

**SENARAI PERALATAN DAN KADAR CAJ PERKHIDMATAN PERALATAN PENYELIDIKAN  
FAKULTI SAINS DAN MATEMATIK, UPSI**

Bil	Peralatan	UPSI	Luar UPSI	Analisis Segera (Dalam dan Luar UPSI Dalam Masa Sehari)
1.	Inductively Coupled Plasma (ICP-OES) + Persediaan	RM30/element/sample RM50	RM50/element/sample RM50	RM70/element/sample RM50
2.	Atomic Absorption Spectrometry (AAS) + Persediaan	RM15/element/sample RM50	RM30/element/sample RM50	RM50/element/sample RM50
3.	Mercury Analyzer + Persediaan	RM30/element/sample RM50	RM70/element/sample RM50	RM100/element/sample RM50
4.	Gas Chromatography Mass Spectrometry (GCMS)	RM70/sample/run	RM150/sample/run	RM200/sample/run
5.	Gas Chromatography GC) FID/EDC/TCD Detector	RM40/sample/run	RM100/sample/run	RM120/sample/run
6.	High Pressure Liquid Chromatography (HPLC) + Persediaan	RM40/sample/run RM50	RM100/sample/run RM50	RM150/sample/run RM50
7.	CHNZ Analyzer	RM50/sample	RM200/sample	RM250/sample
8.	Fourier Transform Infrared Spectroscopy (FTIR)	RM40/sample	RM100/sample	RM130/sample
9.	UV-Vis Spectrophotometer + Persediaan	RM30/sample RM50	RM50/sample RM50	RM70/sample RM50
10.	Bomb Calorimeter	RM60/ (triplicates)	RM80/ (triplicates)	RM100/ (triplicates)
11.	Thermogravimetric Analyzer (TGA)	RM60/80/100/sample	RM200/250/300/sample	RM350/sample
12.	Differential Scanning Calorimeter (DCS)	RM60/80/100/sample	RM200/250/300/sample	RM350/sample
13.	High Performance ion Chromatography	RM30/sample	RM50/sample	RM70/sample
14.	High Resolution Field Emision Scanning Electron Microscope (FESEM) + EDX	RM150/sample RM50/sample	RM200/sample RM70/sample	RM250/sample RM100/sample
15.	Fluorescence + Persediaan	RM30/sample RM50	RM50/sample RM50	RM70/sample RM50

**Lampiran 8(I)**

Bil	Peralatan	UPSI	Luar UPSI	Analisis Segera (Dalam dan Luar UPSI Dalam Masa Sehari)
16.	Dual Column Table top Electromechanical Testing System	RM35/sample	RM40/sample	RM50/sample
17.	Gel Pearmentation Chromatography (GPC) + Persediaan	RM40/sample/run RM50	RM100/sample/run RM50	RM150/sample/run RM50
18.	Optical Polarising Microscope + Persediaan	RM30/sample RM50	RM50/sample RM50	RM70/sample RM50
19.	Potentiostat/Galvanostat/Zero Resistance Analyzer + Persediaan	RM30/element/sample RM50	RM50/element/sample RM50	RM70/element/sample RM50
20.	Chemical Oxygen Demand (COD) HACH Reagan dibekalkan	RM20/sample	RM30/sample	RM50/sample
21.	Chemical Oxygen Demand (COD) HACH Reagan tidak dibekalkan	RM5/sample	RM10/sample	RM15/sample
22.	Biochemical Oxygen Demand (BOD)	RM5/sample	RM10/sample	RM15/sample
23.	Ammonia Nitrogen HACH	RM10/sample	RM15/sample	RM20/sample
24.	Total Suspended Solid (TSS) GFC dibekalkan	RM15/sample	RM20/sample	RM30/sample
25.	Raman Spectroscopy	RM200/sample	RM250/sample	RM300/sample
26.	Nuclear Magnetic Resonance (NMR) 400MHz  <u>Jenis Analisis</u> 1-Dimensi  <sup>1</sup> H  <sup>13</sup> C  DEPT	<u>Julat masa (Jam)</u>  -  $\leq 2$ $> 2$  $\leq 2$ $> 2$	RM30  RM50 Tambahan : RM20/jam  RM50 Tambahan : RM20/jam	RM80  RM130 Tambahan : RM50/jam  RM180 Tambahan : RM70/jam

**Lampiran 8(I)**

Bil	Peralatan		UPSI	Luar UPSI	Analisis Segera (Dalam dan Luar UPSI Dalam Masa Sehari)
	2 – Dimensi  COSY HMQC HMBC NOESY NOEdiff	- - - - -	RM100 Tambahan : RM30/jam	RM180 Tambahan : RM80/jam	

