

**VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM**

M.D. DEGREE EXAMINATION - October 2019

PAEDIATRICS

PART I - PAPER I – APPLIED BASIC SCIENCES IN PAEDIATRICS

Time: Three hours

Maximum: 100 marks

**Answer any FOUR in Anatomy and Physiology. Three in other subjects.
All questions carry equal marks**

I. ANATOMY : **(4 x 5 = 20)**

1. Embryology of cardiac septation
2. Development of thyroid gland
3. Portacaval anastomosis
4. Embryological development of upper GIT

II. PHYSIOLOGY : **(4 x 5 = 20)**

5. Distal tubular function of kidney
6. Physiology of Micturition
7. Pathophysiology of acute diarrhoea
8. Determinants of cardiac output

III. BIOCHEMISTRY : **(3 x 5 = 15)**

9. Bilirubin metabolism in newborn
10. Synthesis of adrenal hormones
11. Lab investigations for malabsorption.

IV. PHARMACOLOGY : **(3 x 5 = 15)**

12. Antiviral drugs
13. Drugs in nephrotic syndrome other than steroids
14. Antihypertensives in hypertensive emergency.

V. PATHOLOGY : **(3 x 5 = 15)**

15. Lab diagnosis of bacterial meningitis
16. Prevention of nosocomial infections
17. GeneXpert MTB/RIF

VI. MICROBIOLOGY : **(3 x 5 = 15)**

18. Renal biopsy findings in systemic lupus erythematosus (SLE)
19. Histopathology of liver in biliary atresia
20. Peripheral blood smear in chronic hemolytic anemias.
