

<b>Information &amp; Communication Technology Model Questions</b>
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<b>Number systems 3</b>
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01) Calculate the answer

- |   |   |   |
|---|---|---|
| i. $100_{\text{bin}} + 1_{\text{bin}}$        | ii. $101_{\text{bin}} + 1_{\text{bin}}$           | iii. $110_{\text{bin}} + 10_{\text{bin}}$       |
| iv. $1011_{\text{bin}} + 101_{\text{bin}}$    | v. $1001_{\text{bin}} + 1101_{\text{bin}}$        | vi. $10101_{\text{bin}} + 10101_{\text{bin}}$   |
| vii. $11101_{\text{bin}} + 1111_{\text{bin}}$ | viii. $111011_{\text{bin}} + 101101_{\text{bin}}$ | ix. $111111_{\text{bin}} + 100011_{\text{bin}}$ |

02) Calculate the answer

- |  |   |   |
|--|---|---|
| i. $111_{\text{bin}} - 1_{\text{bin}}$         | ii. $110_{\text{bin}} - 1_{\text{bin}}$           | iii. $100_{\text{bin}} - 10_{\text{bin}}$       |
| iv. $1001_{\text{bin}} - 101_{\text{bin}}$     | v. $11001_{\text{bin}} - 1101_{\text{bin}}$       | vi. $11101_{\text{bin}} - 111_{\text{bin}}$     |
| vii. $100110_{\text{bin}} - 1111_{\text{bin}}$ | viii. $1110010_{\text{bin}} - 10101_{\text{bin}}$ | ix. $1000000_{\text{bin}} - 10111_{\text{bin}}$ |

03) Calculate the answer

- |  |   |  |
|--|---|--|
| i. $4_{\text{oct}} + 3_{\text{oct}}$         | ii. $5_{\text{oct}} + 3_{\text{oct}}$         | iii. $46_{\text{oct}} + 27_{\text{oct}}$     |
| iv. $156_{\text{oct}} + 246_{\text{oct}}$    | v. $654_{\text{oct}} + 124_{\text{oct}}$      | vi. $4022_{\text{oct}} + 3771_{\text{oct}}$  |
| vii. $5667_{\text{oct}} + 6527_{\text{oct}}$ | viii. $2531_{\text{oct}} + 7345_{\text{oct}}$ | ix. $7577_{\text{oct}} + 54561_{\text{oct}}$ |

04) Calculate the answer

- |  |  |   |
|--|--|---|
| i. $4_{\text{oct}} - 2_{\text{oct}}$         | ii. $52_{\text{oct}} - 43_{\text{oct}}$      | iii. $442_{\text{oct}} - 127_{\text{oct}}$  |
| iv. $706_{\text{oct}} - 207_{\text{oct}}$    | v. $4502_{\text{oct}} - 1246_{\text{oct}}$   | vi. $7515_{\text{oct}} - 517_{\text{oct}}$  |
| vii. $4005_{\text{oct}} - 1027_{\text{oct}}$ | viii. $1001_{\text{oct}} - 111_{\text{oct}}$ | ix. $7547_{\text{oct}} - 6472_{\text{oct}}$ |

05) Calculate the answer

- |  |   |   |
|--|---|---|
| i. $7_{\text{hex}} + 2_{\text{hex}}$         | ii. $6_{\text{hex}} + 4_{\text{hex}}$       | iii. $9_{\text{hex}} + 7_{\text{hex}}$      |
| iv. $19_{\text{hex}} + 29_{\text{hex}}$      | v. $5A_{\text{hex}} + 88_{\text{hex}}$      | vi. $4BA_{\text{hex}} + 4C7_{\text{hex}}$   |
| vii. $3831_{\text{hex}} + 9379_{\text{hex}}$ | viii. $F7D_{\text{hex}} + BCE_{\text{hex}}$ | ix. $80FA_{\text{hex}} + BFF8_{\text{hex}}$ |

06) Calculate the answer

- |  |   |  |
|--|---|--|
| i. $8_{\text{hex}} - 5_{\text{hex}}$         | ii. $D_{\text{hex}} - 3_{\text{hex}}$         | iii. $63_{\text{hex}} - 8_{\text{hex}}$    |
| iv. $30_{\text{hex}} - 1A_{\text{hex}}$      | v. $203_{\text{hex}} - 126_{\text{hex}}$      | vi. $3B6_{\text{hex}} - 2B9_{\text{hex}}$  |
| vii. $A0F0_{\text{hex}} - 214B_{\text{hex}}$ | viii. $EA2B_{\text{hex}} - 3C8D_{\text{hex}}$ | ix. $1001_{\text{hex}} - 111_{\text{hex}}$ |

07) Find the answer in Binary

- |  |   |  |
|--|---|--|
| i. $42_{\text{oct}} + 1001_{\text{bin}}$     | ii. $2A_{\text{hex}} + 412_{\text{oct}}$      | iii. $323_{\text{oct}} - 2F_{\text{hex}}$  |
| iv. $30_{\text{hex}} - 1A_{\text{hex}}$      | v. $203_{\text{hex}} - 126_{\text{hex}}$      | vi. $3B6_{\text{hex}} - 2B9_{\text{hex}}$  |
| vii. $A0F0_{\text{hex}} - 214B_{\text{hex}}$ | viii. $EA2B_{\text{hex}} - 3C8D_{\text{hex}}$ | ix. $1001_{\text{hex}} - 111_{\text{hex}}$ |

