S5 Music Practice Paper

S5 | Music | Time: 75 minutes | Total: 100 marks | 24 questions

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Part A Intervals and Equal Temperament (18 marks)

Take A4 = 440 Hz and compute every interval in twelve-tone equal temperament. Give answers to 3 significant figures.

1. Find the frequency of (a) A5 one octave above A4; (b) the note a perfect fifth (7 semitones) above A4; (c) the note a major third (4 semitones) above A4. (6 marks)

2. State the size in cents of an ascending perfect fifth in equal temperament. (4 marks)

3. A just perfect fifth has frequency ratio 3:2. Find its size in cents and the difference from the equal-tempered fifth. (4 marks)

4. C4 has frequency 261.63 Hz. Find the frequency of the note 10 semitones above it. (4 marks)

Part B Rhythm and Time (16 marks)

Tempo marks are given in beats per minute (BPM). Time signatures are as stated in each question.

5. With the tempo mark crotchet = 96, find the duration of one beat in seconds and the total duration of four bars of 4/4. (4 marks)

6. In 6/8 time with dotted crotchet = 60, find the duration of one bar. (4 marks)

7. A piece in 3/4 time has 96 bars at crotchet = 120. Find its total duration in seconds and in minutes. (4 marks)

8. In one bar of 4/4 the notes are a crotchet, two quavers, a dotted crotchet and a quaver. Find the total number of beats and state whether the bar is complete. (4 marks)

Part C Keys and the Circle of Fifths (16 marks)

For each question, state the key, its key signature and the number of sharps or flats.

9. How many sharps are in the key signature of G major, and which note is sharpened? (4 marks)

10. How many flats are in the key signature of E flat major, and which notes are flattened? (4 marks)

11. Moving four steps clockwise from C major on the circle of fifths (C, G, D, A, E), state the final key and its number of sharps. (4 marks)

12. What is the relative minor of A major, and how many sharps does it have? (4 marks)

Part D Chords and Harmony (16 marks)

Unless stated otherwise, all chords are in root position.

13. In C major, write out the three chords of the progression ii - V - I with their names and qualities. (4 marks)

14. Write out the four notes of a G7 chord from lowest to highest. (4 marks)

15. In C major, what is the root of the chord on degree V of the seventh, and what is its quality? (4 marks)

16. What is the cadence from V to I called, and what is the cadence from V to vi called? (4 marks)

Part E Musical Form and Listening (16 marks)

Sections are labelled with letters; the same letter means the same material.

17. What are the structure labels of binary and ternary form, and what is one common example of each? (4 marks)

18. Name the three main sections of sonata form. (4 marks)

19. A song in AABA form lasts 32 bars and each A section is 8 bars long. Find the length of the B section. (4 marks)

20. A theme lasts 16 bars and there are 6 variations, with a 2-bar link between consecutive sections. Find the total number of bars. (4 marks)

Part F Instruments, Timbre and Hong Kong Music (18 marks)

Show your working in the last question.

21. Name the four main woodwind instruments of a symphony orchestra. (4 marks)

22. By the way sound is produced, what family does the erhu belong to, and what is characteristic of its timbre? (4 marks)

23. Name four of the note names used in the gongche notation of Cantonese opera. (4 marks)

24. A Cantonese pop song is in 4/4 time at crotchet = 72 and lasts 128 bars, with a 4-bar introduction and a 4-bar coda. Find (a) the total duration in seconds and (b) the number of bars that carry the sung material. (6 marks)
