Name:

**Enrolment No:** 



## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES School of Health Sciences

## END Semester Examination (ODD SEM) December 2021

Course: Physiopathology in Nutrition Related Disorders Semester: III Program: BSc FND Course Code: HSCC2009

Time: 03 hrs. Max. Marks: 100

## **Instructions: Attempt all Sections.**

	SECTION A		
S. No.	MCQs or True and False or Fill in the blanks or one line answer	30 Marks	CO
1	Deficiency of which vitamin has been associated with enamel defects and increased risk of dental caries? a. Vitamin A b. Folic acid c. Vitamin C d. Vitamin D	1.5	CO1
2	<ul><li>GERD is the back flow of stomach acid into the esophagus.</li><li>A. True</li><li>B. False</li></ul>	1.5	CO2
3	The autoimmunity in "gluten-sensitive enteropathy" involves plasma cells that produce immunoglobulins,and	1.5	CO3
4	"Dermatitis Herpetiformis" is the clinical symptom of a. Diabetes b. Gluten induced enteropathy c. Lactose intolerance d. Peptic ulcer	1.5	C01
5	<ul> <li>The risk factors for pancreatic cancer includes all except:</li> <li>a. Diabetes mellitus</li> <li>b. Hereditary predisposition</li> <li>c. Smoking</li> <li>d. Acute pancreatitis</li> </ul>	1.5	CO2
6	<ul> <li>Which one of the following statements regarding "copper metabolism" is false?</li> <li>a. The average diet provides 2-5 mg/day (almost 3 times the recommended intake).</li> <li>b. Most dietary copper ends up being excreted.</li> <li>c. Copper is absorbed mainly in the terminal ileum</li> <li>d. The liver utilizes some copper for metabolic needs and excretes excess copper into bile.</li> </ul>	1.5	CO3

7	Which one of the following statements regarding laboratory diagnoses of Wilson's	1.5	
	disease is true? a. Serum caeruloplasmin level is low <20 mg/dL		
	b. Hepatic copper content is high > or =250 $\mu$ g/g dry weight. (Normal < 50 $\mu$ g/g).		
	c. Total serum copper (which includes copper incorporated in caeruloplasmin) in		CO1
	WD is usually decreased in proportion to the decreased caeruloplasmin in the		
	circulation but serum noncaeruloplasmin-bound copper concentration is		
	elevated above 25 $\mu$ g/dL in most		
	d. All of the above		
8	People with GERD should avoid foods and beverages such as	1.5	
	a. Mint, tomatoes and mustard		
	b. Caffeine, alcohol and pepper		CO2
	c. Orange grapefruit and vinegar		
	d. All of the above		
9	The thyroid gland produces hormones that regulates	1.5	
	a. Metabolism		
	b. Temperature		CO3
	c. Blood pressure		
	d. Digestion		
10	Weight loss, rapid heart rate, and heat sensitivity are likely symptoms of	1.5	
	a. Hypothyroidism		
	b. Hyperthyroidism		CO1
	c. Thyroid cancer		
	d. All of the above		
11	Gastroparesis is caused by damage or impairment to the nerve that is connected to the	1.5	
	muscles of the stomach. What is this nerve called?		
	a. Vagus nerve		000
	b. Trigeminal nerve		CO2
	c. Frontal nerve		
	d. Digestive nerve		
12	Which of the following etiological factor is responsible for "gall stone"?	1.5	
	a. Obesity		
	b. Sudden loss of weight		CO3
	c. Both a and b		
	d. None of the above		
13	Which of the following term best describe "Hepatitis"?	1.5	
	a. inflammation of the liver	-	
			CO1
			CO1
	c. liver failure		
	d. none of the above		
14	Gastroparesis is caused by damage or impairment to the nerve that is connected to the	1.5	
	muscles of the stomach. What is this nerve called?		
	a. Vagus nerve		CO2
	b. Trigeminal nerve		CO2
	c. Frontal nerve		
	d. Digestive nerve		
15	A positive family history and excess insulin secretion by the pancreas are potential	1.5	
15	The positive fulling instory and excess insuminised effection by the pullereds are potential		CO3

	A. True		
	B. False		
16	Rheumatoid arthritis is an inherited disorder.	1.5	
	A. True		CO1
	B. False		
17	Symptoms of fibromyalgia includes	1.5	
	<ul><li>a. widespread pain</li><li>b. fatigue</li></ul>		CO2
	c. stiffness		02
	d. all of the above		
18	Mention any three causes of Cholecystitis.	1.5	CO3
19	What are the three important causes of Cushing's syndrome?	1.5	C01
20	Which of the following has been associated with peptic ulcers?	1.5	
-	a. <i>Helicobacter pylori</i> , a gram negative bacterium		
	b. <i>H. pylori</i> , a gram positive bacterium		CO2
	c. Campylobacter pylori, a gram positive fungus		
	d. <i>Campylobacter pylori</i> , a gram negative fungus		
	SECTION B		
Q	Short Answer Type Question (5 marks each) Scan and Upload (word limit not more than 80 words per answer)	20 Marks	CO
1	Write important difference between various serotypes of Hepatitis.	5	C01
2	Loss of consciousness and coma are the stage four symptom of "Hepatic encephalopathy". What diagnostic methods are used in this disease?	5	CO2
3	Define "Gluten Induced Enteropathy"? Discuss the role of immunoglobulin in this disease.	2+3	CO2
4	Hyperandrogenism and insulin resistance are the symptoms of which disease? Discuss its pathophysiology.	1+4	C01
	SECTION C 30 marks	1	
Q	Two case studies 15 marks each subsections	30	
		Marks	CO
1	Case Study 1		
	A 42-year-old man has been seen by his family physician for a 5 years history of		
	"heartburn", he has been intermittently taking Pantoprazole–proton pump inhibitor,		
	with some relief. An upper endoscopic examination that was performed recently		
	revealed some reddish discoloration and friability of the lower esophageal region. A biopsy was performed, and the microscopic examination revealed Columnar cells		CO3
	containing goblet cells.	15	CO5
	a. Identify the disease? (1 mark)		
	b. What is a long-term complication of this disease? (3 marks)		
	c. What are the risk factors associated with this disease? (3 marks)		
	d. What is the most likely mechanism of this process? (3 marks)		
	e. Suggest a diet plan for this disease. (5 marks)		
2	Case Study 2	15	CO3
			CO5

	P.A. is a 52-year old man who presented with a 2-week history of polyuria, polydipsia, polyphagia, weight loss, fatigue, and blurred vision. A random glucose test performed 1 day before presentation was 352 mg/dl. The patient denied any symptoms of		
	numbness, tingling in hands or feet, dysuria, chest pain, cough or fevers. a. Identify the disease? (1 mark)		
	b. What is a long-term complication of this disease? (2 marks)		
	c. Explain the pathophysiology of this disease. (5 marks)		
	d. Mention the diagnostic methods used for its detection. (2 marks)		
	e. Suggest a diet plan for this disease. (5 marks)		
	SECTION- D 20 marks		
Q	Long Answer type Questions Scan and Upload (10 marks each) word limit for 8 marks not more than 300 words, for 6 marks not more than 250 words.	20 Marks	СО
1	Proto-oncogenes and tumour suppressor genes play an important role in cell cycle. Explain their role in "Pancreatic Cancer". What are the symptoms associated with this disease? (6+4)	10	CO4
	OR		
	Explain the pathophysiology and clinical symptoms of "Cholecystitis".		
2	The primary symptoms and findings associated with "Ulcerative Colitis" include		
	pathophysiology of Ulcerative Colitis (8 marks). Discuss the		
	pathophysiology of Orcerative Contis (8 marks).	10	CO4
	OR	10	007
	Explain the role of insulin in regulating metabolism. Discuss the etiological factors responsible in causing Type I diabetes. (5+5)		