

4. (a) Explain the concept of Ayurgenomics and its role in personalized medicine.
- (b) Describe how bioactive compounds in food help in maintaining dosha balance. (6,6)
5. Write short notes on **(any two)** the following :
- (a) Ayurvedic Pharmacopoeia of India
- (b) Epigenetics in Ayurveda
- (c) Biopiracy (2×6=12)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 7897

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Unique Paper Code : 3183010022

Name of the Paper : Bridging Ancient Medicine and Practices with Modern Biomedical Research (DSE)

Name of the Course : **B.Sc. (Hons.) Biomedical Science (NEP-UGCF-2022)**

Semester : VIII

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt **four** questions in all.
3. Question No. 1 is compulsory.
4. Subparts of the questions should be attempted together.
5. Give illustrations and examples wherever required.

1. (a) Briefly explain the following (**any four**)

Ashtang Yoga, TKDL, Pranayama, Nutraceuticals, Meditation

- (b) State true or false and justify your answer (**Any three**)

(i) Prakriti is solely determined by environment.

(ii) Yoga has no role in immune modulation.

(iii) Nutraceuticals aid disease prevention.

(iv) Ethnopharmacology has limited modern relevance.

- (c) A 40-year-old individual reports fatigue, weight gain, slow metabolism, and mild depression. Based on Ayurvedic evaluation, the person is identified as having a Kapha-dominant Prakriti with Kapha imbalance (Vikruti).

The treatment plan included regular yoga practices, dietary modifications, and the use of nutraceuticals.

After 8 weeks, improvement was observed in metabolic and psychological parameters Answer the following question with suitable justification (**any 3**) :

(i) Which dosha imbalance is most likely responsible for slow metabolism and weight gain?

(ii) Suggest one type of yoga practice suitable for this condition and state its benefit.

(iii) Identify one nutraceutical that can be used in this condition and mention its role,

(iv) Explain how this case supports the concept of personalized medicine in Ayurveda.

(12,6,6)

2. (a) Explain how Pancha Mahabhuta forms the basis of Tridosha theory.

(b) Discuss the role of yoga in management of stress and hypertension. (6,6)

3. (a) Explain the role of ethnopharmacology in modern drug discovery with one suitable example.

(b) Discuss the role of nutraceuticals in management of neural diseases. (6,6)

P.T.O.