Bahagian A

No.	Kriteria pemarkahan	Markah	
1a.	**Dapat mengelaskan tumbuhan A dan B dengan betul** ***Able to classify plant A and plant B correctly*** **Jawapan** ***Answer*** A: Halofit *Halophyte* B: Xerophyte *Xerofit*	1 1	2
b.i	**Dapat menamakan habitat tumbuhan A** ***Able to name the habitat for plant A*** **Jawapan** ***Answer*** Paya (bakau) *(Mangrove) swamp*	1	1
b.ii	**Dapat menerangkan penyesuaian tumbuhan A untuk mengurangkan kadar transpirasi** ***Able to explain the adaptation of plant A to reduce the rate of transpiration*** **Jawapan** ***Answer*** P1. Daun berkutikel tebal *Leaves with thick cuticle* P2. Daun dengan stoma terbenam *Leaves with sunken stomata*	1 1	2
c	**Dapat menerangkan peranan penyesuaian daun berbentuk duri dalam tumbuhan B** ***Able to explain the role of modification leaves into thorns in plant B*** **Contoh jawapan** ***Sample answers*** P1. Mengurangkan jumlah luas permukaan yang terdedah kepada matahari *Reduces total surface area exposed to the sun* P2. Maka mengurangkan kehilangan air *Thus, reducing water loss*	1 1	

	P3. Mendapatkan bekalan air dengan mengumpulkan embun *To obtain water supply by collecting dew* P4. Mencegah daripada dimakan oleh haiwan *Preventing from being eaten by animals* **Mana- mana satu P** ***Any 1P***	1 1	1
	Jumlah	**6**	

Item Num.	Scoring Criteria	Mark	
6(a)	Able to state the class of mangrove swamp plants *Answer:* Halophyte	1	1
6(b)	Able to state a problem faced by mangrove plants and how to overcome it *Suggested answer:* F1-Lives in soft and muddy soil. P1-To overcome this problem, the roots of mangrove trees branch widely to provide support F2-Soil that holds water and low oxygen content. P2-Mangrove trees have respiratory roots that grow vertically above the soil surface / as pneumatophores // At the roots there are many pores / lenticels that allow gas exchange with the atmosphere. F3-Receives high intensity of sunlight. P3-Leaves lined with cuticles and embedded stoma to reduce water loss to the environment. **Any pair of F and P*	1 1 1 1 1 1	2
			4

6(c)(i)	Able to explain the effects of the untreated waste on the mangrove swamps ecosystem *Suggested answers:* P1: Will be polluted by toxic chemical P2: Population of animals / plants decreases	1 1	2
6(c)(ii)	Able to suggest a way to reduce the effects of untreated waste *Suggested answers:* P1: Treat waste from factories before being disposed. P2: Enforce the law and take action on anyone who pollutes	1 1	1
6(d)	Able to describe 2 adaptations of aquatic plants based on the given diagram. *Suggested answers:* P1: the root which totally submerged are thick, fibrous and heavily branch for stability P2: have aerenchyma tissue (large air spaces) in the stem/root/ leaves provide buoyancy for support so that plants can float on the surface of the water P3: Aerenchyma tissue is form from loose parenchyma tissue with large air spaces reduces the relative density of aquatic plants//provided the necessity water buoyancy for support//Provides for the circulation of gases into and out of aquatic plants P4: Have sclereids cells in leaves and petiole to give some support to prevent leaves and petiole collapse *Notes: Any 2 P*	1 1 1 1	2
	Total		**8**