



2021 Physics

Advanced Higher

The following table provides information on each question including: Course content being assessed, Skills assessed (see Physics Understanding Standards materials for a definition of each code); Maximum Mark; A-type marks.

Question	Part	Course content	Skills assessed	Maximum mark	A-type marks
1	(a)	Rotational motion and astrophysics- kinematic relationships	K3	3	
	(b)	Rotational motion and astrophysics- kinematic relationships	K3	3	
2	(a)(i)	Rotational motion and astrophysics- angular motion	K3	3	
	(a)(ii)	Rotational motion and astrophysics- angular motion	K3	3	1
			S4	1	1
	(a)(iii)	Rotational motion and astrophysics- angular motion	S6	2	1
	(b)	Rotational motion and astrophysics- rotational dynamics	K2	2	1
3	(a)	Rotational motion and astrophysics- rotational dynamics	K3	2	
	(b)(i)	Rotational motion and astrophysics- rotational dynamics	K1	1	
	(b)(ii)	Rotational motion and astrophysics- rotational dynamics	K3	3	
	(b)(iii)	Rotational motion and astrophysics- rotational dynamics	K2	2	2
4	(a)(i)	Rotational motion and astrophysics- gravitation	K1	1	
	(a)(ii)	Rotational motion and astrophysics- gravitation	S3	2	2
	(a)(iii)	Rotational motion and astrophysics- gravitation	K2	2	1
	(b)	Rotational motion and astrophysics- general relativity	K2	2	2
	(c)	Rotational motion and astrophysics- gravitation	S4	1	
			K3	3	
5		Rotational motion and astrophysics- general relativity	K2	3	2
6	(a)	Rotational motion and astrophysics- stellar physics	K1	1	
	(b)(i)	Rotational motion and astrophysics- stellar physics	K3	3	
	(b)(ii)	Rotational motion and astrophysics- stellar physics	S4	1	
			K3	3	
	(c)(i)	Rotational motion and astrophysics- angular motion	S2	1	1
			K3	3	2
	(c)(ii)	Rotational motion and astrophysics- gravitation	K3	3	
7	(a)	Quanta and waves - introduction to quantum theory	K1	1	
	(b)(i)	Quanta and waves - introduction to quantum theory	K3	2	
	(b)(ii)	Quanta and waves - introduction to quantum theory	K3	3	
			K2	1	1
	(c)	Quanta and waves - introduction to quantum theory	S4	2	2
8	(a)	Quanta and waves - introduction to quantum theory	K1	1	
	(b)	Quanta and waves - introduction to quantum theory	K3	3	
	(c)(i)(A)	Electromagnetism - fields	S4	1	
			K3	3	
	(c)(i)(B)	Quanta and waves - particles from space	K3	2	

Question	Part	Course content	Skills assessed	Maximum mark	A-type marks
	(c)(i)(C)	Electromagnetism - fields	K3	3	2
	(c)(ii)	Electromagnetism - fields	S4	2	
	(d)	Quanta and waves - particles from space	S6	1	1
9	(a)	Quanta and waves - simple harmonic motion	K1	1	
	(b)	Quanta and waves - simple harmonic motion	K3	3	1
	(c)(i)	Quanta and waves - simple harmonic motion	K3	3	
	(c)(ii)	Quanta and waves - simple harmonic motion	K3	3	
	(c)(iii)	Quanta and waves - simple harmonic motion	K3	3	
	(d)	Quanta and waves - simple harmonic motion	S3	2	1
	(e)	Quanta and waves - simple harmonic motion	S6	2	1
10	(a)	Quanta and waves - interference	K2	1	1
	(b)(i)	Quanta and waves - interference	K1	1	
	(b)(ii)	Quanta and waves - interference	K1	1	
	(c)(i)	Quanta and waves - interference	S4	2	
	(c)(ii)	Quanta and waves - interference	K2	2	2
	(d)(i)	Quanta and waves - waves	S2	1	
			K3	2	
	(d)(ii)	Quanta and waves - waves	K3	3	2
11	(a)	Quanta and waves - polarisation	K1	1	
	(b)(i)	Quanta and waves - polarisation	S3	1	
	(b)(ii)	Quanta and waves - polarisation	K3	3	
	(c)	Quanta and waves - polarisation	K2	2	
12		Uncertainties	K2	3	2
13	(a)	Electromagnetism - fields	K3	3	
	(b)	Electromagnetism - fields	K3	3	
	(c)	Electromagnetism - fields	S4	1	1
			K3	3	2
14	(a)	Electromagnetism - fields	S6	1	
	(b)(i)	Electromagnetism - fields	K3	2	
	(b)(ii)	Electromagnetism - fields	K3	2	
	(c)	Electromagnetism - fields	K2	1	1
15	(a)(i)	Electromagnetism - circuits	K2	1	1
	(a)(ii)	Electromagnetism - circuits	S2	1	
			K3	3	
	(a)(iii)	Electromagnetism - circuits	K3	4	3
16	(b)	Electromagnetism - circuits	S3	2	1
	(a)(i)	Data analysis	S4	3	
	(a)(ii)	Uncertainties	S2	1	
			K3	1	
	(a)(iii)	Data analysis	K2	1	1
	(b)	Evaluation and significance of experimental uncertainties	S7	2	2
	(c)	Uncertainties	S7	1	1