## M.D.S Degree (Part-I) Examination - 27-Dec-2021

[Time: 3 Hours] [Max. Marks: 100]

## ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS

Paper-I: Applied Basic Sciences: Applied anatomy, Physiology, Dental Materials, Genetics, Pathology, Physical Anthropology, Applied Research Methodology, Bio-Statistics and Applied Pharmacology.

(Revised Scheme-5)

Q.P. CODE: 6043

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary.

## Answer All The Questions

10 X 10 = 100 Marks

- Outline the development of the branchial arches and discus the embryologic basis of craniofacial and dental anomalies commonly seen in orthodontic practice.
- 2. Discuss role of vitamins and hormones on the growth and development of Jaws and teeth.
- Briefly outline the molecular basis and genomics of heredity of the craniofacial region. Add a note on the inheritable types of facial deformities and malocclusion.
- Explain in detail the aetiology of cleft lip and palate.
- Discuss the role of cartilages at various sites in the pre and post-natal craniofacial development.
- Describe briefly various materials used in the manufacture of arch-wires, giving their advantages, disadvantages, physical and chemical properties.
- Give the origin, insertion and enervation of all the muscles of mastication. Describe the role played by them in the morphology of the masticatory apparatus.
- Describe briefly impression materials used in orthodontics.
- Describe in detail the method of Sample Size Determination.
- Enumerate the different theories of growth. Discuss original functional matrix theory as first postulated by Melvin Moss.

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