CONTENTS

VOLUME 1

SECTION 1: CLINICAL MEDICINE

1. **Practice of Medicine in 21st Century: Opportunities and Challenges** 1
   G Eswar, KV Seshaiah, K SSS Surya Prakash
2. **Good History Taking and General Physical Examination** 6
   SV Ramanamurty, KSR Swamy, Chakravarthy DJK
3. **Weight Loss, Cachexia, and Fatigue: Clinical Approach and Evaluation** 18
   Y Sathyanarayana Raju, Y Rahul, Y Sairam
4. **Abdominal Pain: Evaluation and Management** 21
   Sanchit Kumar, Gaurav Gupta, Sanjeev Sinha
5. **Diarrhea and Constipation: Clinical Approach and Management** 29
   Veerappa Annasaheb Kothiwale, Vivek Veereshkumar Shirol
6. **Lymphadenopathy: Causes and Evaluation** 35
   Alladi Mohan, Vasili Pradeep
7. **Patient with Hepatosplenomegaly: Possibilities and Evaluation** 39
   Sagnik Biswas, Sanchit Sharma
8. **Ascites: Clinical Approach** 44
   K Ravi, Devamsh GN
9. **Dyspnea, Syncope and Palpitations: Evaluation** 51
   Sudha Vidyasagar, Sudhakar Rao, Cynthia Amrutha
10. **Cough and Hemoptysis: Evaluation** 61
    SK Sharma
11. **Clinical Approach to a Cardiac Murmur** 66
    Rajeev Menon, Neelkanth Patil, B Soma Raju
12. **Patient with Altered Sensorium: Evaluation and Management** 75
    B Vengamma
13. **Cutaneous Manifestations and Diseases** 79
    A Surekha, G Ramesh Kumar
14. **Psychiatric Disorders in Clinical Medicine** 84
    Rajesh Sagar, Ragul Ganesh
15. **Chest X-ray Evaluation and Some Spotters** 90
    Chandan J Das, Zohra Ahmad

SECTION 2: GENERAL MEDICINE

GENERAL TOPICS

16. Nutritional Deficiency Disorders **103**
Atanu Chandra, Aritra Kumar Ray

17. Metabolic Disorders: Carbohydrate, Protein, and Others **109**
Akhil Krishna, Sujoy Ghosh

18. Common Metabolic Disorders: Amyloidosis, Porphyria, and Wilson's Disease **118**
Uddalak Chakraborty, Tarun Kumar Paria

19. Poisoning and Drug Overdose: General Principles of Management **134**
Somnath Das, Rina Das

20. Heavy Metal Poisoning **143**
Udas Chandra Ghosh, Manali Chandra

21. Genetic Counseling and the Treatment of Genetic Disorders **150**
Rudrajit Paul

22. Human Leukocyte Antigen System in Molecular and Genetic Medicine **156**
Gaurav Sharma, Ajay Kumar Baranwal, Narinder Kumar Mehra

23. Electronic Health Records, Artificial Intelligence, and Big Data—Role in Medicine **164**
Rahul Shukla, Ashish Sahani

24. Psychiatric Disorders: Physicians Perspective **174**
Navkiran Sooch Mahajan, Ranjive Mahajan, Deepika Bansal

25. Palliative and End-of-life Care **188**
D Thangam

GERIATRICS

26. Approach to Older People in Clinical Settings **196**
Prasun Chatterjee

27. Frailty Syndrome **202**
Venugopalan Gunasekaran, Manicka Saravanan Subramanian

28. Falls in Elderly **207**
Monika Bansal, Jyotirmoy Pal, Purbasha Biswas

29. Drug Therapy in Elderly **213**
G Usha

30. Infections in Elderly **221**
Jyotirmoy Pal, Arkapravo Hati, Tanuka Mandal

31. Immunology and Vaccination in Elderly **228**
Nandini Chatterjee, Agnibha Maiti, Vikas Gupta

32. Cognitive Assessment in Dementia **232**
Parveen Goel, Souvik Dubey, Biman Kanti Ray

SECTION 3: INFECTIOUS DISEASES

BASIC CONSIDERATIONS

33. Pyrexia of Unknown Origin **241**
OC Abraham

34. Nosocomial Infection **243**
Subhash Todi, Mohuya Bhattacharya

35. Hospital Infection Control **248**
Gagandeep Singh, Arti Kapil

36. Principles of Antibiotic Therapy **253**
George M Varghese, Abi Manesh

37. Management of Septicemia **264**
Atul K Patel, Ketan Patel

38. Prevention and Management of Infection in Transplant Recipients **269**
Anupa Thampy, Priscilla Rupali

39. Adult Vaccination **278**
V Ramasubramanian, Madhumitha R, Murali Narasimhan

BACTERIAL INFECTIONS

40. Infections Caused by Gram-positive Cocci: *Streptococcus*, *Pneumococcus*, and *Enterococcus* **288**
Bipanchi Mahanta, Anup Kumar Das

41. Staphylococcal Diseases **298**
Smarajit Banik, Amit Kumar Adhikari, Indranil Sen

42. Gram-negative Pathogens and Infections **303**
Rajeev Soman, Umang Agrawal

43. Gram-negative Bacterial Infections: Salmonellosis, Shigellosis, Brucellosis, Cholera, and Plague **307**
Dwijen Das, Jacquiline D Shira, Indrajit Debnath

44. Tetanus, Botulism, and Other Clostridial Infections **317**
Priyam Batra, KVP Saikiran, Rama Chaudhry

VIRAL INFECTIONS

45. Influenza Viruses Including H1N1 **326**
S Anuradha

46. RNA Virus Infections **331**
Sajithkumar R

47. DNA Viruses: Herpes Simplex, Varicella Zoster, Epstein–Barr Virus, Cytomegalovirus, and Human Papillomavirus **338**
Jaya Chakravarty, Shubham Gupta, Aakash Rai

48. Other Virus Infections: Chikungunya, Hantavirus, Nipah Virus, and Zika Virus **345**
Gaurav Gupta, Manasvini Bhatt, Ashutosh Biswas

49. Rabies **354**
Sajithkumar R

50. Dengue Fever **357**
Ayan Basu, Bibhuti Saha

51. Human Immunodeficiency Virus Epidemiology and Prevention **369**
BB Rewari, Priyanka Ojha

52. Management of HIV **380**
Subhasish Kamal Guha, Soumendra Nath Haldar

CORONAVIRUS INFECTION

53. Coronaviruses and the Epidemics **385**
Mahesh Moorthy, Runal John Steve

54. COVID-19: Transmission, Pathophysiology, and Diagnosis **391**
Navneet Arora, Ritin Mohindra, Vikas Suri

55. COVID-19: Clinical Presentation and Management **396**
Ram Gopalakrishnan, Bikram Das, Haripriya Reddy Challa

56. Mucormycosis in COVID-19 Pandemic: The New Challenge **403**
Jagdish Chander

57. COVID-19 Vaccines **413**
Savita Verma, Jyoti Sharma

OTHER INFECTIONS

58. Tropical Fever: Diagnosis and Management **421**
Vikas Suri, Ashish Bhalla

59. Malaria **428**
Manoj Kumar Mohapatra, Abhipsa Mohapatra

60. Other Protozoal Infections: Leishmaniasis, Toxoplasmosis, Trypanosomiasis, Trichomoniasis, Amoebiasis and Giardiasis **434**
Agnibho Mondal, Mehebubar Rahman, Rama Prosad Goswami

61. Diseases of Rickettsiae, *Mycoplasma*, and Chlamydiae **444**
Sanjay K Mahajan, Sanyam K Mahajan

62. Other Mycobacterial Infections: Leprosy and Nontuberculous Mycobacteria **450**
SK Baruah, Bhaskar Thakuria, Hitakalpa Baishya

63. Spirochetal Infections: Syphilis, Leptospirosis, and Others **456**
Gurinder Mohan, Akanksha, Jaspreet Kaur

64. Common Fungal Infections: Aspergillosis, Candidiasis **470**
J Rajkumar, S Subramanian, G Balajee

65. Fungal Infections: Histoplasmosis, Blastomycosis, Pneumocystis Pneumonia, and Others **476**
Immaculata Xess, Gagandeep Singh, Renu Yadav

66. Helminthic Infections **484**
Subhash Chandra Parija, Tuhina Banerjee

SECTION 4: CRITICAL CARE

67. Recognition and Approach to Critically ill Patient **491**
JV Peter

68. Monitoring in Intensive Care Unit **499**
Binila Chacko

69. Organization and Quality Indicators in Intensive Care **510**
Subhash Todi, Saswati Sinha

70. Chronic Critical Care **515**
Manjunath BG, Sushmita Jakka, Sheenam Walia

71. Fluid Assessment and Management in Critically ill Patients **522**
Sheila Nainan Myatra, Nishanth Baliga

72. Oxygen Therapy **526**
Pawan Kumar Singh, Dhruva Chaudhry

73. Mechanical Ventilation: Principles and Strategies **533**
Satya Ranjan Sahu, Kunal Ahuja, GC Khilnani

74. Acute Respiratory Distress Syndrome **539**
Rupali Patnaik, Shreyas H Gutte, Mohan Gurjar

75. Approach to Hemodynamic Instability and Shock **547**
Atul Prabhakar Kulkarni, Ruchira Wasudeo Khasne

76. Fever in Intensive Care Unit **556**
Rajesh Chawla, Roseleen Kaur Bali, Aakanksha Chawla Jain

77. **Sepsis and Septic Shock** 561
Mradul Kumar Daga, J Aarthi, Raghu RV

78. **Antibiogram and Molecular Diagnostic Tests in an Intensive Care Unit: Interpretation and Relevance** 570
Shaoli Basu, Camilla Rodrigues

79. **Antimicrobial Stewardship** 578
Apurba Sankar Sastry, Deepashree R, Haritha Madigubba

80. **Cytokine Release Syndrome** 584
Harpreet Singh, Ritu Sangwan, Prabhudev

81. **Envenomation: Snake and Scorpion** 588
Dhruva Chaudhry, Diksha Tyagi

82. **Cardiopulmonary Resuscitation** 597
Rakesh Kumar, Sunil Kumar

83. **Brain Death: Diagnosis and Management** 602
Sunil Shroff, Mathew Joseph, Rahul Pandit

84. **End-of-life Care, Medico-legal Aspects, and Ethics in ICU** 611
Raj Kumar Mani, Srinagesh Simha, Roop Gursahani

VOLUME 2

SECTION 5: CARDIOLOGY

85. **Clinical Evaluation of Cardiac Patients** 619
Prabhavathi, Bhupinder Singh

86. **Epidemiology of Cardiovascular Diseases** 633
Nazneen Ali, Arun Pulikkottil Jose, Dorairaj Prabhakaran

87. **Electrocardiogram** 638
M Chenniappan

88. **Noninvasive Cardiac Imaging** 655
Manish Bansal, Priya Chudgar, Jagat Narula

89. **Cardiac Catheterization and Coronary Angiography** 675
Mandava Satya Sahitya, Navjyot Kaur, Rajesh Vijayvergiya

90. **Bradyarrhythmias** 685
Naved Aslam, Salil Jaura, Ulhas Pandurangi

91. **Tachyarrhythmias and Sudden Cardiac Death** 693
Aseem Basha, Nirmal Ghati, Nitish Naik

92. **Heart Failure: Pathophysiology and Diagnosis** 705
Tiny Nair

93. Management of Heart Failure 712
Sanjay G, Harikrishnan S

94. Acute Rheumatic Fever 721
IB Vijayalakshmi, Chitra Narasimhan

95. Mitral Valve Disease 730
CN Manjunath, Prabhavathi

96. Diseases of the Aortic Valve 741
Prafulla G Kerkar, Rajesh Matta, Ankita A Kulkarni

97. Tricuspid, Pulmonary, and Multivalvular Diseases 756
Smit Shrivastava

98. Congenital Heart Disease in the Adults 766
Balaji Arvind, Anita Saxena

99. Pulmonary Artery Hypertension 775
Sandeep Bansal, Ashutosh Yadav, Anunay Gupta

100. Infective Endocarditis: A Systemic Disease 784
Abhishek Goyal, Bishav Mohan, Jasvinder Singh

101. Pregnancy and Heart 793
Shibba Takkar Chhabra, Gurleen Kaur, Jyotsna Maddury

102. Ischemic Heart Disease: Risk Factors and Prevention 801
Rajeev Gupta

103. Hypertension: Epidemiology, Presentation, Causes, and Evaluation 811
Gurpreet S Wander, Sandhya Kamath

104. Management of Hypertension 818
Gurpreet S Wander, YP Munjal

105. Dyslipidemias and Drugs Used for Management 825
Debabrata Roy, Navanil Biswas, Saurabh Dhumale

106. Chronic Stable Angina 835
Artur Lopes, Rajesh G Nair, Boban Thomas

107. Acute Coronary Syndrome: Unstable Angina and Non-ST-Segment Elevation Myocardial Infarction (NSTEMI) 842
Mohanan Padinhare

108. Acute ST-elevation Myocardial Infarction 848
Srinivasan Narayanan, Ajit S Mullasari, Thomas Alexander

109. Diseases of the Myocardium 856
Ajay Bahl

110. Pericardial Diseases 868
Sandeep Seth, SS Kothari

111. Diseases of the Aorta **873**
Gurbhej Singh, George Joseph

112. Peripheral Vascular Disease **882**
NN Khanna, Sushant Mishra, Swati Singh

SECTION 6: ENDOCRINOLOGY AND METABOLIC DISORDERS

113. Disorders of the Hypothalamus and Pituitary Gland **891**
Liza Das, Kirti Gupta, Pinaki Dutta

114. Thyroid Disorders **907**
Suresh Vaikkakara, Avinash Patil

115. Disorders of Adrenal Gland **915**
Rama Walia, Rajat Gupta

116. Gonadal and Pubertal Disorders **924**
Aashima Dabas, Rekha Ramot, Rajesh Khadgawat

117. Obesity **934**
Ashu Rastogi

118. Endocrine Tumors and Malignancies **940**
Suneel Mattoo, Roma Pradhan, Amit Agarwal

119. Diabetes Mellitus: Diagnosis, Classification, and Pathophysiology **950**
Anshita Aggarwal, Sri Venkata Madhu, Sanjay K Bhadada

120. Complications of Diabetes **955**
Rakesh K Sahay, Manisha Sahay

121. Diabetes Mellitus: Management **966**
Subhankar Chowdhury, Partha Pratim Chakraborty

122. Calcium and Phosphate Homeostasis **977**
MK Garg, Madhukar Mittal

123. Parathyroid Disorders **984**
Sanjay K Bhadada, Ravinder Goswami, Rimesh Pal

124. Diagnosis and Management of Osteoporosis **992**
Sanjay K Bhadada, Sushil Gupta, Rekha Singh

125. Endocrine Disorders in Pregnancy **1001**
Soham Mukherjee, Sanjay K Bhadada

126. Endocrine Disorders of Elderly **1009**
Surya K Singh, Vahid Bharmal

127. COVID-19 and Endocrine Disorders **1015**
Sanjay K Bhadada, Rimesh Pal

SECTION 7: GASTROENTEROLOGY

128. Clinical Approach to Gastrointestinal Diseases **1021**
Anuraag Jena, Anupam Kumar Singh, Rakesh Kochhar

129. Esophageal Disorders **1028**
Shobna Bhatia, Arshdeep Singh

130. Dyspepsia and Peptic Ulcer Disease **1036**
Amit Kumar Dutta

131. Nonvariceal Upper Gastrointestinal Bleeding **1043**
Sanjay Khanna, Ajay Kumar

132. Small Bowel Evaluation **1051**
Shivaraj Afzalpurkar, Usha Goenka, Mahesh K Goenka

133. Celiac Disease and Other Causes of Malabsorption **1059**
Ajit Sood, Vandana Midha, Arshdeep Singh

134. Intestinal Tuberculosis **1070**
Ashish Chauhan, Archita Makharia, Govind K Makharia

135. Irritable Bowel Syndrome **1077**
Uday C Ghoshal

136. Inflammatory Bowel Disease **1083**
Sudheer K Vuyyuru, Saurabh Kedia, Vineet Ahuja

137. Lower GI Bleed **1095**
Pradev Inavolu, Mohan Ramchandani

138. Acute Pancreatitis **1105**
Anshuman Elhence, Soumya Jagannath Mahapatra, Pramod Kumar Garg

139. Chronic Pancreatitis **1112**
Rupjyoti Talukdar, D Nageshwar Reddy

140. Gallbladder **1119**
Srikant Mohta, Anoop Saraya

141. Approach to Management of Jaundice: Obstructive Jaundice/Hepatitis **1125**
Subrat K Acharya, Pankaj Puri, Shivanand Gamanogatti

142. Acute Liver Failure **1138**
Shalimar, Subrat K Acharya

143. Approach to Management of Chronic Hepatitis **1146**
Akash Roy, Sunil Taneja

144. Treatment of Hepatitis (B, C, and Autoimmune) **1150**
Pankaj Puri, Bimal Kumar Sahu

145. Spectrum of Alcoholic Liver Disease and Management of Alcoholic Hepatitis **1157**
Shekhar Singh Jaduan, Kaushal Madan

146. Cirrhosis of Liver and Its Complications **1163**
Manav Wadhawan

147. Nonalcoholic Fatty Liver Disease **1167**
Arka De, Ajay Duseja

148. Toxic and Drug-induced Liver Injury **1175**
Mallikarjun Patil, Harshad Devarbhavi

149. Hepatocellular Carcinoma **1180**
Dharmesh Kapoor, Anil Kumar Mannava

150. Liver Transplantation **1187**
Abhideep Chaudhary, Gaurav Sood, Ajay Kumar

151. Gastrointestinal Manifestations of COVID-19 **1195**
Neha Berry, Amrish Sahney, Ajay Kumar

SECTION 8: HEMATOLOGY AND ONCOLOGY

HEMATOLOGY

152. Disorders of RBCs: How to Approach? **1203**
Afaq Ahmad Khan, Prashant Sharma, Reena Das

153. Approach to Disorders of Leukocytes **1211**
Tushar Sehgal

154. Bleeding Disorders **1218**
Pooja Prasad, Nabhajit Mallik

155. Thrombotic Disorders **1228**
Preethi Jeyaraman, Pulkit Rastogi

156. Transfusion Medicine: Principles and Application **1236**
Suchet Sachdev, Hari Krishan Dhawan, Ratti Ram Sharma

157. Hematological Malignancies: Classification and Approach **1245**
Vijayalakshmi Aravindan Arun, Pankaj Malhotra

ONCOLOGY

158. Cancer: Hallmarks and Prevention **1251**
Davinder Paul, Subhadeep Bose

159. Cancer Biomarkers: Role and Relevance **1258**
Davinder Paul, Subhadeep Bose

160. Solid Tumors: An Overview **1263**
Sujith Kumar Mullapally

161. Chemotherapy: Principles, Classification, and Toxicity **1274**
Manjinder Singh

162. Radiotherapy: Principles, Methods, and Application **1281**
Subhadeep Bose, Davinder Paul

VOLUME 3

SECTION 9: NEPHROLOGY

163. Signs, Symptoms and Laboratory Tests of Kidney Disease **1287**
Raja Ramachandran, Vinay Sakhuja

164. Acute Kidney Injury and Rapidly Progressive Renal Failure **1291**
Manisha Sahay

165. Acid-base and Electrolytes **1300**
Ashwini Balasaheb Gadde, Ajay Kher

166. Glomerular Diseases **1313**
Natarajan Gopalakrishnan, M Sreelatha

167. Chronic Tubulointerstitial Disorders and Obstructive Nephropathy **1323**
Suceena Alexander, Santosh Varughese

168. Hypertension, Diabetes, and Kidney Disease **1329**
Anantharam Jairam, Vijoy Kumar Jha

169. Infections and Kidney **1338**
Arunkumar S, Kristin George, Sandeep Mahajan

170. Hereditary and Congenital Kidney Diseases **1343**
Dinesh Khullar, Pallavi Prasad

171. Systemic Diseases and Kidney **1353**
Manish Rathi, Arpita Ray Chaudhury

172. Pregnancy and Kidneys **1366**
S Shiri, Arpana Iyengar

173. Drugs and Kidneys **1377**
Vivek Kumar, Ashwani Kumar, Ritambhra Nada

174. Emerging Renal Syndromes: Onconephrology and Cardiorenal Syndrome **1385**
R Jayasurya, Sreejith Parameswaran

175. Uremic Syndrome: Diagnosis and Management **1394**
UK Sharma

176. Preventing Chronic Kidney Disease: In Whom, When, and How? **1400**
Divya Bajpai, Gopesh K Modi

177. Conservative Kidney Care **1407**
Ravindra Prabhu Attur, Indu Ramachandra Rao, Shankar Prasad Nagaraju

178. Hemodialysis **1414**
Snehal Gaikwad, Valentine Lobo

179. Peritoneal Dialysis **1421**
Narayan Prasad, Ruju Gala

180. Kidney Transplantation **1428**
Pranaw Kumar Jha, Ashwini Balasaheb Gadde, Vijay Kher

181. COVID-19 and Kidneys **1433**
Mayuri Trivedi, Raja Ramachandran

SECTION 10: NEUROLOGY

182. Neurological Disorders: Basic Considerations and Clinical Approach **1438**
Lakshmi Narasimhan Ranganathan, Karthika Ajit, Guhan Ramamurthy

183. Migraine and Other Headaches **1449**
Sanjay Cheema, Salwa Kamourieh, Manjit Matharu

184. Raised Intracranial Pressure and Hydrocephalus **1456**
Vedantam Rajshekhar

185. Seizures and Epilepsy **1465**
Gagandeep Singh

186. Acute Ischemic Stroke: A Recent Update **1472**
Jeyaraj Durai Pandian, Ivy Anne Sebastian

187. Hemorrhagic Cerebrovascular Diseases **1486**
MV Padma Srivastava, Ajay Garg

188. Acute Bacterial Meningitis **1497**
Neeraj Balani, Amol Nanak Singh, Manish Modi

189. Tuberculous Meningitis **1509**
Jayantee Kalita, Usha K Misra

190. Viral Encephalitis **1521**
Dhananjay Duberkar

191. Fungal and Parasitic Diseases of the Nervous System **1526**
Jagarlapudi MK Murthy, Sundaram Challa

192. Demyelinating Diseases of the Central Nervous System **1538**
Michlene R Passeri, Ram N Narayan

193. Movement Disorders: The Clinical Vignette **1552**
Birinder Singh Paul, Gunchan Paul

194. Cerebellar Disorders **1557**
Achal K Srivastava, Divyani Garg, Mohammed Faruq

195. Amyotrophic Lateral Sclerosis **1564**
Vineeth Jaison, Raviteja Kakarla, Dimple Dawar

196. Myelopathies **1575**
Rahul Yadav, Devangi Desai, Soaham Desai

197. Approach to Peripheral Neuropathy **1590**
Yogeesh PM, Vishnu VY

198. Guillain–Barré Syndrome **1596**
Rajinder K Bansal

199. Myasthenia Gravis **1600**
S Meenakshi-Sundaram, Lakshmi Narasimhan Ranganathan, S Mahesh Kumar

200. Disorders of Muscle **1610**
Rakesh K Singh, Vikram Aglave, Satish V Khadilkar

201. COVID Neurology **1622**
Vibhor Pardasani

SECTION 11: PULMONARY MEDICINE AND TUBERCULOSIS

202. Clinical Approach to Respiratory Problems **1627**
Surinder K Jindal, Aditya Jindal

203. Air Pollution: Health Effects in Current Scenario and Way Forward **1632**
Randeep Guleria, Vartika Mathur, Pawan Tiwari

204. Bronchial Asthma **1639**
SK Chhabra, Mansi Gupta

205. Chronic Obstructive Pulmonary Disease **1648**
Raja Dhar, Shyam Krishnan, Tarang Kulkarni

206. Occupational Lung Diseases **1658**
Surinder K Jindal, Trinath Dash

207. Pneumonia and Other Respiratory Infections **1663**
DJ Christopher, Barney J Isaac

208. Tuberculosis: Epidemiology, Pathology, and Diagnosis **1670**
D Behera, Ranjan Kumar Behera

209. Management of Pulmonary Tuberculosis **1679**
Deepak Aggarwal

210. Extrapulmonary Tuberculosis **1685**
Uma Devaraj, Priya Ramachandran

211. Nontuberculous Mycobacterial Pulmonary Disease **1692**
Vishwanath Upadhyay, Surendra K Sharma

212. Interstitial Lung Diseases **1705**
Vijay Hadda, Irfan Shekh, Irshad Ahmad Banday

213. Bullous Lung Disease **1717**
Anant Mohan, Tejas M Suri

214. Sarcoidosis **1723**
Karan Madan

215. Pulmonary Eosinophilic Disorders **1728**
Aditya Jindal

216. Pulmonary Vasculitides **1734**
Kavitha Venkatnarayan, Uma Mohan Krishnaswamy

217. Pulmonary Vascular Diseases **1743**
Mohammad Azizur Rahman, Pajanivel Ranganadin, Ketaki Barve Utpat

218. Lung Cancer **1747**
Srinivas Rajagopala, Saurav Verma, Navneet Singh

219. Pleural Diseases **1757**
Javid Ahmad Malik

220. Mediastinal Anatomy and Disorders **1765**
Priya N, Balamugesh T

221. The Chest Wall **1773**
Priya N, Balamugesh T

222. Respiratory Sleep Disorders **1779**
Avishek Kar, Khushboo Saxena, Abhishek Goyal

223. Respiratory Failure **1788**
Surinder K Jindal

224. Pulmonary Rehabilitation **1794**
Deepak Talwar

225. COVID-19: Acute Respiratory Manifestations **1800**
Uma Mohan Krishnaswamy, Chitra Veluthat

226. Post-COVID Respiratory Complications **1807**
Surinder K Jindal

SECTION 12: RHEUMATOLOGY

227. Approach to a Patient with Musculoskeletal Complaints **1813**
Rohini Handa

228. Soft Tissue Rheumatism **1816**
SJ Gupta

229. Low Back Pain **1825**
Molly Mary Thabah, Ved Chaturvedi

230. Osteoarthritis **1832**
Renu Saigal, Amit Kansal, Vikramraj Jain

231. Gout and Other Crystal-related Arthritides **1839**
Binoy J Paul, Reeta James

232. Rheumatoid Arthritis **1845**
Ashok Kumar, Kushagra Gupta

233. Spondyloarthritis **1855**
Sakir Ahmed

234. Systemic Lupus Erythematosus **1865**
Sarit Sekhar Pattanaik, Rudrarpan Chatterjee, Amita Aggarwal

235. Antiphospholipid Syndrome **1873**
Sreejitha KS, Liza Rajasekhar

236. Systemic Sclerosis: An Update **1878**
Vineeta Shobha, Ramya Aithala

237. Sjögren's Syndrome **1887**
Ramakrishna Rao Uppuluri, Sripurna Deepti Challa

238. Mixed Connective Tissue Disease and Overlap Syndromes **1894**
Debashish Mishra, Shefali K Sharma

239. Idiopathic Inflammatory Myopathies **1900**
Prithvi Sanjeevkumar Gaur, Latika Gupta

240. Vasculitis **1912**
Rohini Handa

241. Miscellaneous Rheumatic Diseases **1918**
Subramanian Shankar, Vivek Vasdev

Index ***1925***