Section A – Short Answers: 4 marks each

1. **Reliability and Validity** – Week 3 (Ch 25,12) – Psychometric Testing of Intelligence
   ▪ What makes a good psychometric test? – Reliability and Validity
   • **Reliability:** In psychometric testing, there are two forms of reliability: internal reliability and reliability over time (test-retest reliability)
   • <u>Internal reliability</u> (or consistency) refers to whether all the aspects of the psychometric test are generally working together to measure the same thing. Therefore, we would expect to find that all these aspects would be positively correlated with each other.
   • <u>Test – Retest Reliability</u> (reliability over time) – assesses reliability over time. It is concerned with individuals being relatively consistent in their attitudes and behaviours over time are interested in test - retest reliability.
   • Reliability: Consistency of a test measure (how many times you repeat the test)
      - Measured by the reliability coefficient (Pearson product-moment correlation); test-retest (getting a similar result if you were to do the test again); internal consistency (Cronbach alpha – correlation measure to measure reliability)
   ▪ Interpreting Reliability Coefficients – Usefulness of a Test
      • 0.90 = excellent reliability
      • 0.80 – 0.89 = good reliability
      • 0.70 – 0.79 = fair
        0.60-0.69 = Too Low
         - Groth-Marnet (2009) suggests that reliability coefficients should be around 0.90 for clinical decision-making. 0.70 is acceptable for research purposes.
         - Reliability coefficients should be around at least 0.70 (because of shared variance) for normal test and 0.90 for clinical studies.
         - 0.70 squared = 0.49 → 49% (one administration of a test and the second administration of a test, shared variance) it is less than 50%, hence it's a bad test and its not going to work.
         - The shared variance needs to be over 80%, hence a correlation of 0.90 squared.
   • **Validity:** Is whether a test is measuring what it claims to be measuring. There are many different types of validity including
      - Face validity (e.g. does it look like an intelligence test); content validity (testing content); criterion validity – how well the test works compared to other test, concurrent and predictive).
   • Psychometric tests should have well written items, be reliable (consistent) and be valid (accurately measure what they intend).

2. **Measuring Intelligence** – Week 3 (Ch 13)

Measuring General Intelligence – Tests of Intelligence Associated with the General Factor

Raven's Progressive Matrices
- Raven (1938), minimise the influence of culture and language by relying on non-verbal problem
- Raven's Progressive Matrices is a non-verbal group test – administered to groups ranging from 5 year olds to the elderly.
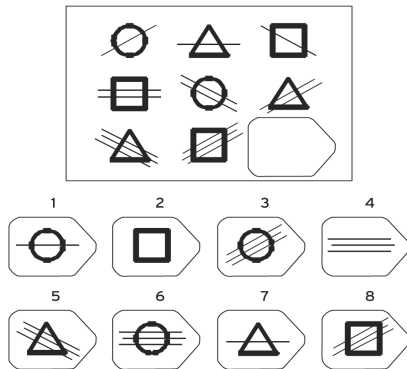
Wechsler Test
- Measuring 'g' – Based on Spearman's theory.
- David Wechsler developed his scales of intelligence, which have become the most well known popular intelligence tests today.
- The Wechsler tests "the overall capacity of an individual to understand and cope with the world around him"
- Today's versions of his WAIS allow for a global IQ, measures of verbal comprehension, perceptual reasoning, working memory and processing speed.
- 3 models of the Wechsler Test – (these tests looked at the general factor of ability):
    - Wechsler Adult Intelligence Scale (WAIS)
    - Wechsler Intelligence Scale for Children (WISC)
    - Wechsler Preschool and Primary Scale of Intelligence (WPPSI)
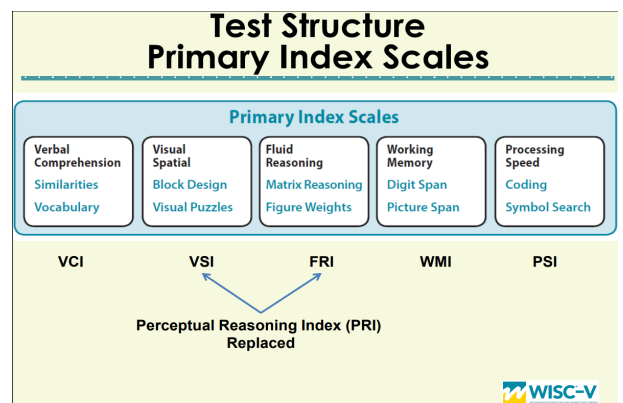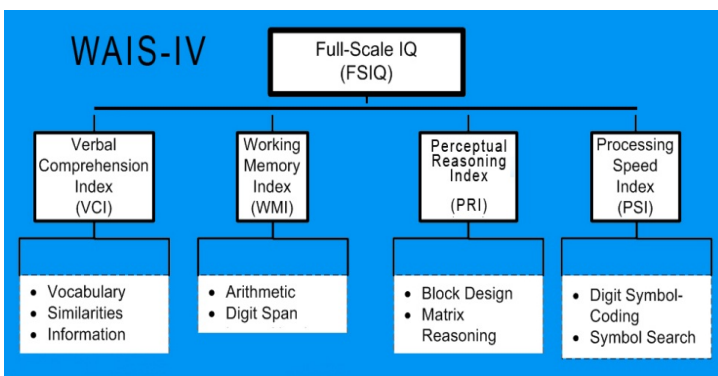
WAIS – IV: current measure of adult intelligence test.

WISC – V (5) – came out in 2015. The only difference is that Perceptual Reasoning has been split into Visual Spatial and Fluid Reasoning – introducing new measurements/tests