



ASHFAQ ACADEMY OF CLINICAL MEDICINE

Complete Paediatric Exam Preparation

Sample pages · Curriculum & Study Guide

This is a short preview of the 130+ page Curriculum & Study Guide that every registered student receives. The full guide covers all 16 modules topic by topic, with the most-tested topics flagged, drill packs, case-approach cards and revision checklists.

Shown here: what the exam actually asks, and the opening pages of Module 1, Neonatology.

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PREVIEW EDITION

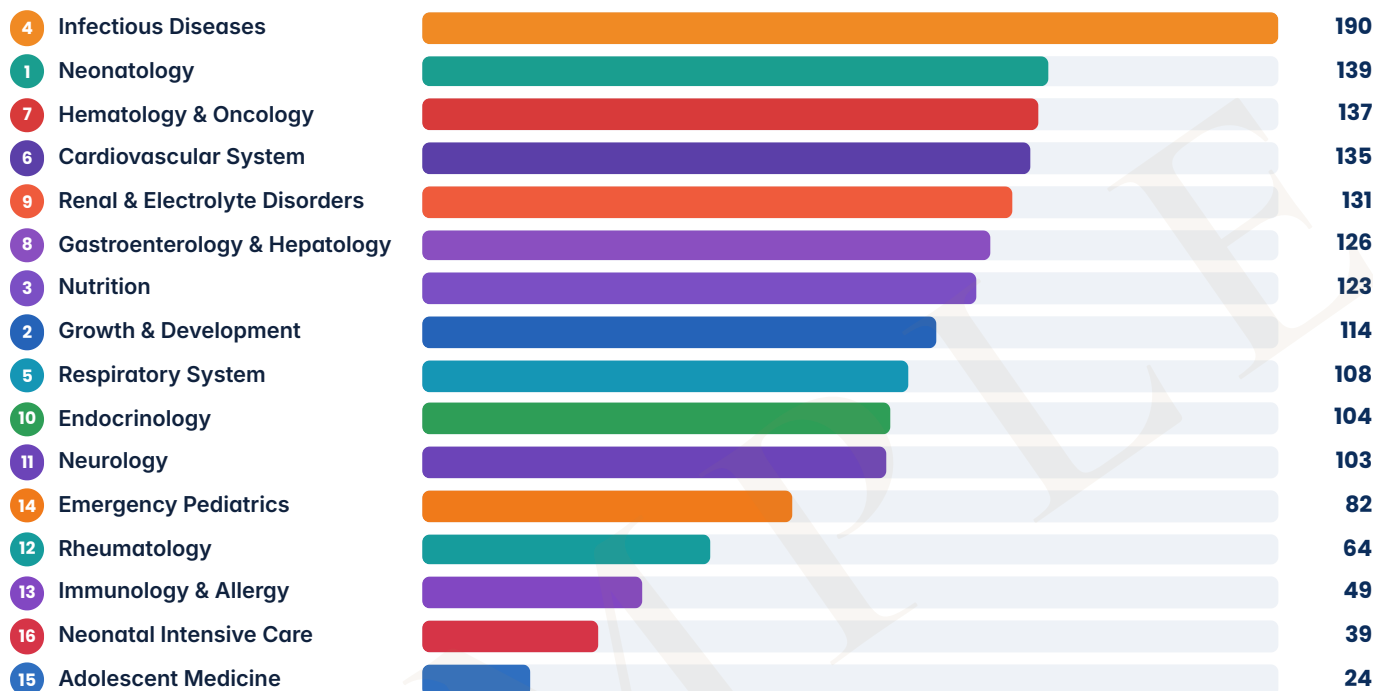
THE DATA BEHIND THE CURRICULUM

What the exam actually asks

We parsed the three MCQ books question by question, tagged each to a topic, and counted the questions that carry an IMM or FCPS-II recall tag. Those counts set the time each module receives and the heat flag on every topic.

Past-paper recall questions by module

Qbank questions carrying an IMM or FCPS-II sitting tag (n = 1,668); each question counted once, under its main topic



What the numbers tell us

Neonatology (with NICU) and Infectious Diseases carry 22% of all recall questions, so they get six sessions between them — Neonatology opens the course and returns as NICU in Week 8.

Renal tubular disorders (20 recalls, 16 sittings) are asked more often than nephrotic syndrome (16) — RTA, Bartter and Gitelman get real teaching time.

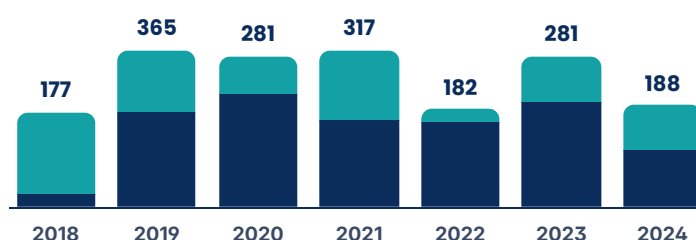
Nephrotic syndrome and **developmental milestones** appeared in 17 and 16 different sittings — the most consistently examined topics in the bank.

Poisoning (kerosene, tricyclics, iron, organophosphates, datura, opioids) adds up to 45 recalls — short, scenario-based and very scoreable.

Recall tags by year

■ FCPS-II ■ IMM

1,791 of 1,799 sitting tags fall in 2018–2024; a question repeated in several sittings carries several tags.



Reading the flags: ★★★ **HOT** top 50 topics · ★★ **HIGH** ranks 51–150 · ★ **TESTED** asked, lower frequency · **CORE** background. Beside each topic: **PP** past-paper recalls · **QB** Qbank questions · **L/P** LANGE + PreTest questions.

SESSION
01
WEEK 1

MODULE 1 · NEONATOLOGY

The Newborn: Transition, Jaundice & Birth Problems

NEO-1 · 21 topics · 3 HOT · 5 HIGH

BY THE END OF THIS SESSION YOU CAN

- Run neonatal resuscitation to the current NRP algorithm and score Apgar correctly
- Separate physiological from pathological jaundice; choose phototherapy vs exchange; diagnose Rh/ABO haemolysis
- Recognise birth injuries, normal newborn skin findings and the problems of IDM, SGA and polycythaemia
- Master the universal long-case history scheme used in every clinic of this course

SESSION AT A GLANCE

- 0–70** Concept teaching — HOT topics first
75–115 Timed MCQ drill — 25 MCQs + review
115–150 Long-case clinic

85past-paper
recalls**126**Qbank MCQs
mapped**77**LANGE +
PreTest

PRE-READ · NELSON TEXTBOOK OF PEDIATRICS, 22E

22 The Newborn · **115** The Newborn Infant · **116** High-Risk Pregnancies · **119** The High-Risk Infant · **121** Clinical Manifestations of Diseases in the... · **123** Neonatal Resuscitation and Delivery Room · **137** Jaundice and Hyperbilirubinemia in the Newborn · **139** Anemia in the Newborn Infant · **140** Hemolytic Disease of the Fetus and Newborn · **141** Neonatal Polycythemia · **142** Hemorrhage in the Newborn Infant · **143** Nonimmune Hydrops · **145** Neonatal Abstinence Syndrome · **146** Fetal Alcohol Spectrum Disorder · **147** Infants of Diabetic Mothers

PART A Concept teaching

TEACH IN DEPTH · HOT & HIGH

★★★★ HOT

Neonatal resuscitation & Apgar

PP 11 · QB 20 · L/P 3

Initial steps (warm, position, dry, stimulate) → PPV if apnoeic/gasping or HR <100; a rising heart rate is the best sign of effective ventilation. Compressions 3:1 only if HR <60 after 30 s of effective PPV, then IV/UVC adrenaline 0.01–0.03 mg/kg (0.1–0.3 mL/kg of 1:10,000). Pre-ductal SpO₂ target at 5 min: 80–85%. Non-vigorous meconium baby: routine tracheal suction is no longer advised — start PPV (older keys still say 'suction').

★★★★ HOT

Haemolytic disease of newborn (Rh/ABO)

PP 11 · QB 17 · L/P 7

Rh: anti-D within 72 h of delivery (and at 28 wk); DAT strongly positive; commonest reason for intrauterine transfusion; hydrops. ABO: group O mother, A/B baby, can affect the first baby, mild, DAT weak/negative, microspherocytes. Jaundice in the first 24 h is pathological — if the mother had anti-D, think ABO.

★★★★ HOT

Neonatal jaundice (unconjugated) & phototherapy

PP 10 · QB 12 · L/P 4

Pathological if: onset <24 h, TSB rising >5 mg/dL/day, conjugated >1 mg/dL, or persisting >2 wk (term). Phototherapy acts mainly by structural isomerisation to lumirubin (blue-green light 460–490 nm). Breastfeeding (poor intake) jaundice = first week; breast-milk jaundice = after the first week, peaks at 2–3 wk. Bronze-baby syndrome = phototherapy in a cholestatic infant.

★★ HIGH

Birth injuries

PP 8 · QB 12 · L/P 9

Erb palsy C5–C6: waiter's tip, absent Moro, grasp preserved; with C3–C5 phrenic injury → paralysed hemidiaphragm (paradoxical breathing). Klumpke C8–T1: claw hand ± Horner (ptosis, miosis, enophthalmos). Cephalhaematoma stops at sutures; caput and subgaleal cross them (subgaleal → shock). Clavicle = commonest fracture (crepitus, asymmetric Moro; immobilise). Sternomastoid tumour → stretching.

★★ HIGH

Normal newborn & skin findings

PP 7 · QB 9 · L/P 16

Erythema toxicum (day 2–3, erythematous base, eosinophils) vs transient pustular melanosis (at birth, no erythema, leaves pigmented macules); neonatal acne (2–4 wk); milia; harlequin colour change and acrocyanosis are benign — reassure.

★★ HIGH

Infant of diabetic mother

PP 6 · QB 8 · L/P 6

Hypoglycaemia (hyperinsulinism) in the first hours, macrosomia, RDS (insulin delays surfactant), hypocalcaemia, polycythaemia, jaundice, septal hypertrophy (avoid inotropes), caudal regression (most specific), small left colon, renal vein thrombosis.

★★ HIGH

Neonatal thrombocytopenia (NAIT, maternal ITP)

PP 6 · QB 7 · L/P 2

Well baby + severe thrombocytopenia + normal maternal count = NAIT (anti-HPA-1a): IVIG/antigen-negative platelets, cranial USG, recurs in later pregnancies. Maternal ITP: check the baby's count at birth and over days 2–5 (nadir); treat if <30,000/bleeding. Sick baby = sepsis/DIC/TORCH.

★★ HIGH

Vitamin K deficiency bleeding

PP 5 · QB 7 · L/P 2

Early (<24 h; maternal phenytoin, phenobarbital, rifampicin, warfarin), classic (day 2–7, breastfed, no prophylaxis), late (2–12 wk; cholestasis/malabsorption, ICH). PT prolonged, platelets normal; Apt test separates swallowed maternal blood. Vitamin K 0.5–1 mg IM at birth; treat bleeding with IV vitamin K ± FFP.

RAPID REVIEW · TESTED & CORE

★ TESTED

Teratogens & fetal alcohol syndrome

PP 3 · QB 5 · L/P 6

FAS: short palpebral fissures, smooth philtrum, thin upper lip, microcephaly, IUGR, VSD. Cocaine → IUGR, vascular disruption, PVL. Valproate → NTD; phenytoin → nail/digit hypoplasia; warfarin → nasal hypoplasia, stippled epiphyses; lithium → Ebstein; isotretinoin → ear/CNS/heart; ACE inhibitors → renal dysgenesis.

★ TESTED

Neonatal hypoglycemia

PP 3 · QB 5 · L/P 2

Symptomatic: 2 mL/kg 10% dextrose then infusion at GIR 6–8 mg/kg/min. Needing >8–10 mg/kg/min = hyperinsulinism (IDM, BWS, KATP channel). Preterm/SGA = poor glycogen stores. Hypoglycaemia + micropenis + prolonged jaundice = hypopituitarism.

★ TESTED

Polycythaemia / hyperviscosity

PP 3 · QB 5 · L/P 0

Venous Hct >65%: delayed cord clamping, IDM, SGA (placental insufficiency/pre-eclampsia), recipient twin, trisomies. Complications: hypoglycaemia, jaundice, NEC, seizures, renal vein thrombosis. Partial exchange with normal saline if symptomatic.

★ TESTED

IUGR / SGA / LGA

PP 2 · QB 4 · L/P 3

SGA = birth weight <10th centile for gestation. Symmetric (early insult: chromosomal, TORCH) vs asymmetric head-sparing (placental insufficiency). Problems: hypoglycaemia, hypothermia, polycythaemia, asphyxia.

★ TESTED

Neonatal hypocalcaemia & metabolic bone disease

PP 2 · QB 4 · L/P 3

Early (<72 h: preterm, IDM, asphyxia) vs late (day 5–10: phosphate-rich milk, hypoparathyroidism/22q11, maternal hyperparathyroidism). Jitters, seizures, long QTc. Metabolic bone disease of prematurity: low phosphate, very high ALP.

★ TESTED

Birth asphyxia & HIE

PP 2 · QB 4 · L/P 1

Sarnat stages I–III. Therapeutic hypothermia for ≥36 wk with moderate–severe HIE: start within 6 h, 33.5 °C for 72 h, rewarm slowly. EEG/aEEG predicts outcome. Phenobarbital for seizures; avoid hyperthermia and hypoglycaemia.

★ TESTED

Thermoregulation & neonatal hypothermia

PP 2 · QB 2 · L/P 1

Newborns do not shiver — brown-fat (non-shivering) thermogenesis raises O₂ use → hypoglycaemia and metabolic acidosis. WHO hypothermia: mild 36–36.4, moderate 32–35.9, severe <32 °C. Kangaroo mother care.

★ TESTED

Hydrops fetalis

PP 2 · QB 2 · L/P 0

Non-immune hydrops now outnumbers immune; cardiovascular causes are commonest, then chromosomal (Turner, T21), parvovirus B19, α-thalassaemia (Hb Bart's), TTTS, lymphatic.

★ TESTED

Perinatal statistics & high-risk pregnancy

PP 0 · QB 0 · L/P 5

LBW <2500 g, VLBW <1500 g, ELBW <1000 g; preterm <37 wk. Perinatal and neonatal mortality definitions; high-risk pregnancy factors.

★ TESTED

Neonatal anaemia & twin-twin transfusion

PP 1 · QB 2 · L/P 3

Feto-maternal haemorrhage → Kleihauer–Betke test. TTTS: donor anaemic, oligohydramnios, growth-restricted; recipient polycythaemic, polyhydramnios, heart failure.

★ TESTED

Kernicterus / bilirubin encephalopathy

PP 1 · QB 1 · L/P 3

Acute bilirubin encephalopathy: lethargy, hypotonia, poor suck → hypertonia, retrocollis/opisthotonos, high-pitched cry. Kernicterus: choreoathetoid CP, upward-gaze palsy, sensorineural deafness, enamel dysplasia.

CORE

Neonatal abstinence syndrome

PP 0 · QB 0 · L/P 1

Opioid withdrawal: irritability, high-pitched cry, tremor, sweating, sneezing, diarrhoea; score (Finnegan/Eat-Sleep-Console); morphine if needed. Never give naloxone to the infant of an opioid-dependent mother.

CORE

History taking, examination & clinical skills

PP 0 · QB 0 · L/P 0

Covered in the long-case clinic: history scheme, examination order, presentation and viva technique.

