2016 WAEP Applications Unit 3&4

Changes highlighted below:

Q13 Solutions only

Was:

| Task | Duration (minutes) | Predecessor(s) | Earliest Start Time | Latest Start Time | Float Time |
|------|-----------------------|----------------|------------------------|----------------------|----------------|
| A | 14 | - | 0 | <mark>2</mark> | <mark>2</mark> |
| В | 12 | - | 0 | 0 | 0 |
| С | 10 | - | 0 | 2 | 2 |
| D | 20 | - | 0 | 9 | 9 |
| E | 4 | B, C | 12 | 18 | 6 |
| F | 17 | B, C | 12 | 12 | 0 |
| G | 7 | A, E | 16 | 22 | <mark>4</mark> |
| Н | 6 | A, E | 16 | 23 | <mark>5</mark> |

The tasks involved in a project, their immediate predecessors and duration, are shown below.

Should be

The tasks involved in a project, their immediate predecessors and duration, are shown below.

| Task | Duration (minutes) | Predecessor(s) | Earliest Start Time | Latest Start Time | Float Time |
|------|-----------------------|----------------|------------------------|----------------------|---------------|
| А | 14 | - | 0 | 8 | 8 |
| В | 12 | - | 0 | 0 | 0 |
| С | 10 | - | 0 | 2 | 2 |
| D | 20 | - | 0 | 9 | 9 |
| E | 4 | B, C | 12 | 18 | 6 |
| F | 17 | B, C | 12 | 12 | 0 |
| G | 7 | A, E | 16 | 22 | 6 |
| н | 6 | A, E | 16 | 23 | 7 |

Q14(b) – changes to both Question Paper and Solutions.

(b) Complete the table below, rounding the missing numbers of tyres to the nearest whole number. (2 marks)

| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| T_n | <mark>2400</mark> | <mark>1800</mark> | <mark>1380</mark> | <mark>1086</mark> | <mark>880</mark> | <mark>736</mark> | <mark>635</mark> | <mark>565</mark> | <mark>515</mark> | <mark>481</mark> |

Question should be:

(b) Complete the table below, rounding the numbers of tyres to the nearest whole number. (2 marks)

| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| T_n | 2500 | 1870 | 1429 | 1120 | 904 | 753 | 647 | 573 | 521 | 485 |

Solutions should be:

(b) Complete the table below, rounding the numbers of tyres to the nearest whole number. (2 marks)

| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------|------|---|---|---|---|-----|-----|-----|-----|-----|
| T_n | 2500 | | | | | 753 | 647 | 573 | 521 | 485 |

Q15 Solutions only

Was

| Solution |
|---|
| Taxi from G: G-H-D-A-B = 20 minutes |
| Taxi from K: K-J-F-E-B = 19 minutes |
| Taxi from <mark>G</mark> will reach B first. |
| Specific behaviours |
| ✓ states taxi from K arrives first |
| ✓ lists, in order, route from G |
| ✓ states total time from G |
| ✓ lists in order route from K |

✓ lists, in order, route from K
 ✓ states total time from K

Should be

| Solution |
|---------------------------------------|
| Taxi from G: G-H-D-A-B = 20 minutes |
| |
| Taxi from K: K-J-F-E-B = 19 minutes |
| |
| Taxi from K will reach B first. |
| |
| Specific behaviours |
| ✓ states taxi from K arrives first |
| ✓ lists, in order, route from G |
| ✓ states total time from G |
| ✓ lists, in order, route from K |
| \checkmark states total time from K |