

## KEY PERFORMANCE INDICATOR MEASUREMENT TOOL

SECTION B - QUANTITY AND QUALITY OF RESEARCHERS (15 MARKS)								15				
No	Kriteria	KPI	Weightage	Sub-Weightage	Unit Data	Benchmark	Benchmark Scores	Target	Achievement	Achievement Score	% Achievement	
1	Critical Mass	Percent of academic staff involved as principal investigator of research grants	30%	100%	% of staff	80	4.50			4.12	3%	
		a. University Funded		15%		15%	0.68	23	42	1.23	183%	
		b. National Grants		35%		25%	1.58	37	63	2.68	170%	
		c. Industry Grants		20%		20%	0.90	30	1	0.03	3%	
		d. International Grants		30%		20%	1.35	30	4	0.18	13%	
2	PhD or Professional Qualification	a. Total number of staff with PhD/DSc, D.Eng.	10%	80%	% of staff	70%	1.20	104	125	1.44	120%	
		b. Total number of staff with Professional Qualifications (such as medical, engineers, architects, accountants etc)		20%	% of staff	25%	0.30	37		0.00	0%	
3	Research Experience (3 cohorts)	Total number of staff in each age group:	30%	100%	% of staff		4.50	150	148	1.13	25%	
		a. > 50 years old		30%		30%	1.35	45	76	0.00	0%	
		b. 40 - 50 years old		40%		40%	1.80	60	30	0.00	0%	
		c. < 40 years old		30%		30%	1.35	45	42	1.13	84%	
4	Awards/stewardship conferred by national and international learned and professional bodies towards research excellence	a. Total number of awards and recognitions conferred by international academic and professional bodies for research excellence	30%	40%	No./fac	60	1.80	60	0.00	0.00	0%	
		b. Total number of awards and recognitions conferred by national academic and professional bodies for research excellence		60%	No./fac	75	2.70	75	0.00	0.00	0%	
<b>Total Mark for Section B</b>			<b>100%</b>				<b>15.0</b>			<b>6.70</b>		

SECTION C - QUANTITY AND QUALITY OF RESEARCH (30 MARKS)								30					
No	Kriteria	KPI	Weightage	Sub-Weightage	Sub-sub weightage	Unit Data	Benchmark	Benchmark Scores	Target	Achievement	Achievement Score	% Achievement	
1	Publications	<b>a. Publication Impact</b>	70%	-	-	-	-	-	-	-	-	-	
		(i) Cumulative citations of publications		50%	50%	cumulative citations per institution in the last 5 years	100,000	6.125	9,250	0	0.00	0%	
		(ii) Percentage of journal in Q1 and Q2			50%	%	70%	6.125	478	47.2	0.60	10%	
		<b>b. Total number of publications indexed in SCOPUS/WOS/ERA</b>		-	-	-	-	-	-	-	-	-	-
		(i) Journal papers		30%	90%	no./staff	PROFESOR - 6 PROF. MADYA - 5 PENSYARAH KANAN - 4 PENSYARAH - 3	6.615	682	180	1.75	26%	
		(ii) Conference proceedings			10%	no./staff	0.5	0.735	74	31	0.31	42%	
		c. Total number of publications in other journals (not indexed in SCOPUS/WOS/ERA)		5%	-	no./staff	2.0	1.225	296	9	0.04	3%	
		<b>d. Research books and Chapter</b>		-	-	-	-	-	-	0	-	-	
		(i) No. of research books		10%	60%	no./staff	0.2	1.47	30	0	0.00	0%	
		(ii) No. of chapters in research books			40%	no./staff	0.8	0.98	119	30	0.25	25%	
		e. Policy papers		3%	-	no./staff	0.01	0.735	2	0	0.00	0%	
		f. Other publications (technical reports, articles in magazines, newsletters, original writings and publications from conferences)		2%	-		2.00	0.49	296	29	0.05	10%	
2	Research grants for academic staff	a. Total amount of public fundings or from parent company	30%	50%	-	RM/staff	RM60,000 per S&T staff PLUS RM24,000 per NS&T staff	5.25	8,880,000.00	2,609,367.00	1.54	29%	
		b. Total amount of private fundings (including contract research)		20%	-	RM/staff	RM20,000 per S&T staff PLUS RM12,000 per NS&T staff	2.1	2,960,000.00	30,000.00	0.02	1%	
		c. Total amount of international fundings		30%	-	RM/staff	RM20,000 per S&T staff PLUS RM24,000 per NS&T staff	3.15	2,960,000.00	69,600.00	0.07	2%	
<b>Total Mark for Section C</b>			<b>100%</b>					<b>35</b>			<b>4.63</b>		

SECTION D - QUANTITY AND QUALITY OF POSTGRADUATES (10 MARKS)								10				
No	Kriteria	KPI	Weightage	Sub-Weightage	Unit Data	Benchmark	Benchmark Scores	Target	Achievement	Achievement Score	% Achievement	
1	No of PhDs graduated	a. Total no Phd Graduate per year							36			
		b. Ratio of PhDs graduated to academic staff	80%	70%	no.	0.20	5.6	7.2	0.24	6.81	122%	
		c. Number of PhD graduated within 7 Semester						0	9			
		d. Percentage of PhD graduated within 7 semesters		30%	% of stud	25%	2.4	9	100%	2.4	100%	
2	Post-doctoral appointments	a. Number of local Post-doctoral fellows active in the year		20%	80%	no./fac	50	1.6	3	2.0	1.28	80%
		b. Number of foreign Post-doctoral fellows active in the year	20%		no. / fac	50	0.4	3	4.0	0.64	160%	
<b>Total Mark for Section D</b>			<b>20%</b>				<b>10</b>			<b>11.13</b>		

SECTION E - INNOVATION (15 MARKS)								15				
No	Kriteria	KPI	Weightage	Sub-Weightage		Unit Data	Benchmark	Benchmark Scores	Target	Achievement	Achievement Score	% Achievement
1	Product patenting	a. Total number of patents granted in the year	0%	-		-	-	-		1	-	
		(i) National patents										
		(ii) International patents										
		b. Total number of patents filed in the year	0%	-		-	-	-	6	-		
		(i) National										
		(ii) International										
c. Total number of products/processes patented	20%	100%	No./fac	1%	3	2	0	0.00	0%			
d. Total number of products/processes filed	10%	100%	No./fac	4%	1.5	6	0	0.00	0%			
2	Commercialized products	Total number of new products licensed for commercialization in the year	30%	100%		No./fac	0.5%	4.5	1	0	0.00	0%
3	Technology know-how licensing	Total number of technology know-how licensing in the year	30%	100%		No./fac	1%	4.5	2	0	0.00	0%
4	Total number of other IPR (other than patents, excluding books declared in Section C)	Other IPR / copyrights / trademarks / industry design	10%	100%		No./fac	10%	1.5	15	3	0.30	20%
<b>Total Mark for Section E</b>			<b>100%</b>					<b>15</b>			<b>0.30</b>	

SECTION F - PROFESSIONAL SERVICES AND GIFTS (10 MARKS)								10				
No.	Kriteria	KPI	Weightage	Sub-weightage		Unit Data	Benchmark	Benchmark Score	Target	Achievement	Achievement Score	% Achievement
1	Professional services & Gifts	Gross Income generated from training courses (non-degree programme)/postgraduate fees (leading to higher degree)/franchise program fees	20%	100%		RM/fac	35,000,000.00	2.00	3,237,500.00	1213268.85	0.75	37%
2		Gross Income generated from consultancy excluding contract research/hospital recoupable fees	25%	100%		RM/fac	15,000,000.00	2.50	1,387,500.00	253450.26	0.46	18%
3		Profit from organising conferences and seminars in the field of expertise	5%	100%		RM/fac	1,000,000.00	0.50	92,500.00	0	0.00	0%
4		Endowment (including professorial chairs)	10%	100%		RM/fac	10,000,000.00	1.00	925,000.00	0	0.00	0%
5		Gifts (money, equipment, research materials, etc.) (worth > RM 5,000.00)	5%	100%		RM/fac	2,000,000.00	0.50	185,000.00	0	0.00	0%
6		Income from product commercialization/technology know how licencing	35%	100%		RM/fac	7,000,000.00	3.50	647,500.00	0	0.00	0%
<b>Total Marks for Section F</b>			<b>100%</b>					<b>10</b>			1.21	

SECTION G : NETWORKING AND LINKAGES (12 MARKS)								12				
No.	Sub-Criteria	Description	Weightage	Sub-weightage		Unit Data	Benchmark	Benchmark Score	Target	Achievement	Achievement Score	% Achievement
1	International Institution participation in research related activities	a. Total no of MOAs signed	50%	30%		No./ Fac	1	1.8	1	0	0.00	0%
		b. Total no of staff involved in joint research project.		20%		% of staff	10%	1.2	15	0	0.00	0%
2	International professional bodies	Total no of staff appointed to chairmanship/committee position in the professional bodies/associations at international level		50%			1%	3	2	6	9.00	300%
3	National Institution participation in research related activities	a. Total no of MOAs signed	30%	30%		No./ Fac	4	1.08	4	0	0.00	0%
		b. Total no of staff involved in joint research project.		20%		% of staff	20%	0.72	30	0.00	0%	
4	National professional bodies	Total no of staff appointed to chairmanship/committee position in the professional bodies/associations at national level		50%			2%	1.8	3	4	2.40	133%
5	Community Engaged	Total no of active community related research project (KTP)	20%	100%			2%	2.4	3	2	1.60	67%
<b>Total Marks for Section G</b>			<b>50%</b>					<b>12</b>			13.00	

SECTION H : ACCREDITATION LABORATORIES (3 MARKS)								3				
No	Kriteria	KPI	Weightage	Sub-weightage		Unit Data	Benchmark	Benchmarks Score	Target	Achievement	Achievement Score	% Achievement
1	Laboratories (compliance and accreditation to GMP/GLP/ISO17025/GRP) fully operational and calibrated	Total no of laboratories accredited	100%	100			5	3	1	0	0	0%
Total Mark for Section H			100%					3	2		0	