Vaccines and Drugs MS

QUESTION 1

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	antibodies		1
	antitoxins		1
	antibiotics		1
b)	any two from:		2
	? measles		
	? mumps		
	rubella / German measles		
c)	less / low / no chance of getting	must be comparative	1
	named /all condition(s) if		
	vaccinated		
	quantitative figure(s) e.g. 5 times		1
	less likely to get convulsions		
d)	enzymes		1
	genes		1
Total marks			9

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	any two from: resistant to (most) antibiotics contagious or easily passed on or reference to open wounds patients ill therefore less able to combat disease	virus is neutral	2
b)i)	chloride of lime / hand washing killed bacteria (picked up from corpses)	allow disease / germs / infection / disinfectants	1
b)ii)	people to wash hands after contact with patient so bacteria / pathogen / MRSA not transferred to other patient		1
Total marks			5

QUESTION 3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)i)	lives inside cells		1
a)ii)	inactive		1
a)iii)	antibodies		1
b)i)	1950		1
b)ii)	8 (years)		1
b)iii)	any one from: eg ②disease could be reintroduced (from abroad) ② disease would spread if it came back ②protection on holiday abroad ②high proportion of immune people needed to prevent epidemic	disease might come back insufficient	1
Total marks			6

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	any three from:		3
	vaccine is inactive / dead form of	allow antigens	
	(pathogen)		
	stimulates antibody production		
	stimulates antitoxin production		
	by white cells		
	antibodies kill (pathogen)		
	antitoxins neutralise poisons		
	antibodies quickly produced on reinfection	ignore antibodies remain in blood	
	reference to ingestion by white		
	cells		
b)i)	(no)		2
	any two from		
	sample size small / only 12		
	② conclusion based on hearsay		
	from parents		
	② only 8 parents linked autism to		
	MMR		
	②no control used		
b)ii)	(yes)		1
	being paid by parents / lawyers		
Total marks			6

QUESTION 5

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	antibodies	allow antitoxins / memory cells	1
		do not allow antigens	
	immune	ignore protection	1
		allow resistant	
b)i)	fell		1
	numerical qualification to zero / nothing / by 100%	allow stopped in 1995	1
b)ii)	(no)		1
	% vaccination fell or when no		
	vaccination		1
	but autism numbers did not fall		
	/stayed high / increased		
	or		
	'(yes) might support it if time lag		
	between vaccination and autism		
	symptoms' / 'time lag for		
	diagnosis'(1)		
	6 year time lag quantified(1)		
Total marks			6

QUESTION 6

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	measles		1
	mumps		1
	rubella		1
b)	antibodies		1
c)i)	any two from:		2
	•fell		
	•then rose		
	any reasonable amplification eg		
	until 2004 / to 80%		
	•flattens off (between 1999–		
	2000)		
c)ii)	eg fear of side effects		1
	or		
	cost of vaccine		
	or		
	lack of vaccine		
	or		
	complacency / disease less		
	common		
Total marks			7

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	Painkiller Used as a fertility drug Painkiller Used to relieve disease symptoms Statin Used to treat leprosy Thalidomide Used to lower blood cholesterol	all three correct = 3 marks two correct = 2 marks one correct = 1 mark extra line from a statement cancels the mark	3
Total marks			3

QUESTION	ANSWER	EXTRA INFORMATION	MARKS
a)	A B Used to treat /bacteria diseases Alcohol A very addictive drug May cause lung cancer Heroin May cause babies to be born with abnormal limbs Cigarette smoke May cause liver disease	1 mark for each correct line mark each line from left hand box two lines from left hand box cancels mark for that box	4
b)i)	ecstasy		1
b)ii)	(no) any one correct difference eg Ecstasy in Class A but least harmful according to scientists	accept reference to figures	1
c)	for pleasure		1
Total marks			7