FOR OFFICIAL USE

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National Qualifications 2023 MODIFIED

Mark

# X802/77/01

# Mathematics of Mechanics
# Answer booklet

TUESDAY, 9 MAY

1:00 PM – 3:50 PM

*X8027701*

**Fill in these boxes and read what is printed below.**

Full name of centre

Town

Forename(s)

Surname

Number of seat

Date of birth

Day

Month

Year

Scottish candidate number

Write your answers clearly in the spaces provided in the answer booklet. The size of the space provided for an answer is not an indication of how much to write. You do not need to use all the space.

Additional space for answers is provided at the end of the answer booklet. If you use this space you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give this booklet to the Invigilator; if you do not, you may lose all the marks for this paper.

SQA ©

*X802770101*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| 1. | | |
| 2. | | |

*X802770102*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **3.(a)** | | |
| **3.(b)** | | |

*X802770103*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **4.(a)** | | |
| **4.(b)** | | |

*X802770104*

QUESTION NUMBER

**5.**

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*X802770105*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **6.(a)** | | |
| **6.(b)** | | |

*X802770106*

QUESTION NUMBER

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**7.**

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **8.(a)** | | |
| **8.(b)** | | |

*X802770108*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **9.(a)** | | |
| **9.(b)** | | |

QUESTION NUMBER

**10.(a)**

DO NOT WRITE IN THIS MARGIN

*X 8 0 2 7 7 0 1 1 0*

QUESTION NUMBER

**10.(b)**

DO NOT WRITE IN THIS MARGIN

*X 8 0 2 7 7 0 1 1 1*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **11.(a)** | | |
| **11.(b)** | | |

QUESTION NUMBER

**12.**

DO NOT WRITE IN THIS MARGIN

*X 8 0 2 7 7 0 1 1 3*

QUESTION NUMBER

**13.**

DO NOT WRITE IN THIS MARGIN

*X 8 0 2 7 7 0 1 1 4*

QUESTION NUMBER

**14.**

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*X 8 0 2 7 7 0 1 1 5*

QUESTION NUMBER

**15.**

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*X 8 0 2 7 7 0 1 1 6*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **16.(a)** | | |
| **16.(b)** | | |

*X802770117*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
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| **17.(a)** | | |
| **17.(b)** | | |

*X 8 0 2 7 7 0 1 1 8*

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **18.(a)** | | |
| **18.(b) (i)** | | |

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **18.(b) (i) (cont)** | | |
| **18.(b) (ii)** | | |

| QUESTION NUMBER | | DO NOT WRITE IN THIS MARGIN |
|---|---|---|
| **19.(a)** | | |
| **19.(b)** | | |

ENTER NUMBER OF QUESTION

## ADDITIONAL SPACE FOR ANSWERS

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*X 8 0 2 7 7 0 1 2 2*

ENTER NUMBER OF QUESTION

## ADDITIONAL SPACE FOR ANSWERS

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## ADDITIONAL SPACE FOR ANSWERS

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## ADDITIONAL SPACE FOR ANSWERS

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## ADDITIONAL SPACE FOR ANSWERS

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*X802770126*

ENTER NUMBER OF QUESTION

## ADDITIONAL SPACE FOR ANSWERS

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*X802770127*

| For marker's use | |
|---|---|
| Question | Marks |
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*X802770128*