

Nervous System MS

QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	A - muscle B - receptor C - neurone D - spinal cord		1 1 1 1
Total marks			4

QUESTION 2

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	A sensory (neurone) B motor (neurone) C spinal cord / central nervous system / grey matter	ignore nerve ignore nerve	3
b)	by chemical / substance	allow transmitter	1
c)	muscle	allow extensor	1
Total marks			5

QUESTION 3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	eye / sight / eyesight ear / hearing	either order ignore light	1 1
b)	ear		1
c)i)	reflex		1
c)ii)	neurones		1
Total marks			5

QUESTION 4

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	receptor	allow named receptor eg light receptor ignore sensory neurone allow sense organ / named sensory	1

		organ eg skin / eye	
a)ii)	sensory (neurone)	allow afferent	1
a)iii)	motor (neurone)	allow efferent	1
a)iv)	effector / muscle / gland / named		1
b)	any two from: \ impulse / information passes from one neurone to another or impulse/ information passes across gap \ chemical / transmitter involved \ diffusion (across gap)		2
c)	brain / person not aware of pain / stimulus / can't feel possibility of (permanent / serious)damage / eg burning	allow brain/ person doesn't know / realise / unable to coordinate ignore reflex ignore information ignore danger	1 1
Total marks			8

QUESTION 5

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	Y – spinal cord / central nervous system / CNS W – receptor / nerve ending X – effector / muscle	do not accept spine ignore nerve / nervous system / coordinator ignore grey / white matter ignore sensory / neurone / stimulus allow gland	1 1 1
b)	any two from: eg reflex action quicker effect of reflex action over shorter period hormone involves blood system and reflex involves neurones / nerve cells reflex involves impulses and hormone involves chemicals reflex action affects only one part of the body	accept reverse argument for each marking point ignore nervous system / nerves ignore involves brain ignore outside / inside stimuli	2
Total marks			5

QUESTION 6

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	eye		1
a)ii)	Nose		1
a)iii)	Skin		1
a)iv)	tongue		1
b)	(lung) cancer		1
c)i)	eg to ensure more people addicted to cigarettes / make cigarettes more addictive	accept bronchitis / emphysema / heart disease / blood vessel disease	1
c)ii)	eg people might not buy the brand		1
Total marks			7

QUESTION 7

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	receptor		1
a)ii)	sensory (neurone)		1
a)iii)	motor (neurone)		1
a)iv)	muscle		1
b)i)	eye(s)	allow retina ignore sight	1
b)ii)	ear(s)	ignore hearing do not allow ear drum	1
b)iii)	ear(s)	ignore balance	1
Total marks			7