

# **Cambridge International AS & A Level**

| INFORMATION TEC   | HNOLOGY |          | 9626/02                   |  |  |
|-------------------|---------|----------|---------------------------|--|--|
| Paper 2 Practical |         |          | For examination from 2025 |  |  |
| MARK SCHEME       |         |          |                           |  |  |
| Maximum Mark: 90  |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         |          |                           |  |  |
|                   |         | Specimen |                           |  |  |
|                   |         |          |                           |  |  |

This document has 12 pages.

### **Generic Marking Principles**

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

#### GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptions for the question
- the specific skills defined in the mark scheme or in the generic level descriptions for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

#### **GENERIC MARKING PRINCIPLE 2:**

Marks awarded are always whole marks (not half marks, or other fractions).

#### **GENERIC MARKING PRINCIPLE 3:**

### Marks must be awarded positively:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit
  is given for valid answers which go beyond the scope of the syllabus and mark scheme,
  referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

### **GENERIC MARKING PRINCIPLE 4:**

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptions.

#### **GENERIC MARKING PRINCIPLE 5:**

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

#### **GENERIC MARKING PRINCIPLE 6:**

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptions in mind.

| Question    |                  | Answer  | Marks |
|-------------|------------------|---|-------|
| Task 1 belo | ow for example o | of conceptual Entity Relationship Diagram (ERD).  |       |
| 1           | ERD drawn wit    | th rounded rectangles and correct 1-to-many links | 1     |
|             | Contains data    | types, key fields and field lengths               | 1     |
|             | Teacher entity   | Both fields alphanumeric                          | 1     |
|             |                  | Both fields appropriate length                    | 1     |
|             |                  | TeacherID set as primary key                      | 1     |
|             | Class entity     | ClassID set as primary key                        | 1     |
|             |                  | Day and Time set as Date/Time                     | 1     |
|             |                  | All other data types alphanumeric                 | 1     |
|             |                  | All attributes of appropriate length              | 1     |
|             |                  | TeacherID set as foreign key                      | 1     |
|             |                  | StudentID set as foreign key                      | 1     |
|             | Student entity   | StudentID set as primary key                      | 1     |
|             |                  | DateOfBirth/DOB set as Date/Time data type        | 1     |
|             |                  | All other attributes set to alphanumeric          | 1     |
|             |                  | All alphanumeric attributes appropriate length    | 1     |

| Question    | Answer   | Marks |
|-------------|--|-------|
| Task 2 belo | ow for example of dance worksheet.                   |       |
| 2           | Worksheet dance has lists created in correct columns | 1     |
|             | Columns O and P are 100% accurate with all data      | 1     |
|             | and no duplicates/spaces in list                     | 1     |
|             | sorted into alphabetical order                       | 1     |
|             | Cell Q2 has a list of months displayed               | 1     |
|             | Using the formula =TRANSPOSE(B1:M1)                  | 1     |

| Question                                      | Answer   |   |  |
|---|--|---|--|
| Task 3 below for example of validation rules. |  |   |  |
| 3   | Cell B1 contains validation set to the list                      | 1 |  |
|   | dance!\$O\$2:\$O\$9  | 1 |  |
|   | Cell B2 contains validation set to the list dance!\$P\$2:\$P\$6  | 1 |  |
|   | Cell B3 contains validation set to the list dance!\$Q\$2:\$Q\$13 | 1 |  |

| Question    | Answer   | Marks |
|-------------|--|-------|
| Task 4 belo | ow for example of specfind worksheet values.                 |       |
| 4           | A1:A3 formatted right-aligned, B1:B3 bold and centre-aligned | 1     |

| Question    | Answer                                  | Marks |
|-------------|---|-------|
| Task 5 belo | ow for example of spreadsheet formulas. |       |
| 5           | Cell B5 contains the formula =INDEX( )  | 1     |
|             | dance!B2:M20                            | 1     |
|             | ,MATCH( )                               | 1     |
|             | specfind!B2                             | 1     |
|             | &                                       | 1     |
|             | " "&                                    | 1     |
|             | specfind!B1                             | 1     |
|             | ,dance!A2:A20                           | 1     |
|             | (0)                                     | 1     |
|             | ,MATCH( )                               | 1     |
|             | specfind!B3                             | 1     |
|             | ,dance!Q2:Q13                           | 1     |
|             | (0)                                     | 1     |
|             | ,1)                                     | 1     |

| Question  | Answer                             | Marks |
|---|------------------------------------|-------|
| Task 6 below for example of spreadsheet values – searching. |                                    |       |
| 6   | Task 6a correct search and results | 1     |
|   | Task 6b correct search and results | 1     |
|   | Task 6c correct search and results | 1     |

| Question    | Answer   | Marks |
|-------------|--|-------|
| Task 7 belo | ow for example of chart calculation worksheet.                         |       |
| 7           | Chart worksheet <b>chart</b> created and all required cells replicated | 1     |
|             | New column has been inserted between A and B                           | 1     |
|             | Cell B2 contains =LEFT( )  | 1     |
|             | A2,  | 1     |
|             | FIND( )  | 1     |
|             | " "  | 1     |
|             | A2   | 1     |
|             | ,2)  | 1     |
|             | 1)   | 1     |
|             | Cell R2 contains =SUMIF( )   | 1     |
|             | \$B\$2:\$B\$20   | 1     |
|             | ,\$Q2  | 1     |
|             | Correct absolute and relative referencing                              | 1     |
|             | ,C\$2:C\$20  | 1     |
|             | Correct absolute and relative referencing                              | 1     |
|             | Replicated to AC6  | 1     |

| Question    | Answer  | Marks |
|-------------|---|-------|
| Task 8 belo | w for example of chart.   |       |
| 8           | Chart created with an appropriate chart type  | 1     |
|             | Chart created with an appropriate title Chart created with appropriate axis titles  |       |
|             | Chart created with an appropriate title Chart created with appropriate axis titles Chart created with appropriate axis labels |       |
|             | Chart created with appropriate axis labels  | 1     |
|             | Chart created with a legend for all 5 class types   | 1     |
|             | Chart created with the correct data series/results  | 1     |

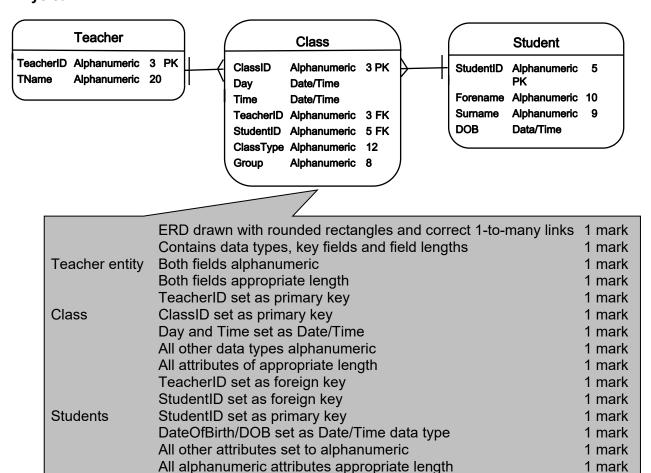
| Question | Answer                              | Marks |
|----------|-------------------------------------|-------|
| 9        | Image ratio of software set to 16:9 | 1     |
|          | Resolution 1024 × 576               | 1     |
|          | First clip trimmed to 7 seconds     | 1     |

| Question | Answer  | Marks |
|----------|---|-------|
| 10       | Still images extracted from first and last frames                                     | 1     |
|          | both images saved in suitable file format, with correct filenames (dance1 and dance3) | 1     |

| Question |                    | Answer   | Marks |
|----------|--------------------|--|-------|
| 11       | 0 seconds:         | Title background set to dance1                                   | 1     |
|          |                    | Title Barong Ket accurate, top left                              | 1     |
|          |                    | Title with appropriate size                                      | 1     |
|          | 4 seconds:         | Title and background retained with no adjustment/movement        | 1     |
|          |                    | Traditional Balinese Dance accurate, bottom right                | 1     |
|          |                    | Set as a subtitle with appropriate size                          | 1     |
|          | 8.2 seconds:       | Clip dance2 placed as specified with no text                     | 1     |
|          | 15 seconds:        | Background image dance3  | 1     |
|          |                    | Audio clip specvoice.mp3 starts                                  | 1     |
|          | 28 seconds:        | Smooth 2 second transition into video file from 28 to 30 seconds | 1     |
|          | 39.2 seconds:      | Black background for credits                                     | 1     |
|          | Credits scroll up  | the screen   | 1     |
|          | Credits include:   | Edited by: candidate name, centre number, candidate number       | 1     |
|          |                    | Filmed by: GBRvideo  | 1     |
|          |                    | Audio by: KMBaudio   | 1     |
|          | Credits of appro   | priate size with appropriate blank lines as spacing between      | 1     |
|          | Appropriate leng   | th for credits – readable speed                                  | 1     |
|          | All text in an eas | ily read font, appropriate colour with good contrast             | 1     |
|          | All text in a cons | istent sans serif font   | 1     |

| Question | Answer  | Marks |
|----------|---|-------|
| 12       | Movie exported/saved as BarongKet_ZZ999_9999.mp4 format | 1     |

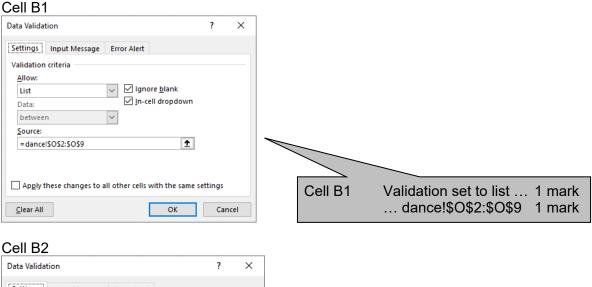
## **Physical ERD**

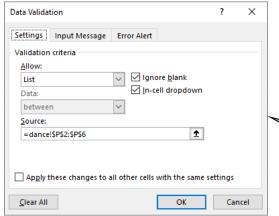


|    | 0         | Р            | Q         |
|----|-----------|--------------|-----------|
| 1  | Teacher   | Class        | Month     |
| 2  | Adam      | Ballet       | January   |
| 3  | Catherine | Contemporary | February  |
| 4  | Donna     | Modern       | March     |
| 5  | James     | Street       | April     |
| 6  | Karla     | Tap          | May       |
| 7  | Kat       |              | June      |
| 8  | Mei Mei   |              | July      |
| 9  | Zoe       |              | August    |
| 10 |           |              | September |
| 11 |           |              | October   |
| 12 |           |              | November  |
| 13 |           |              | December  |

Cell Q2 =TRANSPOSE(B1:M1)

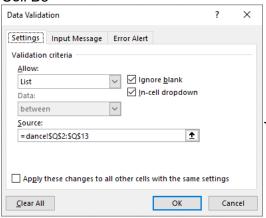
dance Lists created in correct columns 1 mark
Columns O and P 100% accurate with all data ... 1 mark
... and no duplicates / spaces in list ... 1 mark
... sorted into alphabetical order 1 mark
Cell Q2 List of months displayed as shown 1 mark
=TRANSPOSE(B1:M1) 1 mark



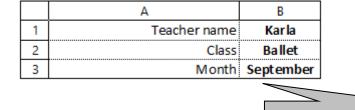


Cell B2 List from specdance!\$P\$2:\$P\$6 1 mark

#### Cell B3



Cell B3 List from dance!\$Q\$2:\$Q\$13 1 mark



Formatted as shown 1 mark =INDEX(dance!B2:M20,MATCH(specfind!B2&" "&specfind!B1,dance!A2:A20,0),

MATCH(specfind!B3,dance!Q2:Q13,0),1)

| Cell B5       =INDEX()       1 mark         dance!B2:M20       1 mark         ,MATCH()       1 mark         specfind!B2       1 mark         &       1 mark         " "&       1 mark         specfind!B1       1 mark |         |   |   |
|--|---------|---|---|
| ,dance!A2:A20 1 mark,0) 1 mark ,MATCH( ) 1 mark specfind!B3 1 mark ,dance!Q2:Q13 1 mark ,0) 1 mark ,1) 1 mark  | Cell B5 | dance!B2:M20 ,MATCH( ) specfind!B2 & " "& specfind!B1 ,dance!A2:A20 ,0) ,MATCH( ) specfind!B3 ,dance!Q2:Q13 ,0) | 1 mark |

| 6a | Correct search and results | 1 mark |
|----|----------------------------|--------|
| 6b | Correct search and results | 1 mark |
| 6c | Correct search and results | 1 mark |

### 6a

|   | А                         | В         |
|---|---------------------------|-----------|
| 1 | Teachers name             | Karla     |
| 2 | Class                     | Ballet    |
| 3 | Month                     | September |
| 4 |                           |           |
| 5 | Number of students taught | 197       |

### 6b

|   | А                         | В          |
|---|---------------------------|------------|
| 1 | Teachers name             | James      |
| 2 | Class                     | Commercial |
| 3 | Month                     | November   |
| 4 |                           |            |
| 5 | Number of students taught | 732        |

### 6c

|   | А                         | В    |
|---|---------------------------|------|
| 1 | Teachers name             | Adam |
| 2 | Class                     | Тар  |
| 3 | Month                     | June |
| 4 |                           |      |
| 5 | Number of students taught | 65   |

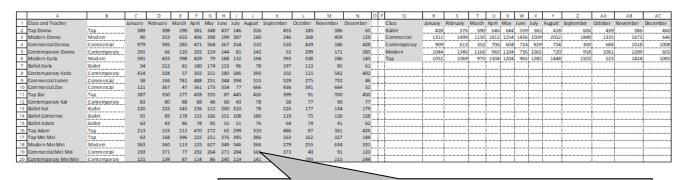


Chart worksheet created and all shaded cells replicated 1 mark New column inserted between A and B 1 mark

|    | A                    | В                            |
|----|----------------------|------------------------------|
| 1  | Class and Teacher    |                              |
| 2  | Tap Donna            | =LEFT(A2,FIND(" ",A2,2)-1)   |
| 3  | Modern Donna         | =LEFT(A3,FIND(" ",A3,2)-1)   |
| 4  | Commercial Donna     | =LEFT(A4,FIND(" ",A4,2)-1)   |
| 5  | Contemporary Donna   | =LEFT(A5,FIND(" ",A5,2)-1)   |
| 6  | Modern Karla         | =LEFT(A6,FIND(" ",A6,2)-1)   |
| 7  | Ballet Karla         | =LEFT(A7,FIND(" ",A7,2)-1)   |
| 8  | Contemporary Karla   | =LEFT(A8,FIND(" ",A8,2)-1)   |
| 9  | Commercial James     | =LEFT(A9,FIND(" ",A9,2)-1)   |
| 10 | Commercial Zoe       | =LEFT(A10,FIND(" ",A10,2)-1) |
| 11 | Tap Zoe              | =LEFT(A11,FIND(" ",A11,2)-1) |
| 12 | Contemporary Kat     | =LEFT(A12,FIND(" ",A12,2)-1) |
| 13 | Ballet Kat           | =LEFT(A13,FIND(" ",A13,2)-1) |
| 14 | Ballet Catherine     | =LEFT(A14,FIND(" ",A14,2)-1) |
| 15 | Ballet Adam          | =LEFT(A15,FIND(" ",A15,2)-1) |
| 16 | Tap Adam             | =LEFT(A16,FIND(" ",A16,2)-1) |
| 17 | Tap Mei Mei          | =LEFT(A17,FIND(" ",A17,2)-1) |
| 18 | Modern Mei Mei       | =LEFT(A18,FIND(" ",A18,2)-1) |
| 19 | Commercial Mei Mei   | =LEFT(A19,FIND(" ",A19,2)-1) |
| 20 | Contemporary Mei Mei | =LEFT(A20,FIND(" ",A20,2)-1) |

| B2 =LEFT( ) A2, FIND( ) " ", A2 ,2)1) | 1 mark<br>1 mark<br>1 mark<br>1 mark<br>1 mark<br>1 mark<br>1 mark |
|---------------------------------------|--|
| Replicated to B20                     | 1 mark   |

|   | Q            | R                                      | S  | Т                                      |
|---|--------------|--|--|--|
| 1 | Class        | January                                | February   | March                                  |
| 2 | Ballet       | =SUMIF(\$B\$2:\$B\$20,\$Q2,C\$2:C\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,D\$2:D\$20)                 | =SUMIF(\$B\$2:\$B\$20,\$Q2,E\$2:E\$20) |
| 3 | Commercial   | =SUMIF(\$B\$2:\$B\$20,\$Q3,C\$2:C\$20) | =SU\ \(\(\xi\)\(\xi\)\B\$2:\\$B\$20,\\$Q3,D\$2:D\$20\) | =SUMIF(\$B\$2:\$B\$20,\$Q3,E\$2:E\$20) |
| 4 | Contemporary | =SUMIF(\$B\$2:\$B\$20,\$Q4,C\$2:C\$20) | =SUN ^2:\$B\$20,\$Q4,D\$2:D\$20)                       | =SUMIF(\$B\$2:\$B\$20,\$Q4,E\$2:E\$20) |
| 5 | Modern       | =SUMIF(\$B\$2:\$B\$20,\$Q5,C\$2:C\$20) | =SUM) \$20,\$Q5,D\$2:D\$20)                            | =SUMIF(\$B\$2:\$B\$20,\$Q5,E\$2:E\$20) |
| 6 | Тар          | =SUMIF(\$B\$2:\$B\$20,\$Q6,C\$2:C\$20) | =SUMIF (Q6,D\$2:D\$20)                                 | =SUMIF(\$B\$2:\$B\$20,\$Q6,E\$2:E\$20) |

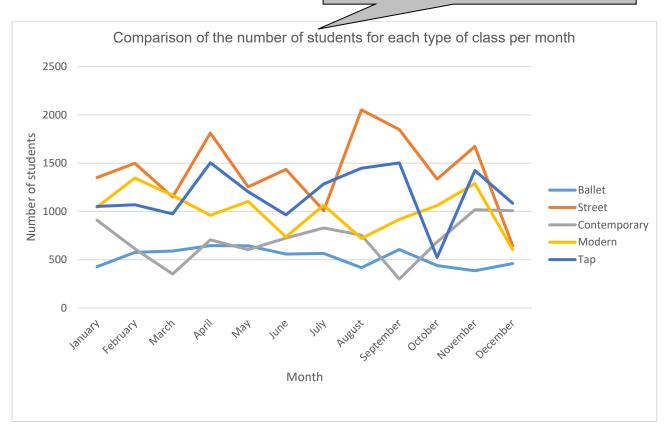
```
R2 =SUMIF(...) 1 mark
... $B$2:$B$20... 1 mark
... ,$Q2 1 mark
Correct absolute and relative referencing 1 mark
... ,C$2:C$20 ... 1 mark
Correct absolute and relative referencing 1 mark
Replicated to AC6 1 mark
```

|   | U                                      | V                                      | W                                      |
|---|--|--|--|
| 1 | April                                  | May                                    | June                                   |
| 2 | =SUM1F(\$B\$2:\$B\$20,\$Q2,F\$2:F\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,G\$2:G\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,H\$2:H\$20) |
| 3 | =SUMIF(\$B\$2:\$B\$20,\$Q3,F\$2:F\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q3,G\$2:G\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q3,H\$2:H\$20) |
| 4 | =SUM1F(\$B\$2:\$B\$20,\$Q4,F\$2:F\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q4,G\$2:G\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q4,H\$2:H\$20) |
| 5 | =SUM1F(\$B\$2:\$B\$20,\$Q5,F\$2:F\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q5,G\$2:G\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q5,H\$2:H\$20) |
| 6 | =SUMIF(\$B\$2:\$B\$20,\$Q6,F\$2:F\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q6,G\$2:G\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q6,H\$2:H\$20) |

|   | X                                      | Υ                                      | Z                                       |
|---|--|--|---|
| 1 | July                                   | August                                 | September                               |
| 2 | =SUM1F(\$B\$2:\$B\$20,\$Q2,1\$2:1\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,J\$2:J\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,K\$2:K\$20)  |
| 3 | =SUM1F(\$B\$2:\$B\$20,\$Q3,1\$2:1\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q3,J\$2:J\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q3,K\$2:K\$20)  |
| 4 | =SUMIF(\$B\$2:\$B\$20,\$Q4,I\$2:I\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q4,J\$2:J\$20) | =SUM IF(\$B\$2:\$B\$20,\$Q4,K\$2:K\$20) |
| 5 | =SUM1F(\$B\$2:\$B\$20,\$Q5,1\$2:I\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q5,J\$2:J\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q5,K\$2:K\$20)  |
| 6 | =SUM1F(\$B\$2:\$B\$20,\$Q6,1\$2:1\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q6,J\$2:J\$20) | =SUM IF(\$B\$2:\$B\$20,\$Q6,K\$2:K\$20) |

|   | AA                                     | AB                                     | AC                                     |
|---|--|--|--|
| 1 | October                                | November                               | December                               |
| 2 | =SUMIF(\$B\$2:\$B\$20,\$Q2,L\$2:L\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q2,M\$2:M\$20) | =SUM1F(\$B\$2:\$B\$20,\$Q2,N\$2:N\$20) |
| 3 | =SUMIF(\$B\$2:\$B\$20,\$Q3,L\$2:L\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q3,M\$2:M\$20) | =SUM1F(\$B\$2:\$B\$20,\$Q3,N\$2:N\$20) |
| 4 | =SUMIF(\$B\$2:\$B\$20,\$Q4,L\$2:L\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q4,M\$2:M\$20) | =SUM1F(\$B\$2:\$B\$20,\$Q4,N\$2:N\$20) |
| 5 | =SUMIF(\$B\$2:\$B\$20,\$Q5,L\$2:L\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q5,M\$2:M\$20) | =SUM1F(\$B\$2:\$B\$20,\$Q5,N\$2:N\$20) |
| 6 | =SUMIF(\$B\$2:\$B\$20,\$Q6,L\$2:L\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q6,M\$2:M\$20) | =SUMIF(\$B\$2:\$B\$20,\$Q6,N\$2:N\$20) |

Chart Appropriate chart type 1 mark
Appropriate title 1 mark
Appropriate axis titles 1 mark
Appropriate axis labels 1 mark
Legend for all 5 class types 1 mark
Correct data series/results 1 mark



# Video file dance2\_

Image ratio of software set to 16 : 9 1 mark
Resolution 1024 × 576 1 mark
First clip trimmed to 7 seconds 1 mark

# Image files dance1 and dance3

| Images dance1 and dance3  |        |
|---|--------|
| Still images extracted from first and last frames                                     | 1 mark |
| both images saved in suitable file format, with correct filenames (dance1 and dance3) | 1 mark |

# Video file BarongKet\_

| 0 seconds:  | Title background set to dance1                                   | 1 mark |  |  |
|---|--|--------|--|--|
|   | Title Barong Ket accurate, top left                              | 1 mark |  |  |
|   | Title with appropriate size                                      | 1 mark |  |  |
| 4 seconds:  | Title and background retained with no adjustment/movement        | 1 mark |  |  |
|   | Traditional Balinese Dance accurate, bottom right                | 1 mark |  |  |
|   | Set as a subtitle with appropriate size                          | 1 mark |  |  |
| 8.2 seconds:  | Clip dance2 placed as specified with no text                     | 1 mark |  |  |
| 15 seconds:   | Background image dance3  | 1 mark |  |  |
|   | Audio clip specvoice.mp3 starts                                  | 1 mark |  |  |
| 28 seconds:   | Smooth 2 second transition into video file from 28 to 30 seconds | 1 mark |  |  |
| 39.2 seconds:   | Black background for credits                                     | 1 mark |  |  |
| Credits scroll up the screen  |  | 1 mark |  |  |
| Credits include:  |  |        |  |  |
| Edited by: candidate name, centre number, candidate number                          |  |        |  |  |
| Filmed by: GBRvideo   |  |        |  |  |
| Audio by: <b>KMBaudio</b>   |  |        |  |  |
| Credits of appropriate size with appropriate blank lines as spacing between credits |  |        |  |  |
| Appropriate length for credits – readable speed                                     |  |        |  |  |
| All text in an easily read font, appropriate colour with good contrast              |  |        |  |  |
| All text in a consistent sans serif font  |  |        |  |  |
| Movie exported/saved as BarongKet_ZZ999_9999.mp4                                    |  |        |  |  |