TYBSc Instructions on preparation

Practical II

Q3. **Anatomy**

- know procedure for double staining
- read up
  - sec. growth theory for all types
  - some terminology of staining
- get clean slides, coverslips, sharp blades
- sketch, label and comment on secondary growth

Q4. Identification

Spm J = Anatomy

- refer to Xerox notes
- Describe in as much detail! Mention and explain terms. you have 5 mins!

Stomata mounting : observe carefully – sketch roughly – it helps describe in detail

Q2. **Maceration** (in afternoon)

- Learn procedure. you *may* have to perform (otherwise macerated material will be provided)
- practice sketching wood elements, different types of thickenings
- stain, and separate elements on slide

PRACTICAL III

Q1. **IDIOGRAM preparation from karyotype**

- jumbled will be given and normal standard
- learn differences between four syndromes; characteristics of each.
- carry ruler, scissors and gum
- measure length of chromosomes and arms (unless examiner says not to)

DNA SEQUENCING

- Read
  - notes on Sangers method, applications, procedure …
  - basics of DNA, nucleotides ….
- mark cathode, anode, 5' and 3'
- keep it neat

AMINO ACID SEQUENCING

- Read
  - protein synthesis notes – translation, A-site, P site ….
  - role of mRNA, tRNA ….
  - codons and anticodons
  - genetic code . . . characteristics
- You will be given Genetic code chart
- remember
- prokaryotes
  - have Shine Dalgarno sequence AGGAGG before AUG
  - code f-met for AUG
- Eukaryotes - have 7-met-G at the 5` end
- read 5' to 3' direction
- label protein N-terminus (5' side) and C-terminal end

Q2. **BIOSTATISTICS**

- learn all relevant formulas and *tables to draw*
- Only material available (last years instructions)
- Chi sq and correlation tables shall be provided