B. Testicular sensation test
  - C. Nocturnal penile tumescence test
  - D. Penile biothesiometry
27. Adverse effects of beta blockers in DM patients with heart failure are all except
- A. Peripheral vasodilatation
  - B. Loss of Glycemic control
  - C. Increased insulin resistance
  - D. More atherogenic lipid profile
28. Consequences of Diabetes on pregnancy is increased occurrence of all except
- A. Hypoglycemia
  - B. Diabetic keto acidosis
  - C. Oligohydramnios
  - D. Diabetic Gastropathy
29. The increased Incidence of Rhinocerebral mucormycosis in DKA patients is due to
- A. Increased Free Magnesium
  - B. Increased free Copper
  - C. Increased free Iron
  - D. Increased free Selenium

30. Which is not normally seen in Diabetic Gastroparesis?
- A. Nausea
  - B. Diarrhoea
  - C. Vomiting
  - D. Post prandial fullness.
31. Which is associated with a significant risk for CHF?
- A. Microalbuminuria
  - B. Macroalbuminuria
  - C. Both
  - D. None of the above
32. Most common organism causing Aymptomatic Bacteruria?
- A. Proteus vulgaris
  - B. Klebsiella pneumonia
  - C. Escherichia coli
  - D. None of the above
33. Which is false regarding IBS?
- A. Most common reason for referral to Gastroenterologist
  - B. Diabetics experience IBS symptoms significantly more frequently than general population.
  - C. Abdomen pain localised to periumbilical / Left Hypochondriac region.
  - D. None of the above.
34. Which Insulin analogue is not preferred in Gestational Diabetes Mellitus?
- A. Lispro
  - B. Aspart
  - C. Detemir
  - D. Glulisine
35. Gold standard test for diagnosing delayed gastric emptying is?
- A. Barium meal follow
  - B. Gastric scintigraphy
  - C. Manometric studies
  - D. None of the above.

36. Drug of choice for NASH (Non alcoholic Steatohepatitis) is?
- A. Pioglitazone
  - B. Metfomin
  - C. SGLT 2 inhibitors.
  - D. Statins
37. Mechanisms of hypertension in metabolic syndrome include all except
- A. Decreased renal sodium and water reabsorption
  - B. Sympathetic hyperactivity
  - C. Decreased synthesis of vasodilatory prostaglandin
  - D. Reduced NaK ATPase activity
38. Loss of 1kg of body weight reduces mean arterial blood pressure by
- A. 4 mm of Hg
  - B. 2 mm of Hg
  - C. 1 mm of Hg
  - D. 5 mm of Hg
39. Third generation betablockers are all except
- A. Carvedilol
  - B. Atenolol
  - C. Nebivolol
  - D. Bisoprolol
40. IADPSG criteria for GDM include
- A. FPG95,1hr180,2hr155
  - B. FPG92,1hr180,2hr153
  - C. FPG90,1hr180,2hr153
  - D. FPG90,1hr180,2hr155
41. Insulin gene is located in the region of
- A. Short arm of chromosome 11
  - B. Long arm of chromosome 11
  - C. Short arm of chromosome 13
  - D. Long arm of chromosome 13

42. Type A Insulin resistance is due to
- A. Anti-Insulin antibodies
  - B. Anti-Insulin receptor antibodies
  - C. Lipoatrophic disease
  - D. Acromegaly
43. All are true about amylin except,
- A. Co secreted with insulin from pancreatic beta cells
  - B. Increase rate of gastric emptying
  - C. Inhibiting glucagon secretion after meal ingestion
  - D. Induces post prandial satiety
44. Maturity onset of Diabetes of the Young(MODY)
- A. Autosomal recessive, Diabetes before the age of 25, Two generations affected
  - B. Autosomal dominant, Diabetes after the age of 25, Three generations affected
  - C. Autosomal recessive, Diabetes after the age of 25, Two generations affected
  - D. Autosomal dominant, Diabetes before the age of 25, Three generations affected
45. Fibrocalculus pancreatic diabetes (FCPD) all are true except,
- A. Age of onset below 30 years, BMI<19
  - B. Patient living in tropics with history of malnutrition in childhood
  - C. Requiring low dose of insulin and proneness to ketosis
  - D. Requiring high dose of insulin and lack of proneness to ketosis
46. Type 1 Diabetes all are false, except,
- A. Absence (or) poor response of glucagon stimulated 'C' peptide levels
  - B. High residual beta cell function
  - C. Positive genetic association with HLA-DR6
  - D. Type 1B due to autoimmune cause
47. Body mass index(BMI)- True statement is
- A.  $BMI = \frac{Height(m^2)}{Weight(kgs)}$
  - B. 18.5-23 is normal range
  - C. 18.5-25 is normal range
  - D. 25-30- Obese



48. Following are true about first class protein except,
- A. Most of the animal proteins have high biological value
  - B. Egg, mutton, fish, chicken
  - C. Milk, curd, panneer
  - D. Oats, barley, ragi
49. Artificial sweetening agents
- A. Caloric sweeteners are also called as non-nutritive sweetener
  - B. Aspartame is recommended in pregnancy
  - C. Consumption will decrease triglyceride level
  - D. Maximum permitted consumption range from 2-4 mg/kg/day
50. Contraindication for sulfonylurea therapy all except,
- A. Insulin dependent Diabetes mellitus
  - B. Allergy to sulfonylureas
  - C. Day of major surgery
  - D. Glibenclamide in pregnant women
51. Mechanism of action of Metformin all are true except,
- A. Anorexogenic effect
  - B. Reduction of excessive hepatic glucose output
  - C. Induction of lipogenesis and FFA availability
  - D. Increased glycogen synthesis
52. Contraindication to the use of metformin all except,
- A. Impaired renal function (eGFR <30)
  - B. Type 1 Diabetes
  - C. 48 hours after IV contrast
  - D. Polycystic ovarian disease
53. All are side effects of pioglitazone except,
- A. Weight gain and fluid retention
  - B. Worsening of cardiac failure
  - C. Euglycemic DKA
  - D. Distal bone fracture

54. Alpha glucosidase inhibitors all are true except,
- A. Blocks the alpha glucosidase enzyme in the brush border of the intestinal epithelium
  - B. Delays the digestion of protein and thus postpones the absorption of aminoacids
  - C. Side effects includes flatulence, diarrrohea and abdominal discomfort
  - D. Miglitol is available as 25mg and 50mg tablets
55. Short acting insulin analogues are all except,
- A. Lispro
  - B. Aspart
  - C. Glulisine
  - D. Detemir
56. Somoygi phenomenon – true statement is
- A. Post hypoglycemic hyperglycemia
  - B. Waning of insulin in the early hours
  - C. Secondary to early morning cortisol surge
  - D. Increase the night dose of insulin
57. Insulin glargine all are true except,
- A. Peakless insulin
  - B. Soluble at pH 4
  - C. Duration of action 10-16 hours
  - D. Long acting insulin analogues
58. Problems arising with insulin therapy following all, except
- A. Hypoglycemia
  - B. Weight loss
  - C. Lipoatrophy and lipohypertrophy
  - D. Insulin allergy
59. Incretin based therapy
- A. Stimulates insulin secretion in glucose dependent manner
  - B. Increase body weight
  - C. Stimulates glucagon secretion
  - D. Stimulates insulin secretion in glucose independent manner

60. SGLT2 inhibitors (sodium glucose co-transporter inhibitors)
- A. Stimulate glucose absorption in proximal convoluted tubule
  - B. Increase body weight
  - C. Inhibit glucose absorption in proximal convoluted tubule
  - D. Reduce genital infections.

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