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Companion for FINAL MBBS

(Including Ophthalmology and Otorhinolaryngology)



Singi Yatiraj

Co-authors
Roopali Somani
Capt. Basavaraj AP

17th Edition

JAYPEE

Companion for
Final MBBS

(**Including Ophthalmology and Otorhinolaryngology**)

17th Edition

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PEDIATRICS

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2. Piyush Gupta **(GUPTA)**: UG Textbook of Pediatrics, 1st Edition, Jaypee Brothers Medical publisher (P) Ltd., New Delhi, ₹ 1195/-

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For CBME Curriculum of Final MBBS Part 2
SCAN THE QR CODE

QUESTION BANK

	GHAI	GUPTA	
CHAPTER 1: INTRODUCTION TO PEDIATRICS			
None			
CHAPTER 2: GROWTH			
Long Essays			
1. Define growth and development. Discuss various factors affecting growth and development. Mention various methods of growth monitoring. Discuss law of growth in children.	6, 8, 9	1, 2, 4	J23(RS3), D07, J11
2. Describe normal growth and development during neonatal period.	6, 24	2, 3, 7	D08(RS2)
3. What do you mean by the term growth? Write briefly about the changes in the parameters from birth to 5 years of age.	6, 24	4	J17(RS3)
4. Mention the factors affecting growth and development and discuss approach towards a child presenting with short stature.	8, 16	10, 43	D14(RS2)
5. Mention the factors that affect the growth. What are the developmental milestones seen from birth to one year of life?	8, 1	5	S21(RS3)
6. Describe the factors influencing growth. Illustrate the composition of a balanced diet by a food pyramid.	8, 81	146	A22(RS3)
7. Discuss various parameters of growth and discuss growth monitoring in children.	9	—	D13(RS2)
8. Discuss growth monitoring in children. Describe various classifications of protein-energy malnutrition.	9, 85	152, 153	J13
9. Describe the parameters used to assess growth and outline the importance of growth charts.	9, 12	455	D17(RS3), J17

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	GHAI	GUPTA	
10. Define short stature and outline the approach in management of a 3-year-old female child with height 67 cm.	16	43	J14(RS2)
11. A child of 6 years is brought with history of short stature. Discuss the etiology and management of short stature.	16	50	M21(RS3)
12. What are the causes of short stature? Discuss clinical features and investigations in a child with nutritional rickets. How will you treat?	16, 104	45	J05
13. Discuss evaluation of short stature and clinical features, management of congenital hypothyroidism.	11, 538	43, 816	D12
Short Essays			
1. What is growth and development? Describe the factors affecting the growth and development of children.	6, 22	1, 2, 4	J15(RS3), J05
2. Anthropometric parameters.	9	143	D15
3. Anthropometry measurements in first year of life.	9	143	J06
4. Mention the changes of weight in the first 24 months of age.	11	10	D01, D04
5. Changes in head circumference in 4 months.	12	11	J02
6. Growth charts (road to health card).	12	14	D11(RS2), D12(RS2), J19(RS3), S21(RS3), D06
7. Short stature—define, common causes (proportionate and disproportionate).	16	43	F22(RS3), J02, D05
8. A 10-year-old child is brought for short stature and found to be 120 cm tall. How does general examination help you arrive at a probable diagnosis?	16	43	D16(RS3)
9. Approach to a child with short stature.	16	43	D17(RS3)
10. Define and enumerate causes of short stature. Treatment of hypothyroidism.	16, 539	43	J16

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	GHAI	GUPTA	
11. Failure to thrive—define, causes, outline the management.	21	39	D18(RS3), J12
Short Answers			
1. Causes of delayed dentition.	—	—	J09(RS2), J16(RS3)
2. Shakir's tape.	—	—	J10
3. Principles of growth.	6	4	J02
4. Weighing scale.	9	10	D11(RS2)
5. What are the changes seen in the weight of children in 1st two years of life?	11	10	D16(RS3)
6. Mid-upper arm circumference (age independent anthropometric index).	11	11	D17(RS3), J05, J15
7. Growth charts.	12	14	D09(RS2)
8. Growth velocity curve.	13		D10(RS2)
9. Define short stature. Two/three/six important causes of (pathological) short stature (due to endocrine disorders).	16	43	F24(RS4), J11(RS2), J19(RS3)
Multiple Choice Questions			
1. The definition of the toddler is: A. 6 months to 1 year B. 1-2 years **C. 1 year to 36 months** D. 1 year to 48 months	6	7	F24(RS4)
CHAPTER 3: DEVELOPMENT			
Long Essays			
1. Define growth. Discuss principles (laws) of development and milestones achieved until one/two/three years of age.	6, 22	1 4	D12(RS2), D15(RS3), D19(RS3)
2. Mention developmental milestones during infancy and discuss causes for mental retardation.	24	26	D12
3. A 2-year-old child is brought to you with history of delay in attainment of walking. Write how history and a physical examination will help you arrive at a probable etiological diagnosis.	36	—	D16(RS3)

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	GHAI	GUPTA	
4. Tabulate normal essential milestones attained in all four-domains of development assessed at 3, 6, 9, 12 and 18 months. Explain most likely causes for speech delay and isolated gross motor delay.	41	26	F23(RS3)
Short Essays			
1. A 3-year-old child presents with global developmental delay with poor scholastic performance. a. Define development. b. List the causes of delayed development in a child.	22	1, 60	F24(RS4)
2. Growth and development of a 10-month-old infant.	24	5	J04
3. Motor milestones in the first six months/up to 2 years of life (fine and gross).	24	27	F22(RS3), D09, D11
4. Speech (language) development in an 18 month/1 year old child.	33	27	D02
Short Answers			
1. Developmental milestones in a 9-month-old child.	24	27	A22(RS3)
2. Developmental milestones at 18 months.	24	27	J05
3. Pincer grasp in baby.	30	27	J10(RS2), J13
4. Social smile.	33	27	D16
5. Red flag signs in child development.	41	41, 399	F22(RS3)
CHAPTER 4: DEVELOPMENTAL AND BEHAVIORAL DISORDERS			
Short Essays			
1. Attention deficit hyperactivity disorder (ADHD)—clinical features and management.	44	76	S21(RS3)
2. What is PICA? Causes of pica and its management.	46	87	J04, J07, D09

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	GHAI	GUPTA	
3. Breath holding spells in children—clinical features and management.	46	84	D01, D04, D11, D15
4. Give an account of thumb sucking.	46	83	J09
Short Answers			
1. Dyslexia.	44	74	D09
2. Pica (definition and management).	46	87	J09(RS2), J11(RS2), J15(RS3), D16(RS3), D18(RS3), D19(RS3), A22(RS3), F23(RS3), J09, J16
3. Temper tantrums.	46	86	F22(RS3), D14
4. Breath holding spells (cyanotic spells)—management.	46	84	D12(RS2), D14(RS2), J17(RS3), D17(RS3), J06, D08, J13, D16
CHAPTER 5: ADOLESCENT HEALTH AND DEVELOPMENT			
Short Essay			
1. Signs of puberty.	48	97	D08
Short Answer			
1. Name the sexual maturity rating (SMR) staging in boys.	49	97	M21(RS3)
CHAPTER 6: FLUID AND ELECTROLYTE DISTURBANCES			
Short Essays			
1. Hypokalemia—causes and management.	63	222	D06, D16
2. Hyperkalemia—management.	64	224	F22(RS3), J17

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	GHAI	GUPTA	
3. Tetany in children.	66	204, 205	D05
4. Metabolic alkalosis.	72	230	D15
Short Answers			
1. Treatment of hyponatremia.	60	220	D19(RS3)
2. Hypernatremia.	61	221	D09(RS2)
3. Hypokalemia—three causes/clinical features.	63	222	D11(RS2), J04
4. Hyperkalemia.	64	224	D10(RS2), J11(RS2), J14(RS2)
5. Hypocalcemia—clinical features.	66	204	J23(RS3)
6. Indications of IV sodium bicarbonate.	72	1023	J11
Multiple Choice Questions			
1. Hyponatremia is defined as serum sodium levels less than: A. 120 mEq/L B. 125 mEq/L C. 130 mEq/L **D. 135 mEq/L**	59	220	F24(RS4)
2. The following is earliest feature in ECG of hyperkalemia child: A. U waves **B. Tall T waves** C. ST segment elevation D. Arrhythmias	65	224	F24(RS4)
CHAPTER 7: NUTRITION			
Long Essays			
1. Define protein-energy malnutrition. Discuss various classifications of PEM. Define marasmus, kwashiorkor. Discuss the etiology, pathophysiology, clinical features (cardinal features) and (principles of) management of (severe acute) protein-energy malnutrition (kwashiorkor/marasmic kwashiorkor/marasmus).	85	156	J09(RS2), J10(RS2), J16(RS3), D19(RS3), J04, J10, D13, J16
2. Describe clinical features of marasmus and kwashiorkor. Discuss the complications in a child with grade IV malnutrition.	87	156	O20(RS3)

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	GHAI	GUPTA	
3. State the WHO criteria for severe acute malnutrition. Describe the management in the first week of SAM.	88, 90	156	F23(RS3)
4. Discuss management of grade IV PEM in a 1-year-old child. Write about staging of vitamin A deficiency (WHO).	89, 101	156	J13(RS2)
5. Complications of severe protein-energy malnutrition and their management.	91	159	D15
Short Essays			
1. Essential fatty acids.	77	137	D08
2. Balanced diet for 7–10 years old child.	81	146	D16(RS3)
3. Weaning (weaning foods—low cost).	82	127	D13(RS2), J16(RS3), D16(RS3), J10, D12
4. Complementary feeding—principles.	82	127	D11(RS2), A22(RS3), J15
5. IYCF guidelines.	83	131	J23(RS3)
6. Amylase rich foods.	83	—	J14(RS2)
7. Define the WHO classification of undernutrition types. Illustrate the ten steps of management of SAM.	85, 90	156	F22(RS3)
8. Protein-energy malnutrition (PEM)—ecological causes, classification.	87	156	J14(RS2), M21(RS3), J06
9. Marasmus—clinical features and management.	87	—	D10(RS2), D09
10. Kwashiorkor—etiology and clinical manifestations (classical features), complications.	87	—	D14(RS2), J17(RS3), D17(RS3), D01, D04, D06, D11, J14
11. WHO criteria for diagnosis of SAM. Describe short-term complications.	89	156	A22(RS3)
12. Nutritional rehabilitation.	95	—	D14
13. Integrated Child Development Services (ICDS) program.	97	986	F23(RS3)

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	GHAI	GUPTA	
Short Answers			
1. Classify PEM according to weight for age.	—	156	J03
2. Grading of marasmus.	—	—	D16
3. Age-independent anthropometry (anthropometric indices).	—	10	J18(RS3), J19(RS3), M21(RS3)
4. Essential amino acids.	76	136	D01
5. What is reference protein? Give an example.	76	137	J16(RS3), D02, D04
6. Nutritional value of hen's egg.	80	141	D12
7. Weaning foods in infants.	83	142	D10
8. National Guidelines on Infant and Young Child Feeding (IYCF).	83	131	D18(RS3)
9. Amylase-rich foods.	83		J19(RS3), O20(RS3)
10. Classification of PEM.	85	156	J14
11. Skin changes in protein-energy malnutrition.	87	161	D13
12. Flag sign.	88	41	D14
CHAPTER 8: MICRONUTRIENTS IN HEALTH AND DISEASE			
Long Essays			
1. Define weaning. Describe principle and hazards of weaning. Discuss management of vitamin A deficiency.	82, 101	127, 176	J18(RS3)
2. When will you suspect rickets in a child? What investigations will you do to confirm your diagnosis?	104	179	D09
Short Essays			
1. Vitamin A deficiency—WHO staging (clinical features) and vitamin A prophylaxis program (prevention/oral vitamin supplementation).	101	176	D08(RS2), D10(RS2), J11(RS2), J12(RS2), D14(RS2), D16(RS3), J19(RS3), D03

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	GHAI	GUPTA	
2. Hypervitaminosis A.	102	177	D14
3. (Vitamin D deficiency/nutritional) Rickets—clinical features, radiological features (using a diagram), diagnosis, management, prevention.	103	180	F24(RS4), J09(RS2), D15(RS3), D17(RS3), D18(RS3), A22(RS3), D06, D07, D10, D12
4. Hemorrhagic disease of newborn.	110	438	J10
5. Scurvy—clinical features, radiological features, management.	114	194	J14(RS2), D19(RS3), D14
6. Role of zinc in nutrition (in pediatrics)—zinc therapy.	115	200	D06, J09, J10
7. Management of iodine deficiency disorders.	116	819	D11(RS2)
Short Answers			
1. Vitamin A deficiency (xerophthalmia/ avitaminosis A)—WHO classification, four features, treatment, prophylaxis in children (vitamin A prophylaxis program).	101	176, 177	J23(RS3), D01, J02, J05, D05, J12
2. Bitot's spots.	101	177	J17
3. Vitamin D deficiency rickets—clinical features, biochemical and radiological features, radiological response to treatment.	104	180	D10(RS2), J13(RS2), J16(RS3), J17(RS3), M21(RS3), J07
4. Role of vitamin K in bleeding.	109	185	D10
5. Clinical features of niacin deficiency.	112	188	D11
6. Scurvy—clinical manifestations, X-ray changes.	114	194	J09(RS2), D13(RS2), D13

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	GHAI	GUPTA	
CHAPTER 9: NEWBORN CARE			
Long Essays			
1. Describe the physical features of a term neonate (describe general physical examination of a newborn infant). Classify neonates according to weight and gestation. Add a note on routine newborn care.	131	—	J12(RS2), J06
2. What are the advantages and problems of breast feeding? Hazards and demerits of artificial feeding.	142	115, 116	S21(RS3)
3. Define a premature neonate. What are the hazards of prematurity in the perinatal period? How do you manage them?	147	447	D05
4. What are the causes of respiratory distress in a neonate? Discuss the etiology, pathogenesis, clinical features, and treatment of hyaline membrane disease.	156	416 418	D07
5. Etiology, clinical features and management of neonatal jaundice.	170	440	J15
6. How do you differentiate physiological jaundice from pathological jaundice? Describe the complications and management of pathological unconjugated hyperbilirubinemia in a full-term baby.	170	441	D11
7. List out the causes of hyperbilirubinemia in the newborn period. How do you investigate and manage a case of ABO incompatibility?	170	440	D02
8. Define pathological jaundice in newborn. What are the causes of pathological jaundice in newborn? Outline the management.	171	441	D09
Short Essays			
1. Hydrops fetalis.	—	543	O20(RS3)
2. Composition of human milk and cow's milk.	—	114	J18(RS3)

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	GHAI	GUPTA	
3. Lactational failure—management and prevention.	—	120	D17(RS3), D18(RS3), D05
4. How will you differentiate various types of jaundice by examining the urine?	—	—	J10
5. Teratogens.	—	3	J07
6. Kernicterus.	—	442	D12
7. Newborn resuscitation.	119	—	J23(RS3)
8. APGAR score in newborn.	120	414	D10, J13
9. Discuss the important components of essential newborn care.	127	983	J14
10. Cephalhematoma.	134	389	D15(RS3)
11. Primitive reflexes in newborn.	138	26	D12(RS2)
12. Temperature regulation in term neonates.	139	396	D14(RS2)
13. What is rooming in? What are the advantages of rooming in?	140	398	D01, D04
14. Hypothermia in newborn.	140	399	J07
15. (Nutritional) Advantages of breast milk/ breastfeeding.	142	115	J11(RS2), D14(RS2), D15(RS3), D19(RS3), J05, D07, J10, J17
16. Technique of breastfeeding.	145	117	D10
17. Ten steps for successful breastfeeding.	145	124	J11
18. Retracted nipple—management.	146	120	J09
19. Intrauterine growth retardation baby—clinical features and problems.	147	406	S21(RS3)
20. Complications of prematurity.	148	—	J16(RS3)
21. Complications expected in low-birth-weight babies.	148	406	J19(RS3)
22. Kangaroo mother care.	149	398	J16(RS3), A22(RS3)
23. Respiratory distress syndrome in the neonate—etiology, management.	157	416	J14(RS2), D17(RS3)
24. Hyaline membrane disease.	157	418	A22(RS3)

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	GHAI	GUPTA	
25. Treatment of oral thrush.	166	909	D10
26. Septicemia in newborn (neonatal sepsis)—causes, recognition, clinical features, investigations and management.	166	432	D11(RS2), J15(RS3), D17(RS3), J19(RS3), J15
27. Neonatal jaundice (physiological jaundice)—causes, treatment.	170	440	J13(RS2), D16(RS3), M21(RS3), J02, J04, J16
28. Pathologic jaundice among neonates.	170	441	F23(RS3)
29. When do you suspect pathological jaundice in the neonate?	171	441	J17(RS3)
30. Treatment of unconjugated/neonatal hyperbilirubinemia in newborn.	172	440	D10(RS2), D19(RS3)
31. Phototherapy (principle).	174	443	J10(RS2), J13(RS2), J08, J09
32. Birth injuries (in a neonate).	175	415	J12(RS2), J14(RS2), D06
33. Exchange transfusion.	175	444	D07, J08, D08
34. Rh isoimmunization—prevention.	175	444	J15
35. Tracheoesophageal fistula—classification and management.	175	449	D11
36. Imperforate anus.	177	509	D12(RS2)
37. Diaphragmatic hernia—clinical features and management.	179	450	J12(RS2), D03
38. Hypoglycemia in neonates—management.	180	826	J09(RS2), J17
39. Clinical features of infant of diabetic mother.	181	430	J02
40. Prevention of vertical transmission of hepatitis B.	183	256	O20(RS3)
Short Answers			
1. Normal variants of newborn baby.	—	379	D18(RS3)
2. ABO incompatibility in newborns.	—	—	J13

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	GHAI	GUPTA	
3. Contraindications for breastfeeding.	—	116	D03
4. Bottle feeding (top feeding) in infants—hazards/disadvantages.	—	—	J14(RS2), J16, D16
5. Burping.	—	82	D14
6. Causes of lactational failure.	—	120	M21(RS3)
7. Dehydration fever.	—	279	D01
8. Six causes of preterm child.	—	—	J02
9. Flat foot.	—	—	D14
10. Umbilical hernia.	—	747	D14
11. Definition of prematurity, LBW and SGA.	119	157, 371	F24(RS4)
12. APGAR score.	120	411	J16(RS3), J17(RS3), A22(RS3)
13. Newborn resuscitation steps.	121	—	D01
14. What are the contraindications of bag and mask ventilation during neonatal resuscitation?	123	424	D17(RS3), D07, J11
15. Transitional diarrhea in the newborn.	130	458	D03
16. Erythema toxicum.	130	395	D13
17. Anthropometry at birth of a term appropriate for gestational age neonate.	132	10	D19(RS3)
18. Assessment of gestational age.	133	37 369	D03
19. Caput succedaneum.	134	389	D13(RS2)
20. Cephalhematoma.	134	389	D08(RS2), M21(RS3), J05
21. Tone assessment in an infant.	138	—	J15
22. Enumerate the neonatal reflexes.	138	389	J16(RS3)
23. Normal Moro's reflex.	138	389	D10(RS2), A22(RS3), J12, D13
24. Causes of hypothermia in newborns/preterm.	140	399	D15, J16

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	GHAI	GUPTA	
25. Steps of warm chain.	140	371, 397	S21(RS3)
26. Benefits of breastfeeding (human breast milk).	142	115	J15(RS3), A22(RS3)e
27. Immunological properties of breast milk.	143	114	D10(RS2)
28. What is nipple confusion?	144	120	J09
29. Colostrum.	144	114	J13, D14
30. Composition of breast milk.	144	114	J10(RS2)
31. Signs of good attachment.	145	117	J12
32. Define prematurity. Enumerate the complications.	148	—	D16(RS3)
33. Types of small for date babies.	148	—	J15
34. Enumerate the complications seen in a small for gestation age neonate/ handicaps in premature baby.	148	64, 977	J17(RS3), J17
35. Kangaroo mother care—three uses.	149	398	J18(RS3), J09, D15
36. Respiratory distress in neonates—mention any three causes.	156	416	F24(RS4)
37. Birth asphyxia—clinical features.	161	411	F23(RS3)
38. What are the superficial infections in newborn baby.	166	436	S21(RS3)
39. Difference between physiological and pathological neonatal jaundice.	170	441	F22(RS3)
40. Criteria to diagnose pathological jaundice in newborn babies.	170	441	O20(RS3)
41. (Prolonged) neonatal physiological jaundice (in first day of life)—cause.	171	441	J14(RS2), J07
42. Treatment of physiological jaundice in the newborn.	172	440	D03
43. Phototherapy—indications, adverse effects.	174	443	J09(RS2), D13(RS2), D05, D07
44. Exchange transfusion in neonates—indications.	175	444	D12
45. Tracheoesophageal fistulas—types, recognition at birth.	175	449	D14(RS2), J15

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	GHAI	GUPTA	
46. Imperforate anus.	177	509	D09(RS2)
47. Feeding instructions in an infant with cleft palate.	178	451	J19(RS3)
48. Diaphragmatic hernia—recognition at birth.	179	450	J09(RS2), J14(RS2)
49. High-risk neonate.	179	—	J11(RS2), J11
50. Clinical features of hypoglycemia in newborns.	181	429	J14
Multiple Choice Questions			
1. The first Apgar is taken at: A. Immediately after birth **B. 1 minute** C. 5 minutes D. 10 minutes	120	404	F24(RS4)
2. The following is the common cause of unconjugated jaundice: A. Biliary atresia B. TORCH infection C. Choledochal cysts **D. Hemolytic anemia**	171	—	F24(RS4)
CHAPTER 10: IMMUNIZATION			
Long Essay			
1. Discuss the immunology of immunization. Describe the IAP immunization schedule in detail.	185, 189	—	J11
Short Essays			
1. Vaccine storage in peripheral health center.	—	245	D19(RS3)
2. Immunization against rubella (Rubella vaccine).	—	296	J14(RS2), D05
3. What are the types of vaccines? Discuss MMR vaccine.	186, 197	241, 258	S21(RS3), D08
4. Immunization Schedule (at birth/in 1st year of life).	189	243	D09(RS2), D15(RS3), J07, D09
5. BCG vaccine.	190	251	D12, J16
6. Polio immunization in India.	192	—	F23(RS3)

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	GHAI	GUPTA	
7. Polio vaccine.	192	254	J16
8. Injectable polio vaccine and vaccine associated poliomyelitis.	193	—	J17
9. Pulse polio immunization.	195	271	J13(RS2), J04
10. DPT vaccine—side effects.	195	252	J09
11. Measles vaccine.	197	258	D15(RS3)
12. *H. influenzae* type B vaccine.	199	256	J19(RS3)
13. Intravenous immunoglobulin's—uses in pediatric practice.	217	323, 554, 1017	J07, J15
Short Answers			
1. Vaccines for swine flu.	—	—	J11
2. Atopy—definition, three features.	—	—	J02
3. Rubella vaccine.	—	259	D13(RS2)
4. Mission Indradhanush.	189	987	J23(RS3)
5. Immunization schedule (in the first year).	189	243	D03
6. BCG vaccine—dose, route and schedule of administration, complications.	190	251	F24(RS4), D12(RS2), D17(RS3), A22(RS3), F23(RS3), D02, D04
7. Oral polio vaccine—advantages.	192	254	J10(RS2), J13
8. Salk (inactivated/injectable) polio vaccine.	193	255	D09(RS2), D18(RS3), J12, D13
9. DPT vaccines—constituents, type, schedule, complications, contraindication.	195	252	D14(RS2), J17(RS3), J03, J05, D10
10. Pertusis vaccine—three adverse reactions.	196	252	J16
11. Acellular pertussis vaccine.	196	252	D12(RS2), J15(RS3), D13

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	GHAI	GUPTA	
12. Measles vaccine—complications.	197	258	D11(RS2), D01
13. Hepatitis B vaccine—immunization schedule.	198	248	D07, J08
14. Immunization of infants born to HbsAg +ve mother.	199	—	J13(RS2), J02
15. Haemophilus influenzae-B (Hib) vaccine—dosage schedule.	199	592	D08(RS2), J11(RS2)
16. Rota virus vaccine.	200	257	J12(RS2), J15
17. Human papillomavirus vaccine.	201	269	D10(RS2)
18. Japanese encephalitis (JE) vaccine.	202	260	D11
19. Varicella vaccine.	204	262	J09(RS2)
20. Vaccine associated polio.	212	242	O20(RS3)
21. Vaccine vial monitor.	213	246	J13(RS2)
22. Cold chain in vaccine storage.	213	245	D13(RS2), J14(RS2), D06
23. Intravenous immunoglobulins—indications.	217	435	J19(RS3)

CHAPTER 11: INFECTIONS AND INFESTATIONS

Long Essays

1. Describe the approach to a febrile child with fever of 8 days duration. Outline the management of typhoid fever.	220, 267	334	J06
2. A 10-month-old unimmunized child presents with fever, cold and cough of 5 days duration. He developed a maculopapular rash starting on day 4 of fever which started on face and progressed to involve the entire body. a. List the viruses causing maculopapular rash. b. Describe the clinical features of measles. c. Complications and management of measles.	230	—	F24(RS4)

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	GHAI	GUPTA	
3. A 6-month-old infant is brought with history of weakness of right lower limb with fever of 5 days. Discuss diagnosis, complications and management.	235	—	D02
4. What is primary complex (Ghon's complex)? Discuss natural course of primary complex. How will you investigate and manage a child with primary complex?	255	281	J02, J05
5. Mention complications of tuberculosis in children. Discuss etiopathogenesis and clinical features of neurotuberculosis.	255	282	D12(RS2)
6. Describe the etiopathogenesis, clinical features, complications and management of diphtheria.	264	325	D11(RS2)
7. Discuss clinical features, diagnosis and management of childhood malaria.	275	337	J13
8. Name the diseases that can be vertically transmitted from the mother to the baby. Write the precautions and prophylactic measures you will recommend. Write the mode of transmission of HIV in children. Write the precaution and prophylactic measure to prevent mother to child transmission.	284, 246, 251	—	D05
9. Expand the term TORCH infections. Discuss clinical features of congenital rubella syndrome.	284	295, 766	J03
Short Essays			
1. Difference between childhood and adult tuberculosis.	—	282	D15(RS3)
2. Chemoprophylaxis in tuberculosis.	—		J18(RS3)
3. Discuss RNTCP management of tuberculosis and mention indications for steroid therapy in childhood tuberculosis.	—	284	D14(RS2)
4. Immunization of HIV infected child.	216	—	D14

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	GHAI	GUPTA	
5. Differential diagnosis of maculopapular rash. List the complication of chickenpox.	224, 232	297	J14
6. Measles—clinical features, prevention, complications.	230	290	J11(RS2), J17(RS3), D06, D07, J08, D14
7. Measles rash—diagnosis and differential diagnosis.	231, 224	—	D14(RS2)
8. Roseola infantum.	234	291	D08
9. Acute viral hepatitis.	237	494	J23(RS3)
10. Hepatitis B—clinical features, diagnosis and treatment, prevention.	238	493	D11(RS2), D14(RS2)
11. Serology as an aid to diagnosis in hepatitis B infection.	239	554	J17(RS3)
12. Dengue fever—define, classify, ecological factors, transmission, management in children.	241	300	J15(RS3), J03, D09
13. Dengue hemorrhagic fever—clinical features and management.	244	300	J09(RS2), J16(RS3), J06
14. Pediatric acquired immune deficiency syndrome/HIV—transmission, clinical features, laboratory investigations, prevention of vertical (mother to child) transmission.	246	316	J10(RS2), J12(RS2), J17(RS3), D18(RS3), D02, J03, J05, J16, J17
15. (Progressive) Primary complex.	255	281, 283	D11(RS2), F23(RS3), D06, D09, J17
16. Diagnosis of tuberculosis.	256	284	M21(RS3), J11
17. Acid-fast bacilli.	257	286	D13
18. Tuberculin (Mantoux) test—interpretation, importance.	257	285	D10
19. Management of persistent cough in an unimmunized child.	264	612	D11
20. Pertussis—clinical features and complications.	265	252	J10(RS2)

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	GHAI	GUPTA	
21. Enteric fever—clinical features, complications, laboratory investigations, management, prevention.	266	334	J09(RS2), D09(RS2), D12(RS2), D01, D02, J03, D04, D11
22. Write interpretation of Widal test.	267	335	J09
23. Leptospirosis.	268	496	J12(RS2)
24. Write a note on transmission of malaria.	274	339	D01, D04
25. Life cycle of malaria parasite (Plasmodium falciparum).	274	338	J16(RS3), J04
26. Clinical types of malaria and management of falciparum malaria.	275	339	J03
27. Cerebral malaria—clinical features, treatment, differential diagnosis.	275	340	D08(RS2), D09(RS2), D10(RS2), J11(RS2), D17(RS3), J02, D03, D07, J14
28. Complicated malaria.	276	339	M21(RS3)
29. Treatment of malaria (vivax malaria).	276	343	D09
30. Newer antimalarial drugs.	276	343	D19(RS3), D14
31. Giardiasis—clinical features, diagnosis and treatment.	282	356	J11, J17
32. Congenital rubella syndrome—clinical features, prevention.	285	296, 448	D16
33. Worm infestations.	286	360	D06
34. Ascariasis.	286	358	F23(RS3)
Short Answers			
1. Differences between primary and post-primary tuberculosis.	—	—	S21(RS3)
2. Tripod sign in poliomyelitis.	—	—	D11
3. Mop up immunization.	—	—	D12(RS2)
4. DOTS plus strategy.	—	—	O20(RS3)
5. Immunization of an infant born to HIV positive mother.	216	122	D16(RS3)

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	GHAI	GUPTA	
6. Koplik spots.	231	290	J04, D12
7. Measles (complications).	231	259	D19(RS3), A22(RS3), J14
8. Measles—immunization.	232	243	J04
9. Subacute sclerosing panencephalitis.	232	753	D08
10. Mumps—three complications.	235	294	D15
11. Hepatitis A prevention.	238	262	J11(RS2)
12. Hepatitis B prevention.	239	493	D16(RS3)
13. Severe dengue.	244	303	J23(RS3)
14. Nevirapine.	249	1015	D08(RS2)
15. Mention the classification of antiretroviral drugs and give two examples each.	250	1014	M21(RS3)
16. Prevention of HIV infection (mother to child transmission).	251	323	D08, J12, J13
17. Progressive primary complex.	255	281 283	J15(RS3), F22(RS3)
18. Scrofula.	256	283	O20(RS3)
19. Indications for work up of tuberculosis in a 2-year-old child.	257	—	J17(RS3)
20. Investigations for diagnosis of childhood pulmonary tuberculosis.	257	—	F23(RS3)
21. Mantoux (tuberculin) test in children—importance, three false-negative causes.	257	285	D08(RS2), J16(RS3), D19(RS3), D05, J09
22. Corticoids in TB—indications and role.	260	—	J13(RS2), D01
23. Side effects of antitubercular therapy.	260	—	J12
24. Adverse effects of rifampicin.	260	—	D13(RS2)
25. Complications of pyrazinamide.	260	—	J10
26. Toxic shock syndrome.	263	250, 259, 313	J13(RS2)
27. Faucial diphtheria.	264	325	D16
28. Diphtheria—complications.	264	326	J07

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	GHAI	GUPTA	
29. Whooping cough (pertussis)—complications.	265	329	J12(RS2), D10
30. Widal test and its interpretation.	267	335	J15(RS3), D17(RS3)
31. Typhoid—treatment (drugs used).	267	335	D06
32. Life cycle of malaria parasite in female anopheles mosquito.	274	338	J19(RS3)
33. Falciparum malaria—laboratory diagnosis, treatment.	275	342	J15(RS3)
34. Peripheral smear examination in malaria.	276	342	D14(RS2)
35. Complications of malaria.	276	341	F22(RS3)
36. Artemisin derivatives in malaria.	277	343	J14(RS2)
37. Cerebral malaria—treatment.	277	340	D05
38. Black water fever.	279	341	J18(RS3)
39. Giardiasis—treatment.	283	357	D10
40. Congenital rubella syndrome—four manifestations.	285	296	J23(RS3), J10, J13
41. Congenital syphilis—Hutchinson's triad.	286	446	J11
42. Ascariasis (round worm)—diagnosis and treatment.	287	358	J09(RS2), D14(RS2), J07, D09
43. Mention drugs used in worm infestation.	287	—	J16
44. Filarial eradication.	289	353	J10(RS2)
Multiple Choice Questions			
1. Triad of congenital rubella syndrome include all, *except:* A. Cataract B. Sensorineural deafness **C. Horseshoe kidney** D. Congenital heart disease	285	296	F24(RS4)

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	GHAI	GUPTA	
CHAPTER 12: DISEASES OF GASTRO-INTESTINAL SYSTEM AND LIVER			
Long Essays			
1. Acute watery diarrhea (gastroenteritis) in children (infancy)—causes, pathogenesis, clinical features, complications, assessment and management (child with severe dehydration).	307	458	D10(RS2), D18(RS3), J09, D14
2. What are the clinical features of shock in a 5-year-old child? Discuss the differential diagnosis. Outline the fluid therapy for a severely dehydrated child.	768, 311	945	J07
3. Portal hypertension—etiology, clinical features and management.	338	501	D09(RS2)
Short Essays			
1. Congenital hypertrophic pyloric stenosis—diagnosis and treatment.	295	506	J11
2. Gastroenteritis (acute diarrhea)—complications.	300	458	J12(RS2), J10
3. Chronic recurrent abdominal pain—causes and management.	303	478	D18(RS3)
4. Intussusception (clinical features).	304	506	J04
5. Assessment of dehydration in an infant.	310	—	D13(RS2), J05, D09
6. Mention the fluid and electrolyte disturbance in severe dehydration secondary to diarrhea and its management.	311	461	J14
7. Oral rehydration therapy.	311	460	J13
8. Oral rehydration solution (ORS) WHO—composition and administration advice.	311	460	D01, D04, D05
9. Home management of acute diarrhea.	311	462	D02
10. Write a note on ReSoMaL and plan 'B' management of dehydration.	312	163	J18(RS3)
11. Management of some dehydration (in a 2-year-old child/child weighing 6 kg) in diarrhea—IMNCI Plan B.	312	217	D13(RS2), F22(RS3), D03, J10, D12, D15

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	GHAI	GUPTA	
12. Management of severe dehydration—Plan C (in an one-year-old child weighing 10 kg).	312	461	J11(RS2), J19(RS3)
13. Bacillary dysentery—causes and management.	314	355	J03
14. Persistent diarrhea—define, dietary algorithm for treatment.	315	458	D12(RS2), O20(RS3), S21(RS3)
15. Emergency management of hematemesis in portal hypertension.	326	501, 503	D13
16. Hepatomegaly—causes.	328	—	D09(RS2)
17. Causes of acute liver cell failure in children.	333	495	J06
18. Cirrhosis—causes and clinical features.	334	496	J09(RS2), J13(RS2)
19. Hepatic encephalopathy—management.	336	782	F23(RS3)
20. Portal hypertension in children—etiology, diagnosis (clinical and investigation approach), management (of complications—hematemesis).	338, 326	501	F24(RS4), J15(RS3), O20(RS3), J08, J16
21. Wilson disease.	342	929	J08
22. Causes of prolonged cholestatic jaundice.	345	480	J09(RS2)
23. Biliary atresia.	346	500	D12(RS2)
Short Answers			
1. Liver span.	—	—	D15
2. Contraindications of ORS.	—	460	
3. Clinical features of hypernatremic dehydration.	—	221	O20(RS3), M21(RS3)
4. Nutritional recovery syndrome.	—	462	D12(RS2)
5. Congenital hypertrophic pyloric stenosis—diagnosis, metabolic derangements.	295	506	D15(RS3), D10
6. List three complications of acute watery diarrhea.	310	460	F24(RS4)
7. Assessment of dehydration.	310	460	J08

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	GHAI	GUPTA	
8. Low osmolar WHO oral rehydration salt (ORS)—composition.	311	460	F24(RS4), J10(RS2), J23(RS3), D12
9. Clinical features of severe hyponatremic dehydration.	312	461	D17(RS3)
10. WHO oral rehydration solution—composition (electrolyte content in milliequivalents), contraindications.	312	461	D08(RS2), J09(RS2), D07, D16
11. Plan "A" management of dehydration in a 2-year-old child.	312	460	D16(RS3)
12. Plan B management of diarrhea (some dehydration)—principles.	312	461	D12(RS2), J03, J12
13. Plan C for dehydration.	312	461	F23(RS3)
14. Management of severe dehydration (diarrhea).	312	461	J04, D06
15. Indications of antimicrobials in diarrhea.	314	462	J10
16. Dysentery—definition, drugs in bacillary dysentery.	314	464	J02
17. A 5-year-old child presents with bloody stools. Mention three causative organisms	314	—	F24(RS4)
18. Management of persistent diarrhea.	315	319, 458	D11
19. Hepatosplenomegaly with anemia in children—causes.	328	524, 526	J14
20. Laboratory investigations in acute hepatic failure.	333	495	J17
21. Stages in hepatic encephalopathy.	334	782	S21(RS3)
22. Chronic liver disease—signs.	334	496	J10
23. Asterixis (metabolic flap).	335		J15
24. Puddle sign.	337	485	D11(RS2)
25. Clinical features (major symptoms and signs) of portal hypertension.	338	501	D15(RS3), D03
26. Fatty liver in children—causes.	344	501	D10
27. Stool in prolonged cholestatic jaundice of newborn.	345		J13(RS2)
28. Biliary atresia.	346	471, 500	J10

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	GHAI	GUPTA	
CHAPTER 13: HEMATOLOGICAL DISORDERS			
Long Essays			
1. Define anemia. Describe etiopathogenesis, clinical features, diagnosis, management and preventive strategies of iron deficiency anemia in children.	350, 354	518, 526	D01, D04, D16
2. Define and classify anemia. Write a note on management of thalassemia and prevention of thalassemia.	350, 362	518, 539	M21(RS3)
3. What are the causes of hypochromic microcytic anemia? Outline the clinical features and management of it.	354	519	J09
4. Hemolytic anemia—classification, clinical features of thalassemia.	357	535	J02
5. Thalassemia major—etiology, clinical features and investigations and treatment.	360	540	F22(RS3)
Short Essays			
1. Management of dimorphic anemia.	—	535	J14
2. Vaccination for thalassemic child.	—	539	D01, D04
3. Note on Von-Willebrand disease.	—	559	M21(RS3)
4. Classification of anemia in children.	—	518	D03
5. Laboratory workup of nutritional anemia in children.	351	530	J17(RS3), J11
6. Significance of peripheral smear.	353	517	D14
7. Classify anemia and write a short note on investigation of megaloblastic anemia?	354	518, 531	F24(RS4)
8. Microcytic hypochromic anemia.	354	528	D06
9. Dietary sources of iron.	354	529	J06
10. Iron deficiency anemia in children—causes, clinical features and treatment.	354	526	J10(RS2)
11. Macrocytic anemia.	355	519	F23(RS3)
12. Megaloblastic anemia—causes and clinical features.	355	531	D13(RS2), J03
13. Hemolytic anemias (hemolysis)—laboratory diagnosis (peripheral smear).	357	535	J12, J15, D16

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	GHAI	GUPTA	
14. Hereditary (congenital) spherocytosis.	358	546	D12(RS2), O20(RS3)
15. Thalassemia (major/trait)—clinical features, investigations (describe and interpret) management.	360	885	F24(RS4), J11(RS2), J04, D12
16. Iron overload in chronically transfused—causes, clinical features and management.	363	542, 1022	D16
17. Chelation therapy in thalassemia.	363	537	J17
18. Iron chelating agents.	363	537	J14(RS2)
19. Sickle cell anemia—clinical features (crisis).	364	544	D08(RS2), D11, D16
20. Aplastic crisis.	365	545	O20(RS3)
21. Discuss the approach to a child with bleeding—diathesis.	369	—	D10(RS2), D18(RS3)
22. Acute immune thrombocytopenic purpura/idiopathic thrombocytopenia (ITP)—clinical features and treatment.	371	553	S21(RS3), D02, D14
23. Hemophilia—clinical features and diagnosis (approach).	372	556	D13, J14
24. Disseminated intravascular coagulation.	373	—	J18(RS3)
Short Answers			
1. Laboratory investigations suggestive of response to iron therapy.	—	515	J17
2. Capillary filling time.	—	—	D11(RS2), J23(RS3)
3. RBC indices.	352	518	J18(RS3)
4. Serum ferritin.	354	541	D12
5. Dietary sources for iron.	354	528	J10
6. Koilonychia.	354	527	D15
7. Iron deficiency anemia—investigations (peripheral smear findings), treatment.	354	526	J11(RS2), D16(RS3), S21(RS3), J03, D03, D09, J16
8. Nonresponsive to iron therapy in a case of anemia.	355	89	D13
9. Megaloblastic anemia.	355	531	D18(RS3)

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	GHAI	GUPTA	
10. Hemolytic anemia—peripheral smear findings.	357	536	D16(RS3), J19(RS3)
11. Hemolytic (thalassemic) facies.	358	536	D11(RS2), J13(RS2), D10
12. Mention the drugs contraindicated in G6PD deficiency.	359	547	J14
13. Beta thalassemia major—laboratory diagnosis (peripheral smear finding), treatment.	361	540	J12(RS2), J14(RS2), D02, D04, J07
14. Iron chelation therapy.	363	538	J23(RS3)
15. Name complications of sickle cell anemia.	364	544	J18(RS3)
16. Aplastic anemia—causes.	365	523	J10(RS2)
17. Immune thrombocytopenic purpura (ITP)—investigations, treatment.	371	553	J12(RS2), F22(RS3)
18. Hemophilia—clinical features, treatment, prevention.	372	556	F24(RS4), O20(RS3), A22(RS3), D16

CHAPTER 14: OTORHINOLARYNGOLOGY

Short Essays

1. Allergic rhinitis—clinical features.	386	584	J03
2. Tonsillectomy in children—indications.	390	584	J06
3. (Congenital laryngeal) Stridor.	391	590	J13, D16
4. Laryngomalacia.	392	591	D13

Short Answers

1. Otitis media—clinical features, six complications.	379	577	J02
2. Epistaxis—causes.	388	577	D10
3. Stridor.	391	590	D06

CHAPTER 15: DISORDERS OF RESPIRATORY SYSTEM

Long Essays

1. Pneumonia in children—classify, etiology, clinical features, diagnosis and management. Add a note on ARI control program.	402, 405	601	J10(RS2), D16(RS3), D10

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	GHAI	GUPTA	
2. Write about ARI control program. Discuss management of croup.	401, 405	—	J13(RS2)
3. What is acute respiratory infection control program? Describe clinical features of pneumonic consolidation caused by *Streptococcus pneumoniae* and its complications and treatment.	405, 404	601	J15(RS3)
4. Acute bronchiolitis in children—etiology, clinical features, management and complications.	406	612	J11(RS2), D08, D14
5. Bronchial asthma—define, predisposing factors, management of acute severe asthma.	407	614	J10
6. Empyema in children—etiology, clinical features and management.	417	605	J15
Short Essays			
1. Pleural effusion in children—causes.	—	605	D09(RS2)
2. Causes of recurrent or persistent cough in a 5-year-old child.	396	581	J06
3. Evaluation of children with chronic persistent cough.	396	581	J11
4. Wheezing in children—causes.	397	609	J09
5. Recurrent respiratory infections—investigations.	399	601	J19(RS3)
6. Epiglottitis.	401	592	J18(RS3)
7. Croup—differential diagnosis, investigations and treatment.	401	593	F22(RS3), D15
8. Pneumonias in children—classification, management.	402	601	D08(RS2), J09(RS2), D01, D04
9. Bacterial pneumonia—clinical features and complications.	402	605	D18(RS3)
10. Management of staphylococcal pneumonia.	403	602	J08
11. Antistaphylococcal agents.	403	—	D13
12. Classify acute respiratory infection (ARI) and discuss the management of very severe ARI.	405	601	M21(RS3), J03

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	GHAI	GUPTA	
13. Bronchiolitis—etiopathogenesis, clinical features and diagnosis, management, complications.	406	612	O20(RS3), M21(RS3), S21(RS3), J05
14. Bronchial asthma—complications.	406	614	D02
15. Clinical features of acute severe asthma and management of status asthmaticus.	407	615	J18(RS3)
16. Treatment of a child with acute severe asthma.	415	614	D09(RS2), D16(RS3), J12
17. Status asthmaticus (acute attack of bronchial asthma)—management.	415	614	D10(RS2), J23(RS3), D03, D07
18. Foreign body aspiration—diagnosis (radiological findings) and management.	416	596	D18(RS3), D03
19. Bronchiectasis—definition and pathology.	416	581	J02
20. What are the common suppurative lung diseases in children? What are the signs and symptoms of bronchiectasis in children?	417	—	J15(RS3)
21. Empyema (thoracis)—management.	417	605	D12(RS2)
Short Answers			
1. Management of *Pneumocystis carinii* pneumonia.	—	—	J16
2. Bronchial breathing.	—	—	D11(RS2), J10
3. Whispering pectoriloquy.	—	—	J08
4. Pleural rub.	—	606	D15
5. Characteristics of pleural fluid in transudative pleural effusion.	—	606	D07
6. Epiglottitis—etiology and clinical features.	401	592	D17(RS3)
7. Etiology of recurrent respiratory infections in children (any six).	401	601	D14(RS2)
8. Etiological agents of pneumonia in children.	402	601	J03

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	GHAI	GUPTA	
9. When do you suspect severe pneumonia in a 10-month-old child? Write about the initial management.	402	601	J17(RS3)
10. Signs and symptoms of very severe pneumonia.	402	601	J06
11. Clinical features of lobar pneumonia.	402	601	D12
12. Indications for antibiotics in ARI.	405	—	J04
13. Classification of respiratory distress according to the ARI control program.	405	—	D15(RS3)
14. Acute bronchiolitis—etiological factors, management.	406	625	D06, D09, J10, J17
15. Inhaler therapy.	412	623	J13
16. Status asthmaticus (acute severe asthma)—management.	415	940	D05, J08
17. Acute severe asthma—name three drugs used.	415	940	F24(RS4)
18. Bronchiectasis—etiology.	416	581	D02, D04, J08, D08
19. Empyema—treatment.	417	605	J12(RS2)
Multiple Choice Questions			
1. The commonest organisms causing acute laryngotracheobronchitis is: A. **Parainfluenza virus type 1** B. Adenovirus C. Respiratory syncytial virus D. Rhinovirus	401	593	F24(RS4)
CHAPTER 16: DISORDERS OF THE CARDIOVASCULAR SYSTEM			
Long Essays			
1. Congestive cardiac failure in children—etiopathogenesis, clinical features and management.	423	657	J03, D16
2. Classify cyanotic congenital heart diseases in children. Fallot's tetralogy—clinical features, investigations and management (of hypercyanotic spells).	430, 444	633	J15(RS3)

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	GHAI	GUPTA	
3. Acute rheumatic carditis (rheumatic fever) in a 7/10-year-old child—etiopathogenesis, clinical features, investigations, management, prophylaxis. Add a short note on complications of acute rheumatic fever.	457	678	J18(RS3), J23(RS3), D03
Short Essays			
1. Congestive cardiac failure (CCF)—causes in infants/older children, clinical features (principles of), management (drugs used).	423	657	J09(RS2), J13(RS2), J18(RS3), J19(RS3), D19(RS3), F22(RS3), D01, J06, D04, J11, J12
2. Fetal circulation.	428	635	D13
3. Classify congenital heart disease. Management of congestive heart failure.	430, 424	651	J14
4. Cyanotic spells (etiology, clinical features and management).	436	638	D08(RS2), D10(RS2), D07, J08, D13, J16
5. Atrial septal defect—hemodynamics and clinical manifestations.	438	664	D12(RS2)
6. Ventricular septal defect (below 1 year of age)—hemodynamics, clinical features, investigations, treatment and complications.	439	657	J11(RS2), J17(RS3), O20(RS3), A22(RS3), J09, D12, J13
7. Patent ductus arteriosus (PDA)—hemodynamics, clinical features, complications, management and ductus dependent cardiac lesions.	442	661	D09(RS2), J10(RS2), J05, J15
8. Tetralogy of Fallot (TOF)—components, hemodynamics, clinical features (in first 5 years of life), radiological findings and management (of cyanotic spells).	444	633	D14(RS2), J16(RS3), D16(RS3), A22(RS3), F23(RS3), D09, D15

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	GHAI	GUPTA	
9. Rheumatic carditis (fever)—signs and symptoms, John's diagnostic criteria (medical), management, prophylaxis (primary and secondary).	457	678	J10(RS2), J12(RS2), J15(RS3), S21(RS3), J07, J08, D14, D15, J17
10. Infective endocarditis—clinical features, prophylaxis (in rheumatic and congenital heart disease).	466	680	J09(RS2), D10
11. Management of SABE.	468	—	J02
Short Answers			
1. Digital (differential) clubbing.	—	—	J10(RS2), D11(RS2), J12
2. Differential cyanosis.	—	661	D12(RS2), D13(RS2)
3. Congestive heart failure in infants—clinical features/signs (recognition).	423	651	J15(RS3), D15(RS3), D18(RS3), D11, D14
4. Congestive cardiac failure in children—mention three drugs used.	425	522	F24(RS4)
5. Digitalization in children.	425	653	J13(RS2), J04
6. Nada's criterias for congenital heart diseases.	432	645	J16(RS3), S21(RS3)
7. Central cyanosis—causes.	432	639	D09(RS2), J11(RS2)
8. Second heart sound splitting.	433	642	D11(RS2)
9. Ventricular septal defect—any three complications.	441	657	D15(RS3)
10. Continuous murmur—six causes.	444	644	D15, J16
11. Fallot's tetralogy—components, clinical manifestations, complications.	444	633	S21(RS3), D13, D16
12. Uses of propranolol in pediatrics.	446	996	J07
13. Acute cyanotic spells—management (two drugs used).	447	638	J12(RS2), J19(RS3), D03, D05

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	GHAI	GUPTA	
14. Rheumatic carditis.	457	678	D06
15. Modified Jones criteria for diagnosis of rheumatic fever (essential).	459	676	D10(RS2), D13(RS2), J14(RS2), D14(RS2), J17(RS3), M21(RS3), J05, D07
16. Describe joint involvement in acute rheumatic fever.	460	677	J19(RS3)
17. Erythema marginatum.	460	677 641	D08(RS2)
18. ASLO titer.	460	—	J13
19. Rheumatic fever—prophylaxis/ penicillin/primary prevention.	461	677	D19(RS3), F23(RS3), J09, D11
20. Roth spots.	467	927	D09(RS2)
21. Myocarditis—clinical signs.	469	676	J04
22. Pericardial effusion—causes.	473	682	D08(RS2)
23. Pulsus paradoxus.	474	682	J17

CHAPTER 17: DISORDERS OF KIDNEY AND URINARY TRACT

Long Essays

1. How do you detect gross proteinuria? Discuss causes and management of minimal change disease.	496, 500	717	J12
2. Acute poststreptococcal glomerulonephritis—nephritogenic strains of streptococci, predisposing factors, clinical features, complications and management (of acute nephritis).	496	711	J09(RS2), J08
3. Discuss approach towards a child who is 3-year-old coming with hematuria and management of acute glomerular nephritis.	496	—	J17(RS3)
4. Nephrotic syndrome in children—etiology, pathogenesis, clinical features, investigations, treatment and complications. How would you manage a child with minimal change?	500	721	J11(RS2), A22(RS3)

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	GHAI	GUPTA	
5. Define severe malnutrition. List the causes of edema in a 4-year-old child. Outline the management of first attack of nephrotic syndrome.	502	—	J07
6. Urinary tract infections (1-year-old child)—etiopathogenesis (causative organism, predisposing factors), clinical features, diagnosis and management.	507	702	F22(RS3), J02, J17
Short Essays			
1. Evaluation of a child with hematuria.	493	707	J11
2. Poststreptococcal (acute) glomerulonephritis—etiopathogenesis, investigations and management.	496	711	J10(RS2), F23(RS3), D03, J06, D15, J16
3. Acute nephritis—management.	497	—	D16
4. Henoch-Schonlein purpura—clinical features, investigation and treatment.	499	—	J23(RS3)
5. Nephrotic syndrome (initial episode)—define, classify, histopathological changes, complications, diagnosis/investigations (urinary and biochemical changes) and management (drugs used).	500	721	J15(RS3), J16(RS3), J23(RS3), J04, J10
6. Minimal lesion nephrotic syndrome—pathogenesis, treatment.	500	721	D08(RS2), D13
7. (Recurrent) urinary tract infection in children—causes, investigations (in 2-year-old boy) and treatment.	507	702	J12(RS2), D13(RS2), D14(RS2), D16(RS3), J05, J12
8. Vesicoureteric reflux—management.	510	706	J13(RS2), D11
9. What are the differences between prerenal and intrinsic renal failure.	511	—	D10(RS2)
10. Management of acute renal failure.	513	217	M21(RS3)
11. Hemolytic uremic syndrome—clinical features and management.	517	727	S21(RS3)
12. Nocturnal enuresis—causes and management.	527	87	D08(RS2), D10(RS2), J05, J13
13. Obstructive uropathy.	529	703	D12

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	GHAI	GUPTA	
Short Answers			
1. Hematuria.	493	707	J06
2. Proteinuria.	496	717	D14
3. Albuminuria.	496	—	D08
4. Acute glomerulonephritis—define and enumerate types, urinary findings (urinary sediments)/treatment.	496	711	D15(RS3), J19(RS3), D01, D06, J09, D09, J15
5. Nephrotic syndrome—define, urine examination, complications.	500	721	J14(RS2), J17(RS3), J18(RS3), D19(RS3), D02, D04, D07, D10, J13, J14
6. Management of minimal change nephrotic syndrome.	502	723	D18(RS3)
7. Complications of acute glomerular nephritis.	504	711	M21(RS3)
8. (Recurrent) urinary tract infections—investigations (urinary findings).	507	702	J11(RS2), D17(RS3), J03
9. Fluid management in acute renal failure.	513	217	O20(RS3)
10. Complications of acute renal failure.	514	217	S21(RS3)
11. Hemolytic uremic syndrome.	517	727	J08
12. (Primary) nocturnal enuresis—define, management (drugs used).	527	87	J14(RS2), J16(RS3), A22(RS3), D14
CHAPTER 18: ENDOCRINE AND METABOLIC DISORDERS			
Long Essay			
1. Congenital hypothyroidism—clinical features, investigations and management.	538	816	D09(RS2), D13(RS2), D01, D04

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	GHAI	GUPTA	
Short Essays			
1. Congenital hypothyroidism (cretinism)—etiology, clinical feature, laboratory diagnosis and management.	538	816	J11(RS2), D05, J11, J15
2. Juvenile hypothyroidism—features.	539	816	D10, D14
3. Goiter.	539	818	J13
4. Obesity.	547	51	J13
5. Juvenile diabetic mellitus—clinical features.	564	819	D13
6. Juvenile diabetic ketoacidosis—clinical features, investigations and management (fluid therapy).	567	825	J10(RS2), D11(RS2), D15(RS3), J23(RS3), J12, J14
Short Answers			
1. Congenital hypothyroidism in a term neonate—diagnosis (clinical features).	538	—	D14(RS2), D15(RS3), J17(RS3)
2. Hypothyroidism (cretinism)—clinical features, investigations, treatments.	538	—	J10(RS2), J12(RS2), D18(RS3), F22(RS3)
3. Three clinical markers of pathologic obesity.	548	—	J15
4. Kussumaul's breathing.	567	—	J15
5. Diabetic ketoacidosis—management.	567	825	D06
CHAPTER 19: CENTRAL NERVOUS SYSTEM			
Long Essays			
1. List out common developmental milestones up to 2 years of age. Outline the important causes of mental retardation and management of any one condition.	—	—	D06
2. Discuss the etiology of convulsions in children. Write a note on management of status epilepticus.	579	951	J14

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	GHAI	GUPTA	
3. Purulent (pyogenic) meningitis (in 2-year-old child)—etiology, clinical features, diagnosis, complications and management.	585	777	J12(RS2), D18(RS3), D03, D10, D11, D13
4. Tuberculous meningitis—etiology, pathogenesis, stages, clinical features, diagnosis, management and long-term complications.	586	780	D08(RS2), D10(RS2), J19(RS3), J04, D15, J16
5. Cerebral palsy—define, etiological factors, classification and management.	578	799	J08
6. Raised intracranial tension—clinical features and management.	589	—	F22(RS3)
7. Hydrocephalus—etiology, clinical features and management.	589	766	D11(RS2)
Short Essays			
1. Macrocephaly	—	59	J18(RS3)
2. Pseudotumor cerebri.	—	—	J07
3. Infantile hemiplegia—causes.	—	—	J07
4. Cerebral edema.	—	—	J12(RS2)
5. Microcephaly.	574	59	D13
6. Spina bifida.	574	877	J13(RS2)
7. Dermatological manifestations of different neurocutaneous syndromes.	576	—	J12
8. Cerebral palsy—causes, classification, clinical features (quadriplegic cerebral palsy), comorbidities, complications, team approach, intervention.	578	799	D13(RS2), J14(RS2), D14(RS2), J15(RS3), D15(RS3), D17(RS3), J19(RS3), D08, J15, D16
9. Status epilepticus—definition, pathophysiology and management.	579	951	J17(RS3), S21(RS3), F23(RS3), J13

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	GHAI	GUPTA	
10. Neonatal seizures/convulsions (in a 3 days old)—causes and management.	579	—	F24(RS4), D13(RS2), J18(RS3), J19(RS3), A22(RS3), J05
11. How will one treat a child with generalized convulsion in continuing in emergency?	580	—	F22(RS3)
12. (Typical) Febrile seizures—define, types, clinical features (characteristics/ recognition), diagnosis and management.	580	—	D09(RS2), D10(RS2), J16(RS3), D16(RS3), D19(RS3), M21(RS3), J23(RS3), D05, D10, J15
13. Absence seizures.	581	—	J10(RS2)
14. Japanese B encephalitis (ecological factors).	584	260	D02
15. Encephalitis—complications.	584	—	D09(RS2)
16. Pyogenic meningitis—CSF findings (long-term), complications.	586	777	D13(RS2), D15(RS3), J08
17. Tubercular meningitis—stages, clinical manifestations in each stage, complications, investigations (CSF findings), treatment.	586	780	F24(RS4), D11(RS2), J14(RS2), D17(RS3), D19(RS3), D11
18. Reye's syndrome—clinical presentation.	588	—	D16
19. Hydrocephalus—etiopathogenesis, clinical features.	589	766	D08(RS2), O20(RS3), A22(RS3)
20. Evaluation of a comatose child.	593	—	J11
Short Answers			
1. Macrocephaly (large head)—causes.	—	59	J16(RS3), A22(RS3)

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	GHAI	GUPTA	
2. Crossed hemiplegia.	—	—	D15
3. Normal CSF—composition.	—	—	D08(RS2), D18(RS3)
4. Kernig's sign.	—	—	D05
5. Pseudotumor cerebri.	—	—	D13(RS2)
6. Microcephaly—causes.	574	59	D08
7. Spina bifida.	574	877	O20(RS3)
8. Three external markers of neurocutaneous syndromes.	576	—	D15
9. Cerebral palsy—define, classification.	578	799	J12(RS2), F22(RS3)
10. (Typical/atypical) febrile convulsions/ seizures—clinical features, management, prophylaxis.	580	774	J12(RS2), J18(RS3), D03, J05, J07, D08, D12, D16
11. Criteria for diagnosing febrile seizure.	580	775	J17
12. Etiology of neonatal seizures (any six).	581	425	D19(RS3)
13. Viral meningitis—CSF findings.	584		D12
14. Encephalitis—CSF findings.	584	781	J03
15. Pyogenic (bacterial) meningitis—etiologic organisms, symptoms and signs (child less than 1 year), CSF findings (partially treated), complications.	585	777	D16(RS3), J18(RS3), F23(RS3), J04, J05, J07, D07, D09, D16
16. Tuberculous meningitis—CSF findings, drug therapy.	586	779	J15(RS3), D02, D04, J07
17. Macewen's sign.	589	—	J17
18. Hydrocephalus—causes.	589	766	S21(RS3)
19. Crack pot sign.	589	—	O20(RS3)
20. Pupillary signs in coma.	593	—	J06
21. Chorea—define, center in the brain, causes.	600	677	D09, J12
22. Sydenham chorea.	600	677	D12(RS2)
23. Beevor's sign.	615	—	D15

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	GHAI	GUPTA	
Multiple Choice Questions			
1. All the following are causes of microcephaly in children, *except:* A. Down syndrome B. Congenital Rubella infection C. Craniosynostosis **D. Untreated B thalassemia major**	574	—	F24(RS4)
2. The Miller-Fisher variant syndrome of Guillain-Barre syndrome is characterized by all of the following, *except:* A. Ophthalmological abnormalities B. Ataxia C. Areflexia **D. Bladder and bowel involvement**	610	—	F24(RS4)
CHAPTER 20: NEUROMUSCULAR DISORDERS			
Short Essays			
1. A 10-year-old child is brought to the emergency with progressive weakness of the lower limbs since 3 days. a. What is acute flaccid paralysis? b. Describe any three-differential diagnosis of AFP.	611	793	F24(RS4)
2. Acute flaccid paralysis (AFP).	611	793	J16
3. Acute flaccid paralysis surveillance.	611	798	J05
4. Acute generalized flaccid paralysis (floppy infant).	611	807	J10(RS2), J13(RS2)
5. Differential diagnosis of in a floppy infant.	611	807	D05
Short Answers		—	
1. Acute flaccid paralysis—write six main causes.	611	—	J15(RS3)
2. Laboratory diagnosis of DMD.	615	810	J11
CHAPTER 21: CHILDHOOD MALIGNANCIES			
Long Essay			
1. A 2-year-old child presented with hepatosplenomegaly, severe anemia and bleeding manifestations. Discuss the differential diagnosis and investigations to come to a diagnosis. Outline the management of acute lymphatic leukemia.	621	—	D08

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	GHAI	GUPTA	
Short Essays			
1. Acute lymphoblastic leukemia (ALL)—classify, laboratory investigation and management.	620	560	D09(RS2), J16(RS3), D02, J03, J16
2. What is the most common type of leukemia in children? Write the clinical features and mention the drugs used for its treatment.	621		J15(RS3)
3. Acute leukemia—clinical features.	621	560	D16
4. Principles of leukemia management.	624	561	J18(RS3)
5. Staging of lymphoma.	628	563	O20(RS3)
6. Neuroblastoma—clinical features.	638	—	D12(RS2)
Short Answers			
1. Leukemia—define, predisposing factors.	620	—	D01, D08
2. Acute lymphocytic leukemia (ALL)—clinical features, peripheral smear findings, drugs used.	621	—	J09(RS2), D15(RS3), D17(RS3), M21(RS3), J05, J06, J14
3. Chronic myeloid leukemia—peripheral blood picture.	627	—	J04
4. Wilms tumor—clinical features.	636	—	J13(RS2), J08
5. Investigations in suspected neuroblastoma.	639	—	J18(RS3)
CHAPTER 22: RHEUMATOLOGICAL DISORDERS			
Long Essays			
1. A 5-year-old female child presented with pain in multiple joints, initially the knee joint followed by ankle and then the wrist for 1 week duration each. On examination child is afebrile, HR—120/min, local examination—arthritis of right wrist. CVS—apex, left 5th ICS, pansystolic murmur in mitral area. On probing, history of sore throat 3 weeks back given by the mother. a. What is the most probable diagnosis? b. State the criteria to diagnose the same. c. How will you manage this child?	651	—	F24(RS4)

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	GHAI	GUPTA	
Short Essays			
1. Juvenile rheumatoid arthritis (JRA)—investigations, management (drugs used).	652	—	J02, D02, J06, D11
2. Kawasaki disease.	658	851	J08
Short Answers			
1. Juvenile rheumatoid (chronic) arthritis—joint involvement.	652	—	D15(RS3), D06, J10
2. Diagnosis of systemic onset juvenile rheumatoid arthritis.	652	—	D17(RS3)
3. Juvenile rheumatoid arthritis—laboratory investigations/disease modifying agents.	652	—	F22(RS3), F23(RS3)
CHAPTER 23: GENETIC DISORDERS			
Short Essays			
1. Down's syndrome (trisomy 21)—clinical features, chromosomal abnormalities, antenatal diagnosis, genetic counseling, risk of recurrence in siblings.	666	871	J11(RS2), J14(RS2), J15(RS3), D15(RS3), D18(RS3), D19(RS3), F22(RS3), A22(RS3), J02, J04, D05, J07, D07, J09
2. Turner syndrome.	668	874	D08
3. Klinefelter's syndrome.	669	875	D15
4. X-linked inheritance.	671	865	D12
Short Answers			
1. Down's syndrome—chromosomal types/defects, clinical features (facial features), antenatal screening.	666	871	J06, D06, J16
2. Name three autosomal dominant disorders.	671	864	D07
3. X-linked disorders.	671	525	F23(RS3)
4. Genetic counseling in hemophilia.	676	556	D14(RS2)

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	GHAI	GUPTA	
CHAPTER 24: INBORN ERRORS OF METABOLISM			
Short Essay			
1. Lactose intolerance.	—	470	D13(RS2)
Short Answers			
1. Lactose intolerance.	—	470	D05
2. Diet in lactose intolerance.	—	—	J17
CHAPTER 25: INBORN ERRORS OF IMMUNITY			
Multiple Choice Questions			
1. Severe combined immunodeficiency manifests during: **A. First few months of life** B. After 1 year C. After 2 years D. After 5 years	697	—	F24(RS4)
CHAPTER 26: OPHTHALMIC DISORDERS			
Short Answer			
1. Congenital cataracts.	704	921	J06
CHAPTER 27: SKIN DISORDERS			
Long Essay			
1. What are the lesions in a newborn, which resolve spontaneously? What is baby friendly hospital initiative?	—	—	D06
Short Essays			
1. Describe Mongolian spots.	721	—	D10
2. Urticaria.	732	—	J13(RS2)
3. Scabies in children—management.	741	—	J15, J17
Short Answers			
1. Erythema nodosum.	—	—	D09(RS2), D13(RS2)

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	GHAI	GUPTA	
2. Mongolian spot.	721	—	D15(RS3)
3. Acute urticaria—management.	732	—	J09
4. Scabies—treatment.	741	—	D08, J09

CHAPTER 28: POISONING, INJURIES AND ACCIDENTS

Short Essays

1. Salicylate poisoning.	—	—	J09(RS2)
2. General guidelines in the management of poisoning.	749	954	M21(RS3), J14
3. Kerosene poisoning.	753	962	D08(RS2), D05
4. Organophosphorus poisoning—clinical features of and treatment.	755	962	D13(RS2), J12
5. Snakebite in children—treatment.	757	1016	J11(RS2), J13(RS2), J16(RS3), D07
6. Scorpion sting—management.	759	—	D11(RS2), J23(RS3), D03, D15

Short Answers

1. Investigations in lead poisoning.	—	209	D19(RS3)
2. Phenobarbitone poisoning—management.	—	—	D02, D04
3. Prevention of poisoning in children.	—	—	D10(RS2), D14(RS2)
4. Methods available to remove poison.	749	955	J02
5. Hydrocarbon poisoning (accidental kerosene ingestion)—management.	753	961	D16(RS3), D09
6. Paracetamol poisoning.	756	964	D09(RS2)
7. Management of snake bite	758	1016	D18(RS3)
8. Scorpion sting—clinical features, management (drug of choice and its dosage).	759	—	J12(RS2), F22(RS3), J03, J07, J11, D12

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	GHAI	GUPTA	
CHAPTER 29: PEDIATRIC CRITICAL CARE			
Long Essays			
1. Define shock and classify shock. Discuss the pathogenesis and management of hypovolemic shock/ septic shock.	767	945	J16(RS3), J14
2. Etiopathogenesis and management of shock in children.	767	948	O20(RS3)
Short Essay			
1. Iron poisoning—management.	774	966	J10
Short Answers			
1. Signs of shock.	768	946	D05
2. Complications of blood transfusion.	774	—	J14
CHAPTER 30: IMPORTANT MEDICAL PROCEDURES			
Short Essay			
1. Bone marrow examination in children—indications.	784	521	J04
Short Answers			
1. Sites of intraosseous infusion.	—	234	J11
2. Common foreign bodies.	776	596	J11
3. How do you introduce the nasogastric tube in children?	777	461	D02, D04
4. How will you do lumbar puncture?	781	—	D09
5. Liver biopsy—indications.	785	498	J09
CHAPTER 31: RIGHTS OF CHILDREN			
Long Essay			
1. Mention the government nutritional programs for under five years children in India and its role in reducing mortality.	788	—	J19(RS3)
Short Answer			
1. Child labor.	—	—	D05

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	GHAI	GUPTA	
CHAPTER 32: INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS			
Long Essays			
1. What is neonatal mortality rate? What are the main causes of neonatal mortality? What are the measures to be taken to prevent neonatal mortality.	—	980	J12
2. What is the perinatal mortality rate? Describe the factors responsible for perinatal mortality in India.	—	980	D15(RS3)
3. What is the extended perinatal mortality rate (EPMR)? What measures can be taken to reduce EPMR in India?	—	—	D14(RS2)
4. IMNCI—components and role in reducing mortality in children.	793	—	J14(RS2), D17(RS3)
Short Essays			
1. Infant mortality rate—define and factors affecting, measures to reduce.	—	978	D11(RS2), J17(RS3), D19(RS3), D07
2. Perinatal mortality rate (PMR)—causes, interventions to reduce.	—	980	D02, J07, D10
3. Neonatal mortality rate—interventions to reduce.	—	980	J03
4. Under five mortality rate.	—	930	D16(RS3)
5. IMNCI food box for 1–2 years old child (feeding recommendations).	—		J12
6. IMNCI for a child with acute diarrhea.	801	—	J23(RS3)
Short Answers			
1. Infant mortality rate—define and four causes.	—	978	J15(RS3), D01, J04, J05
2. NMR—four causes.	—	980	J02
3. Define perinatal mortality. What is perinatal mortality rate? Mention two/three important causes. Mention the PMR in our country.	—	980	J16(RS3), J14

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	GHAI	GUPTA	
4. Integrated Management of Neonatal and Childhood Illnesses (IMNCI)—aim, principles.	793	989	S21(RS3), J11

CHAPTER 33: RATIONAL DRUG THERAPY

Short Essays

1. Phenytoin sodium—indications and toxicity.	841	997	D17(RS3)
2. Anti-snake venom.	850	1016	D12

Short Answers

1. Methotrexate—six complications.	—	845	J02
2. Vincristine therapy—complications.	—	—	D03
3. Paracetamol.	840	999	F23(RS3)
4. Usage of aspirin in pediatric practice.	840	999	J12
5. Penicillin—mechanism of action, side effects.	842	—	D02, D04, D09
6. Cephalosporins.	842	1001	D09(RS2)
7. Aminoglycosides—four adverse reactions.	842	1000	J03
8. Co-trimoxazole—mechanism of action and side effects.	845	—	D02, D04
9. Vancomycin.	846	1005	J08
10. Albendazole.	846	1009	D13
11. Uses of chloroquine in pediatric practice.	847		D11
12. Acyclovir.	847	1018	D18(RS3)
13. Anti-snake venom (dose).	850	1016	D19(RS3), J06
14. Budesonide.	851	997	D12(RS2)
15. Ipratropium bromide.	851	—	J13(RS2)
16. Digoxin in cardiac failure.	852	653	J10(RS2)
17. Digoxin—dose, toxicity (side effects).	852	1019	D08(RS2), J03, D11
18. Uses of acetazolamide in pediatrics.	852	1020	D10(RS2)
19. Indications for furosemide.	853	1020	J17

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	GHAI	GUPTA	
20. Steroids in pediatric practice—uses (indications).	853	—	D10(RS2), D07
21. Indications for desmopressin.	854	—	J18(RS3)
22. Phenobarbitone—indications and contraindications, adverse effects.	856	1007	D14
23. Phenytoin toxicity.	858	—	D09(RS2)
24. Sodium valproate—use, side effects.	858	—	J09(RS2), J06

MISCELLANEOUS

Short Essays

1. Write about acute diarrheal disease control program.	—	—	J17(RS3)
2. Importance of well-baby clinic.	—	—	J09
3. Delayed closure of anterior fontanel.	—	—	D08
4. Ehrlich's aldehyde test	—	—	J10
5. Miliary mottling in X-ray chest.	—	—	J13
6. Pediatric goals of NRHM.	—	—	D08(RS2)
7. Write a few lines about RCH program.	—	—	D09
8. Baby friendly hospital initiative (BFHI).	—	—	J12(RS2), J14
9. Erb's palsy—clinical features and management.	—	—	D03
10. Klumpke's palsy.	—	—	D08
11. Discuss the etiology and management of a 10-year-old boy with upper gastrointestinal bleeding.	—	—	D08, J12
12. Mendelian inheritance.	—	—	J13

Short Answers

1. Hypersplenism in chronically transfused children.	—	—	D12(RS2)
2. Septic screen.	—	—	J06
3. Fouchet's test.	—	—	J08
4. Three causes of elevated serum cholesterol.	—	—	D08(RS2)
5. What is reverse cold chain?	—	—	J09

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	GHAI	GUPTA	
6. Clinical assessment and classification of pallor.	—	—	D11
7. Hoffman's sign.	—	—	J15
8. Bulging anterior fontanel.	—	—	D12
9. Causes of delayed closure of anterior fontanelle.	—	—	J16
10. Pediatric component of RCH program.	—	—	D01
11. Baby-friendly hospital initiative.	—	—	D11
12. Erb's palsy.	—	—	J10(RS2), F23(RS3), J23(RS3)
13. Klumpke's paralysis.	—	—	J11(RS2)
14. Three cause of papilledema.	—	—	D11(RS2)
15. Gray baby syndrome.	—	—	D08

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