

M.Sc.

2013

2nd Semester Examination

CLINICAL NUTRITION & DIETETICS

PAPER—CND-202

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any three of the following.

1. Answer any ten questions : 1×10
- (a) What is phytoestrogen?
 - (b) Give an example of phytochemical.
 - (c) Write the full form of MUFA.
 - (d) What is bio-yoghurt?
 - (e) Give an example of prebiotic.
 - (f) What do you mean by nutraceuticals?
 - (g) Write an example of microorganism with probiotic activity.

(Turn Over)

- (h) What do you mean by dietary fiber?
 - (i) Mention two major sources of phytic acid.
 - (j) What are the major dietary sources of PUFA?
 - (k) What do you mean by omega-3 fatty acid?
 - (l) What is catechin?
 - (m) Write the basic principle of food fortification.
 - (n) Write an example of genetically modified plant product.
 - (o) What is Biolistics?
2. (a) What do you mean by GM food?
- (b) How foods can be fortified by genetic modification?
 - (c) Describe the fundamental techniques used in GM food preparation.
 - (d) What are the major advantages of GM food?

2+2+4+2

3. (a) What is the basic difference between phytoestrogen and xenoestrogen?
- (b) Classify phytoestrogen.
 - (c) Describe the physiological effects of nutraceuticals.
 - (d) What is the health benefit of genistein?

3+3+2+2

4. (a) What is PUFA's?
(b) Describe the benefits of dietary intake of PUFA.
(c) What do you mean by invisible dietary fat? State briefly their effects on health.
(d) State the structural features of MUFA with an example. $2+3+(1+2)+2$
5. (a) What is a prebiotic?
(b) Write the major sources of prebiotics.
(c) Describe the physiological effects and health benefits of prebiotics.
(d) Describe the difference between probiotics and prebiotics. $2+2+(2+2)+2$
6. (a) State briefly the prerequisites for an ideal probiotic.
(b) Write the effects of probiotics on human health.
(c) Write the major sources of probiotics and describe the mechanism of action of probiotics.
(d) Discuss the safety aspect of probiotics. $3+2+3+2$
7. (a) What is Polyphenols?
(b) Describe the food sources of polyphenols.
(c) Write the perspectives of flavonoids, catechin and tannin for food application.
(d) Describe the effects phytate on human health. $2+2+(2+1+1)+2$
-