PART – I

A) **Studies on post-harvest fungal diseases of mango fruit**
   1) Black mould rot (*Aspergillus niger* rot)
   2) Anthracnose (*Colletotrichum gloesporioides* rot)
   3) Stem end rot (*Botryodiplodia* or Diplodia rot)
   4) Soft rot (*Rhizopus* rot)
   5) Black biotch (*Aspergillus flavus* rot)
   6) *Penicillium* rot
   7) *Aspergillus fumigatus* rot
   8) Black rot (*Alternaria* rot)

B) **Impact of physical factors on disease development of**
   1) Black mould rot (*Aspergillus niger* rot)
   2) Anthracnose (*Colletotrichum gloesporioides* rot)
   3) Stem end rot (*Botryodiplodia* or Diplodia rot)
   4) Soft rot (*Rhizopus* rot)
   5) Black biotch (*Aspergillus flavus* rot)
   6) *Penicillium* rot
   7) *Aspergillus fumigatus* rot
   8) Black rot (*Alternaria* rot)

C) **Detection of fungal disease by digital X-ray scanning**

D) **Detection of spongy tissue of mango by X-ray scanning**

E) **Growth pattern of *Aspergillus niger* isolates**

F) **Molecular characterization of *Aspergillus niger* isolates**
PART –II

A) Cellulase and pectinase enzymes action of post-harvest fungi
   a) Effect of carbon sources
   b) Effect of nitrogen sources
   c) Effect of phosphorous sources
   d) Effect of sulphur sources
   e) Effect of antibiotics
   f) Effect of vitamins
   g) Effect of fungicides
   h) Effect of temperature
   i) Effect of pH
   j) Effect of light

B) Biochemical changes in mango fruits due to post-harvest fungi
   a) Change in dry weight
   b) Change in reducing sugar content
   c) Change in vitamin C content
   d) Change in pectin content
   e) Changes in cellulose content
   f) Change in ash content
   g) Change in phosphorus content
   h) Change in calcium content

C) Biocontrol of post-harvest fungal diseases
   a) Essential oils
   b) Plant latex
   c) Plant parts extracts
   d) Plant gums
   e) Hot water treatments

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