

**IDA REGISTERED DIETITIAN EXAMINATION**  
**Paper II- (Nutrition, Dietetics and Food Service Management)**  
**9<sup>th</sup> February 2019**

Time: 2 & 1/2 Hours

Marks: 100

Answer All Questions

SECTION A - (20 Marks)

I. Answer all the questions ( 10 x 2 = 20 marks)

1. Write a short note on Formula 75

2. Expand HFSS & SOFA?

3. The 3 E s of safety

4. Mention the Calorie content of

a. 3 Marie gold biscuits

b. One raw Egg white (30g) from an egg weighing approximately 50g

5. Write the formula to calculate glycemic load of a product and mention the values indicating low, medium and high Glycemic Load v

6. The risk of Chronic Kidney Disease is HIGHER in

a. breast fed infants

b. formula fed infants

c. Gestational Diabetes Mellitus

d. goats milk fed infants

7. Gluten free

a. <200mg/kg

b. <20mg/kg

c. <5g/kg

d. 4 g/kg

8. Dextrose monohydrate provides

a. 4.7 kcal/gm

b. 3.7 kcal/gm

c. 3.9 kcal/gm

d. 3.4 kcal/gm

9. Minimum calorie prescription for nonobese Type 2 dm (ADA 2018)

10. Calories of dietary fiber /gm

**SECTION B ---- (50 Marks)**

II. Answer all the questions.

A. MCQ (5× 1=5 Marks)

1. Melamine ware and soil contains
  - i) Copper ii) Selenium iii) Iron iv) Lead
2. RDA of Sodium and Potassium for Normal Adult; (New IFCT)
  - i) 5g & 4g ii) 2300mg & 4700mg iii) 2500mg & 4000mg iv) 2300mg & 2500mg
3. In a severely undernourished patient aggressive feeding can lead to
  - i) Respiratory Failure ii) Cardiac failure iii) Refeeding Syndrome iv) None
4. Loss of Taste is a common symptom post radiation therapy in those suffering with cancer of the tongue
  - i) Hypogeusia ii) Dysgeusia iii) Xerostomia iv) Ageusia
5. The protein content of 200ml Cow's milk
  - i) 3.2gms ii) 6.4gms iii) 6.2gms iv) 5.4gms.

B. Explain the following : (5× 2=10 Marks)

1. Write a short note on
  - a. Swasth Bharat Yatra "Aaj Se Thoda Kum Campaign" recently launched by FSSAI
  - b. Lark and owl syndrome
2. Give the full form PES Statement, STAMP, HGS & ADI
3. Principles of Nutrition management of Diverticulosis
4. Write short notes on Vegan Diet
5. Work Simplification

C. Write "true" or "false" for the following statements:(5× 1=5 Marks)

1. Roux-en-Y is a Malabsorptive & restrictive type of Bariatric Surgical procedure
2. Alcohol masks hypoglycemia and worsens retinopathy
3. Green leafy vegetables is not an important vegetarian source of omega three Fatty Acids
4. One of the symptoms post gastrectomy and SBS is diarrhea
5. Millets (not sprouted/fermented /roasted) are goitrogenic

D. Fill in the blanks: (5× 1=5 marks)

- a. Sodium free or salt free items have less than \_\_\_\_ milligrams of sodium per serving

- b. Ideal % age of Saturated Fatty Acid Distribution of Total Energy Intake from total fats in diabetic population suggested is \_\_\_\_\_
- c. \_\_\_\_\_ is one of the United States Food and Drug Administration approved Non-Nutritive Sweeteners which crosses the placenta when consumed during pregnancy, hence contraindicated in Gestational Diabetes Mellitus
- d. \_\_\_\_\_ drip method of feeding is ideal in post pyloric feeding.
- e. \_\_\_\_\_ is a common postoperative complication of head and neck surgeries.

E. Explain the following: (5×5= 25 marks)

1. Low Carbohydrate High Fat Diet
2. Write short notes on Enteral Nutrition guidelines in critically ill with reference to Initiation of enteral nutrition and formula selection
3. Milk Adulteration
4. Nutrition management in Nephrotic Syndrome (Adult)
5. Carbohydrate Counting

### **SECTION C - (30 Marks)**

III. Answer **ANY TWO** of the following: (2 × 15 = 30 marks)

1. 49-year-old Mr. X previous history of Cancer of Tongue and Type 2 Diabetes Mellitus on Naso Gastric feeding for past 2 weeks. His was on isocaloric feeds 1000 kcals/day. Dark colored urine. On antihypertensive and fenofibrates previously. Weight loss of 16 kgs from the time of diagnosis in the past 3 months. Referred to Nutritionist for expert advice.

Ht. 162 cm	Blood Pressure	100/70 mmHg
Wt. 46 kgs	Serum Triglyceride	70 mgs/dl
HbA <sub>1c</sub> 5 %	Serum Albumin	2.7 gm%
Fasting Blood Sugar 70 mgs/dl	Serum Potassium	5.3 mEq/L
Post Prandial Blood Sugar 100 mgs/dl	Serum Sodium	145 mEq/L

Normal Blood Urea and S Creatinine

Comment on the Nutritional status. Which assessment tool is ideal in this case? 2 marks

What will be the nutritional care plan with nutrition goals for this patient? 4 marks

Write the normal biochemical values for the Identify the abnormal values 2 marks

Give diet plan with calculations with necessary justification 7 marks

2. Plan a diet for a 25-year female, badminton player with Type 1 diabetes – height 5 ft 1 inches, weighing 45 kg. She on Premeal/ Bolus (Short acting Insulin Analogue) 12 U Thrice daily and 8 U of Insulin Glargine at bed time.

Her post lunch sugar is 275mgs/dl

90 mints practice thrice a week

Plan and calculate a day's diet for her	8 marks
Give reasons and justification for your choice of meal timings and foods.	3 marks
What instructions you give her regarding her exercise	1 marks
Draw the onset of action, peak and duration of action of Short acting Insulin	1 mark
Analogues, Mention the peak action of glargine	
List two fruits with low Glycemic Index and Glycemic Load with values	2 marks

3. 59-year-old Mrs. X was admitted with uremic symptoms with fluid overload and was advised emergency peritoneal dialysis. Followed by AV fistula for regular Hemodialysis. Her caloric intake was hardly 500kcal/day. Her urine output was 400 ml/day. Referred to Nutrition Out Patient Department for dietary advice.

Height	156 cm
Post Dialysis Weight	49 kg
Blood Urea Nitrogen	55 mg/dl
Serum Creatinine	16.9 mg/dl
Serum Sodium	149 mEq/L
Serum Potassium	5.7 mEq/L
Glomerular Filtration Rate	<15 mL/min/1.73m <sup>2</sup>
Blood pressure	180/110mmhg

Write the diagnosis.	½ mark
How will you prevent tissue catabolism?	½ mark
How will you correct the fluid overload through Medical Nutrition Therapy?	1 mark
Write the normal values.	2 marks
Write the nutritional goals & nutrition prescription	2 marks
Plan and calculate a day's diet for Mrs. X (Maintenance Hemo Dialysis) with the help of Renal exchange list	9 marks

OR

Mr. Z A 35-year-old man, 5'9" in height and weighing 52 kgs, patient of Crohn's Disease for 12 years, with severe inflammatory patches in the esophagus, proximal jejunum and most of the ileum. His ileum has been resected totally a week ago and a jejunostomy tube placed. He is on oral and ostomy feedings. Due to severe pain while swallowing, he is only able to consume 900 Kcal on an average orally. He complains of Bone pain and myalgia as well as Sciatica. He also complains of unformed malodorous stools. He was on steroid therapy to curb inflammation.

His Biochemical parameters are as follows:

BP- 140/80 mm Hg. FBS- 130 mg% Serum albumin – 3 gm% Serum sodium – 130 Meq /lt. Hb – 9 gm%.

1. Write: ( 3Mks )

- Medical Diagnosis
- Nutritional Diagnosis
- Overall goals of therapy.

2. Prescribe the energy, macro and micronutrient intakes. (2)

3. Suggest the principles of Medical Nutrition Therapy. List foods allowed & Not allowed -5

4. Plan the ostomy feed according to the initial and final goal, justifying the feeds and /or formulae. (5)