# Second Semester Examination-2018 M.Sc. NUTRITION & DIETETICS

Paper Code: NUD-201

Full Marks: 40

**Time: 2 Hours** 

#### Write the answer for each unit in separate sheet

#### Unit-13

(Nutrition through life cycle)

Answer question no.1 & any 3 from the rest

## **1.** Answer any five questions from the following:

1×5=5

- a. At birth the hemoglobin level of normal healthy infant is
  - i) 10-12g/100ml iii) 17-20g/100ml
  - ii) 13-16g/100ml iv) 20-22g/100ml
- b. High omega -3 fatty acid consumption in adults results
  - i) Decrease productions in Interleukin -1 & TNF
  - ii) Increase production in Interleukin -1 & TNF
  - iii) Increased inflammatory response.
  - iv) Decrease cell membrane content of DHA & EPA.

## c. Gastrointestinal changes noted in aged individual-

- i) Increases HCl secretion
- ii) Decreases HCl secretion
- iii) Increases protein absorption
- iv) Decreases bacterial folate synthesis
- d. According to RDA, Protein requirement of lactating women for first six months is -

i) 77g/day ii) 80g/day iii) 65g/day iv) 68g/day. e. Calcium requirement for pregnant woman is –

i) 600 mg/d ii) 800 mg/d iii) 1000 mg/d iv) 1200 mg/d f. How much  $\beta$ -carotene is necessary for adults?

i) 3200µg/d ii) 4800µg/d iii) 6400µg/d iv) 7600µg/dg. Breast milk is rich sources of

i) Calcium ii) Iron iii) Vit-C iv)  $\beta$ -carotene h. Weaning is started at the age of –

- i)  $3^{rd}$  month of infant
- ii)  $6^{th}$  month of infant
- iii) 9<sup>th</sup> month of infant
- iv) 12<sup>th</sup> month of infant

(Turn Over)

- **2.**a) Why is excess amount of protein essential during pregnancy? 2+1+2=5
- b) Define PIH.
- c) Why is colostrum considered as first immunization to infants?
- **3.**a) Discuss about the role of estrogen and prolactin for regulation of lactation. 3+1+1=5
- b) What is galactogogue?
- c) Write the amount of energy and calcium requirement during lactation.
- **4.**a) What are the risk factors for fetal growth restriction? 2+2+1=5
- b) Why is weaning essential at second half of infancy?
- c) What is IUGR?
- **5.**a) Write the full form of UNICEF and CSIR. 1+2+2=5
- b) State the role of UNICEF on community nutrition up gradation.
- c) Write the feeding pattern of a premature infant.
- **6.**a) How does dietary fibre reduces blood cholesterol level in adults?

2+2+1=5

- b) Write the role of functional foods on detoxification.
- c) Define functional foods.
- 7.a) Why are old age people most prone to osteoporosis? 2+2+1=5
- b) Why is antioxidant containing food stuff should be included in preparing diet chart of old age people?
- c) Write the composition of RUTF.

## **Unit-14**

## (Growth & Development)

## Answer question no.1 & any three from the rest

## 1. Answer any five questions from the following:

- a) Growth due to elevation in cell division is known as
  - i) Hyperplasia ii) Hypertrophy
  - iii) Both hypertrophy and hyperplasia iv) Meta morphosis.
- b) In embryonic life, the primitive male reproductive tract is developed from
  - i) Mullerian duct ii) Wolffian duct
  - iii) Inguinal duct iv) Eustachian duct.

#### c) For skeletal growth of neonate, the necessary nutrients are –

- i) Calcium and PTH ii) Protein and vitamin –D
- iii) Vitamin-D, Calcium and Protein iv) PTH and Thyrocalcitonin.

## d) Reproductive growth at puberty is controlled by –

- i) Growth hormone ii) Gonadotropic hormone
- iii) Gonadotropic hormone and Gonadal steroids
- iv) Insulin and growth hormone.
- e) At the time of gametogenesis in female, the cell produced by low amount of cytoplasm with its nucleus is
  - i) Ootid ii) Primary Oocyte iii) Polar body
  - iv) Secondary Oocyte

## f) Ovulation in human noted at the phase of –

- i) Primary oocyte of diplotene phase ii) Secondary oocyte at prophase
- iii) Secondary oocyte at metaphase iv) Ootid.
- g) Lipogenesis in adipocyte is noted at maximum during
  - i) School going age ii) Early pubertal age
  - iii) Geriatric stage iv) Late neonatal age.
- h) In which months after birth infant will double its birth weight?
  i) 4-5 months
  ii) 5-6 months
  iii) 6 months
  iv) 1 year

1×5=5

<b>2.</b> a)	Write the difference between fetus and embryo.	1+4=5
b)	State the process of unipotential embryo from bipotential embry brief.	o in
<b>3.</b> a)	Describe in brief the cognitive development in children.	4+1=5
b)	What do you mean by 'Dietayet'stage.	
<b>4.</b> a)	State the 'ON-OFF' process of oogenesis in brief.	4+1=5
b)	Write the normal birth weight of Indian baby.	
<b>5.</b> a)	What do you mean by body composition?	2+3=5
b)	Write the changes in body composition noted at puberty of fema	ıle.
<b>6.</b> a)	Define Development	
b)	Write major milestones of 'Development' during infertile life.	1+4=5
<b>7.</b> a)	Write major determinants of growth.	
b)	Sate basic difference between growth and development	3+2=5

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