

**VETERINARY LABORATORY SERVICES UNIT
DEPARTMENT OF VETERINARY LABORATORY DIAGNOSTICS
FACULTY OF VETERINARY MEDICINE, UPM**

SPECIMENS SUBMISSION FOR CLINICAL PATHOLOGY LABORATORY						
SPECIMEN TYPE	TEST	SPECIMENS VOLUME	CONTAINER	REMARKS	TAT (Working days)	CHARGE (RM)
Serum, plasma	Biochemistry:					
	Albumin Globulin Ratio (Estimated)	> 50uL for each test	Plain tube, red cap	<ul style="list-style-type: none"> • Separate the serum from the blood (allows the blood to clot at room temperature for at least 30 minutes before centrifuge at 5000 rpm for 5-10 minutes). • If the serum has not been separated upon submission, do not FREEZE the specimens (do not keep it in the freezer OR direct contact with ice upon delivery using ice box). • Keep the serum (after separation) in the FREEZER. (-20°C). <p>Note: Plasma from EDTA tube are unsuitable for K and Ca analysis.</p> <p>**Note: For glucose, blood sample in plain tube, serum must be separated within 2 hours of blood collection, or else must use Sodium Flouride tube.</p> <p>*For biochemistry panel price, please refer VLSU Fee Schedule.</p> <p>*For research purpose and other specimen type, refer to Appendix I.</p>	1-2 days	FOC
	Albumin (ALB)		or any tubes with no anticoagulants - serum			10.20
	Alkaline Phosphatase (ALP)					10.20
	Alanine Aminotransferase (ALT)	To request				10.20
	Amylase (AMY)	1-3 test/s, need				10.20
	Aspartate Aminotransferase (AST)	to submit more				10.20
	Calcium (CA)	than 150ul				10.20
	Chloride (Cl)		Heparin tube, (green cap), EDTA tube, (purple cap) or **Sodium			10.20
	Cholesterol (CHOL)		Flouride tube (grey cap) - plasma			10.20
	Creatine Kinase (CK)					12.80
	Creatinine (CREA)					10.20
	Direct (Conjugated) Bilirubin (DBIL)					10.20
	Gamma-Glutamyl Transferase (GGT)					10.20
	Globulin (G) (Estimated)					FOC
	Glucose (GLU)					10.20
	High-Density Lipoprotein (HDL)					10.20
	Indirect (Unconjugated) Bilirubin (Estimated)					FOC
	Lactate (LAC)					18.40
	Lactate Dehydrogenase (LDH)					18.40
Lipase (LIP)			18.40			
Low-Density Lipoprotein (LDL)			10.20			
Phosphate (Phos)			10.20			
Potassium (K)			10.20			
Sodium (Na)			10.20			
Total Bilirubin (TBIL)			10.20			
Total Protein (TP)			10.20			
Triglycerides (TGL)			10.20			
Urea			10.20			
Uric Acid (UA)			18.40			

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Whole blood	Coagulation: Prothrombin Time (PT) Activated Partial Thromboplastine Time (APTT) Fibrinogen (Estimated)	>500uL	Sodium Citrate tube (blue cap)	<ul style="list-style-type: none"> • Fill the tube and gently invert the mixture 8-10 times. • Fresh samples should be submitted (<6 hours after withdrawn from the blood vessel). • For delayed submission (< 24 hours), keep the specimens cool (4°C - 8°C). • Do not freeze the specimens OR direct contact with ice upon delivery using ice box. 	1-2 days	18.40 18.40 11.80
	Cross Matching: 1 Recipient 1 Donor, 2 Donors 1 Recipient 3 Donors, 4 Donors	>500uL	EDTA tube (purple cap)	<ul style="list-style-type: none"> • Fill the EDTA tube and gently invert the mixture 8-10 times. • Fresh samples should be submitted (<6 hours after withdrawn from the blood vessel). • For delayed submission (< 24 hours), keep the specimens cool (4°C - 8°C). • Do not freeze the specimens OR direct contact with ice upon delivery using ice box. 	1-2 days	23.80 47.60
	Haematology: Complete Haemogram Complete Haemogram (Avian/Reptile) Ind. Test: Haematocrit (PCV) & Plasma Protein (Estimated) Ind. Test: Reticulocytes Count (Estimated) Ind. Test: Fibrinogen (Estimated)	>500uL	EDTA tube (purple cap) or Heparin tube (green cap)	<ul style="list-style-type: none"> • Fill the EDTA tube and gently invert the mixture 8-10 times. • Fresh samples should be submitted (<6 hours after withdrawn from the blood vessel). • For delayed submission (< 24 hours), keep the specimens cool (4°C - 8°C). • Do not freeze the specimens OR direct contact with ice upon delivery using ice box. 	1-2 days	30.20 40.00 11.80 9.80 11.80

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Faeces	Faecal Examination: General Examination Occult Blood Trypsin	Approximately 10 gram	Sterile universal container/ sample bag	• Collect fresh faeces from the rectum or cloaca using a sterile or clean container.	1-2 days	20.00 18.40 18.40
Urine	Urinalysis: General Examination Bence Jones Protein	Minimum 1 ml Minimum 1 ml	Sterile universal container/tube	• Less than 24-hours urine sample only, refrigerate during collection.	1-2 days	16.00 10.20
	Urine Protein Creatinine Ratio	Minimum 500uL	Sterile universal container/tube	• Less than 24-hours urine sample only, refrigerate during collection.	1-2 days	20.40
FNA or impression smear sample	Cytology: Slide staining (for each specimen (eg. tissue/fluid)): - 1 to 5 slides - 6 to 10 slides - Additional slides	Minimum 1 slide	Thin smear on glass slide			10.00 20.00 2.00/slide
Fluid	Fluid Dipstick Test (for each specimen) Microscopic Examination for each specimen (tissue/fluid) *No limit of slides per specimen Picture (for every 2-4 images)	Minimum 1 ml	Sterile universal container/tube	• Ensure all specimens are clearly labelled.	5 days	10.00 35.00 8.00