

Part No.	Designator	Component	Number	Cost per unit - (GBP)	Total cost - (GBP)	Source of Materials
/	<b>Main Modules</b>	/	/	/	/	/
1	Arduino Uno R3	Micro controller	1	25	25	<a href="#">Amazon</a>
2	L298N Driver	Pumps Driver	2	3.99	7.98	<a href="#">Amazon</a>
3	4-Channel Relay Module	Stirrer Control	1	7.3	7.3	<a href="#">Amazon</a>
4	LED Signal Light Module	Status Check	1	7.8	7.8	<a href="#">Amazon</a>
5	5V DC 4010 Cooling Fan	Thermal Management	2	6.9	13.8	<a href="#">Amazon</a>
6	24/12V-5V Power Buck Converter	DC Converter	1	3.99	3.99	<a href="#">Amazon</a>
/	<b>Accessories</b>	/	/	/	/	/
7	12V 2A Power Adapter	Power Source	1	8	8	<a href="#">Amazon</a>
8	Arduino UNO USB Data Sync Cable	Patch cable	1	7.9	7.9	<a href="#">Amazon</a>
9	Electrical Connectors Block	Wire Connectors	3	1.5	4.5	<a href="#">Amazon</a>
10	Dupont Wire for Arduino DIY	Basic connections	50	0.2	10	<a href="#">Amazon</a>
11	Multicolor Cable ties	Cable Arrangement	5	2.6	13	<a href="#">Amazon</a>
12	AWG Wire for Pumps	AWG Cable	8	1.5	12	<a href="#">Amazon</a>
/	<b>3D Printing Items</b>	/	/	/	/	/
12	Customized Bottom Plate	Floor-1.stl	1	5	5	3D-Printed
13	Customized Upper Plate	Floor-2.stl	1	5	5	3D-Printed
14	Box case for DC converter	Small Box case.stl	2	5	10	3D-Printed
15	Lid for Box case	Insert lid for box case.stl	2	5	10	3D-Printed
16	Brackets for extension devices	Small Brackets.stl	8	3	24	3D-Printed
/	<b>Assembling items</b>	/	/	/	/	/
17	M2-8 Screws	R3 Screws	6	0.05	0.3	Mechanic Workshop
18	M2-10 Screws	Fan Holder Screws	4	0.05	0.2	Mechanic Workshop
19	M2-16 Screws	Fan Holder Screws	6	0.08	0.48	Mechanic Workshop
20	M2 Nuts	Nuts	20	0.05	1	Mechanic Workshop
21	M3-8 Screws	Relay Screws	12	0.05	0.6	Mechanic Workshop
22	M3-20 Screws	LED holder Screws	8	0.08	0.64	Mechanic Workshop
23	M3-28 Screws	Connector Screws	2	0.1	0.2	Mechanic Workshop
24	M3 Nuts	Nuts	25	0.05	1.25	Mechanic Workshop
25	M4-6 Screws	Floor Screws	6	0.05	0.3	Mechanic Workshop
24	M4 Nuts	Nuts	6	0.05	0.3	Mechanic Workshop
25	Aluminum Columns-70/20	Standoffs	4	0.1	0.4	Mechanic Workshop
/	/	/	/	/	/	/
<b>Total Cost =</b>					<b>180.94</b>	

[illegible]