

2015

NUTRITION

[Honours]

PAPER – III

Full Marks : 90

Time : 4 hours

The figures in the right hand margin indicate marks

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

Illustrate the answers wherever necessary

GROUP – A

Answer any **two** questions, taking **one** question from each of the following Subgroups : 15 × 2

Subgroup – A (a)

1. (a) Briefly state the digestion and absorption of carbohydrates.

(b) What is glycaemic index? Mention its significance in the maintenance of blood glucose level. $(5 + 5) + (2 + 3)$

2. (a) What do you mean by bioavailability of trace elements?

(b) Describe the absorption and distribution of iron in human body with suitable schematic diagram. $4 + (5 + 6)$

Subgroup – A (b)

3. (a) Why the nutritional value of mixed pulses are higher than single pulse?

(b) State the in-house causes of spoilage of meat and fish products. Write the name of different microorganisms found in spoiled meat products.

(c) Mention the safe storage criteria for meat and fish products. $5 + (3 + 2) + 5$

4. (a) State the importance of maintenance of food standards from the point of healthy nutrition.

- (b) Write the importance of GM food technology. Mention its merits and demerits.
- (c) Mention principle of any type of GM food preparation with example. $5 + (3 + 4) + 3$

GROUP – B

Answer any **five** questions, taking at least

two from each Subgroups : 8×5

Subgroup – B (a)

5. Describe the physiological dysfunctions noted due to iodine deficiency. 8
6. How fluoride helps in the development of teeth ? What is dental fluorosis ? $4 + 4$
7. (a) How vitamin D influences the role of calcium metabolism ?
- (b) How UV-light helps in the synthesis of vitamin-D ? $6 + 2$

8. State briefly the digestion and absorption of lipid with special reference to chylomicron formation. 3 + 5

Subgroup – B (b)

9. (a) Mention the importance of food adjuncts from the angle of nutrition.
- (b) State the demerits of using food colors with example. 4 + 4
10. (a) How do you identify good quality eggs by home made process ?
- (b) 'The nutritional value of boild egg is higher than that of fried egg' – Justify. 4 + 4
11. (a) 'Nutritional value of germinating legumes is better than raw legnmes' – Justify.
- (b) Formulate the purchasing strategy of vegetables and fruits. 4 + 4
12. Describe different nutritional aspects of tea and chocolates. 4 + 4

GROUP – C

Answer any **five** questions, taking at least
two from each Subgroups : 4 × 5

Subgroup – C (a)

13. Distinguish reducing and non-reducing sugars
with example. 4
14. Compare hetero and homopolysacchaides. 4
15. What is BV and PER ? 2 + 2
16. How do you differentiate soluble and insoluble
dietary fibres, mention with example. 4

Subgroup – C (b)

17. Make comparative statement about nutritional
value of red meat and white meat. 4
18. State the nutritional features of fresh water and
marine water fish. 4

19. Differentiate rising and leavening agents with example. 4
20. 'Food preservative sometimes may be the cause of food adulteration' – Justify. 4
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