(LN 951) AUGUST 2018 **Sub. Code: 1951**

M.Ch. – HAND SURGERY

Paper I – BASIC SCIENCES

Q.P.Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the ligamentous anatomy of the wrist. Describe the biomechanical features providing the stability of the wrist.

2. Describe the anatomy of the Brachial plexus. Discuss the various types of injuries to the brachial plexus.

II. Write notes on: **(10 x 7 = 70)**

1. Tourniquet.
2. Volar plate.
3. Triangular fibrocartilaginous complex.
4. Brewerton view.
5. Sterling Bunnell.
6. Fibrillation potential.
7. Blood supply of the scaphoid.
8. Horner's syndrome.
9. Growth plate.
10. Supracondyloid process.

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(LP 951) AUGUST 2019 **Sub. Code: 1951**

M.Ch. – HAND SURGERY

Paper I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the *in utero* development of the human hand. Briefly mention the salient features of the Oberg Manske Tonkin (OMT) classification of congenital differences of the hand.

2. Describe the anatomy of the Distal Radio Ulnar Joint (DRUJ). Discuss the biomechanics of the Triangular Fibrocartilagenous complex (TFCC).

II. Write notes on: **(10 x 7 = 70)**

1. Bier's block.
2. Ligament Box Complex.
3. Scapholunate Interosseous ligament.
4. Robert's view.
5. Paul Brand.
6. Somatosensory Evoked Potentials (SSEP).
7. Martin Gruber anastomosis.
8. Nail bed.
9. Wallerian degeneration.
10. Beak ligament.

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(MCH 0821) AUGUST 2021 **Sub. Code: 1951**

M.Ch. – HAND SURGERY

Paper I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Discuss the *microscopic structure* of the nerve. What are the salient features of the regeneration of an injured nerve.

2. Describe the anatomy of the extensor mechanism of the digit. Discuss the biomechanics of the development of boutonniere deformity.

II. Write notes on: **(10 x 7 = 70)**

1. Sharpey's fibres.
2. Volar plate.
3. Arcade of struthers.
4. True lateral view of wrist.
5. Harold Kleinert.
6. Nerve growth factors.
7. Pronator quadrates.
8. 1,2 Intercompartmental Supraretinacular artery (ICSRA).
9. Coronoid process.
10. Hook of hamate.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERISYT

(MCH 0822) **AUGUST 2022** **Sub. Code: 1951**

M.Ch. – HAND SURGERY

Paper I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the arterial supply of the bones of the hand. Discuss the various intra-osseous vascular patterns of the Lunate bone and its clinical implications.

2. Describe the innervation of the intrinsic musculature of the hand. Elaborate the patho-mechanics of the claw hand deformity.

II .Write notes on: **(10 x 7 = 70)**

1. Gantzer's muscle.
2. Tourni-Cot®.
3. Kazuteru Doi.
4. Bands of Fontana.
5. Vincula Tendinea.
6. Cervical Rib.
7. Ziter's view.
8. Myofibroblast.
9. Transverse retinacular ligament.
10. Myelin sheath.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0124) JANUARY 2024 Sub. Code: 1951

M.Ch. – HAND SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the carpal arches of the hand. Discuss the vascular supply of the scaphoid bone and its clinical implications in the fracture of the same bone.

2. Classify the vascular patterns of muscles. Describe the vascularity of the Latissimus Dorsi muscle and its applications as a pedicled flap in upper limb surgery.

II .Write notes on: **(10 x 7 = 70)**

1. WALANT procedure.
2. Blood supply of the Brachial Plexus.
3. Erik Moberg.
4. Tendon Nutrition.
5. Perforasome.
6. Banana view.
7. Vicker's ligament.
8. Sagittal Band.
9. Osborne's ligament.
10. Topography of the median nerve in the arm.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0824) **AUGUST 2024** **Sub. Code: 1951**

M.Ch. BRANCH XI – HAND SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the Ligamentous Anatomy of the Wrist, with special emphasis on the Scapholunate joint and its clinical implications.

2. Describe the Nerve supply of the Hand, classification of Nerve Injuries and the physiology of Nerve Healing.

II. Write notes on: **(10 X 7 = 70)**

1. Basal Joint of the Thumb.
2. Anomalous Median-Ulnar Nerve Anastomoses.
3. Kaplan's Lines.
4. The Proximal Interphalangeal Joint.
5. Wrist Block.
6. Anatomy of the Compartments of the Hand.
7. Spiral Oblique Ligament.
8. Electrophysiology of the Hand.
9. Scaphoid Series.
10. Harold E. Kleinert.

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THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

(MCH 0225) **FEBRUARY 2025** **Sub. Code: 1951**

M.Ch. BRACH XI – HAND SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. The Retinacular System of the Hand and the pathophysiology / staging of Dupuytren disease.
2. The Embryology of Hand development and the spectrum of Radial Longitudinal Deficiency.

II. Write notes on: **(10 x 7 = 70)**

1. Anatomy of Guyon's Canal.
2. Martin-Gruber Anastomosis.
3. Basal Joint of the Thumb.
4. Anatomic abnormalities that can be factors in Carpal Tunnel Syndrome.
5. Anomalies and Variations in the Morphology of the Lunate.
6. Nerve Regeneration.
7. Angiosome Concept.
8. Gilula's Arcs.
9. Erik Moberg.
10. Kaplan's Lesion.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

(MCH 0126) **JANUARY 2026** **Sub. Code: 1951**

M.Ch. – HAND SURGERY

PAPER I – BASIC SCIENCES

Q.P. Code: 181951

Time: Three Hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the anatomy of the distal radioulnar joint (DRUJ). Discuss the biomechanics of the distal radioulnar joint (DRUJ).
2. Draw the diagram of a neuron and mark its parts. Discuss in detail, the physiology of nerve regeneration.

II. Write notes on: **(10 x 7 = 70)**

1. Tendon healing.
2. Volar teardrop angle.
3. Sir Robert Jones.
4. Guyon's canal.
5. Target sign.
6. Scapholunate ligament.
7. Atomic classification of flaps.
8. Intrinsic tightness test.
9. Oblique retinacular ligament.
10. Kanavel's signs.

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