Q.1 A 60 Years old Insulin Dependant Diabetic attends your dental practice for his dental treatment. During the course of the treatment he becomes sweaty and collapses. His pulse is rapid and full.
   a) Discuss your differential diagnosis  
      1 Mark
   b) What would be your line of management.  
      2 Marks

**Topic Specification:** Medical Emergencies

**Key:**

**Possible Diagnosis**  
Hypoglycemia  
Vasovagal fainting  
Myocardial Infarction

Most likely diagnosis is hypoglycemia

**Treatment**  
Stop all procedure immediately
Chair positioning to rule out vasovagal fainting
Monitor vital signs and administer oxygen via face mask
Obtain blood glucose using a glucometer

If vasovagal attack it would be amenable to chair positioning
If hypoglycemia
Glucagon 1mg i.m. or s.c.
or
Glucose 50mL of 50% i.v.
Seek medical help if no recovery

**Book Reference:** SCULLY, C; CAWSON, RA Medical Problems in Dentistry (5th Ed)
Q.2 Discuss the contemporary principles of medical management of trigeminal Neuralgia.  

**Topic Specification:** Orofacial Pain

**Key:**

**Medical management is always the first choice**

1. **Carbamazepine**  (Tegretol, Carbatrol)  
   Most commonly used drug  
   100-200mg b.d. or t.d.s. maximum 1600mg / day  
   Monitor blood values to identify agranulocytosis, marrow suppression  

2. **Phenytoin**  (Dilantin, Phenytek)  
   150-300 mg daily either alone or in combination with carbamazepine

3. **Other drugs**  
   a) Clonazepam  
   b) Baclofen  (Lioresal)  
   c) Oxcarbazepine  (Trileptal)  
   d) Gabapentin

**Book Reference:** SCULLY, C ; CAWSON, RA Medical Problems in Dentistry (5th Ed)
Q. 3 A 65 Years old female presents to you with bilateral white patches on her buccal mucosa which are sensitive to spicy food. The white patches develop recurrent ulceration. She also has a history of pruritic skin lesions on her wrists and arms.

a) What is your most likely diagnosis?  
1 Mark

b) Describe the microscopic features you would expect to find on her biopsy specimen  
2 Marks

**Topic Specification:** Vesciculo-bullous Diseases

**Key:**

**Most likely Diagnosis**

Lichen planus with oral and cutaneous involvement  
1 Mark

**Microscopic features on biopsy specimen**

Lichen planus with oral and cutaneous involvement  
2 Marks

1. Orthokeratosis / Parakeratosis
2. Rete pegs may be absent / hyperplastic or appear as "Saw tooth"
3. Intense band-like infiltrate of T lymphocytes adjacent to the epithelium
4. Destruction of basal layer of epithelium (hydropic degeneration)
5. Degenerating keratinocytes at E - CT interface & are termed colloid / civatte / hyaline bodies
6. No significant degree of epithelial atypia

**Book Reference:** LAMEY, PJ; LEWIS, MAO A Clinical Guide to Oral Medicine (3rd Edition)  
BDJ London,
Q. 4 A 60 Years old gentleman presents to you with a history of radiation therapy for a malignancy in the head and neck region. He has a severe xerostomia. What oral complications could arise in this patient?

**Topic Specification:** Salivary Gland disorders

**Key:**

1. Difficulty in swallowing, speech and general discomfort ½ Mark
2. Taste disturbances ½ Mark
3. Oral candidiasis and other opportunistic infections ½ Mark
4. Mucositis & oral ulcers ½ Mark
5. Rampant dental caries especially cervical caries ½ Mark
6. Periodontal disease ½ Mark

**Book Reference:** LAMEY, PJ; LEWIS, MAO A Clinical Guide to Oral Medicine (3rd Edition) BDJ London,
Q. 5  A 50 Years old gentleman presents with a white patch on the floor of his mouth. The biopsy report reveals epithelial dysplasia. What microscopic features would you expect to find in his biopsy specimen?

**Topic Specification:** Oral Precancer

**Key:**

1. Loss of polarity of the basal cells
2. Presence of > one layer of cells having a basaloid appearance
3. Increased nuclear-cytoplasmic ratio
4. Drop-shaped rete processes
5. Irregular epithelial stratification
6. Increased number of mitotic figures (a few abnormal mitoses may be present)
7. Presence of mitotic figures in superficial half of the epithelium
8. Cellular pleomorphism
9. Nuclear hyperchromatism
10. Enlarged nucleoli
11. Reduction of cellular cohesion
12. Keratinisation of single cells or cell groups in the prickle layer

**Book Reference:** LAMEY, PJ; LEWIS, MAO A Clinical Guide to Oral Medicine (3rd Edition) BDJ London,
Q. 6 Describe the differences between the presentation of minor and major oral aphthous ulcers.

**Topic Specification:** Oral Ulceration

**Key:**

**Minor Aphthous Ulcers (80%)**

- Fewest recurrences & shortest duration
- Involve anterior areas:
  - Buccal & labial mucosa - most common sites
  - Ventral surface of tongue
  - Muco-buccal fold
  - Floor of mouth
  - Keratinized mucosa rarely involved
- Common in 10-19 Y age-group
- 3-10 mm in size & 1-5 lesions may be present
- Pain disproportionate to the size of the lesions
- Heal in 7-14 days without scarring
- Recurrence rate ranges from once / year to twice / month

**Major Aphthous Ulcers (10%)**

- Longest duration per episode
- May involve any part of mucosa:
  - Labial mucosa - most common site
  - Soft palate / tonsillar areas and fauces
- Onset after puberty may continue to develop for up to 20 years or more
- 1-3 cm in diameter but deeper & usually 1-10 in number
- Heal in 2-6 weeks often with scarring

**Book Reference:** LAMEY, PJ; LEWIS, MAO A Clinical Guide to Oral Medicine (3rd Edition) BDJ London,
Q. 7 A 65 Years old female with a history of systemic steroids use collapses during surgical removal of her lower left third molar. What is the most likely cause and how would you manage her?

**Topic Specification:** Oral Manifestations of Systemic Diseases (Endocrine Disorders)

**Key:**

**Possible Diagnosis**  
Addisonian / steroid Crisis  

**Treatment**  
1. Lay patient flat with legs raised (unless vomiting) & give 200 mg hydrocortisone i.v.
2. Summon medical help & give oxygen and if necessary artificial ventilation
3. Monitor vital signs & start BLS if necessary
4. Take blood for glucose & electrolyte estimations & give i.v. infusion of dextrose saline 1 litre over 2h with 200 mg hydrocortisone sodium succinate, repeat 4-6h as required
   Continue with oral replacement for at least 3 days

**Book Reference:** SCULLY, C; CAWSON, RA Medical Problems in Dentistry (5th Ed)
Q. 8  Discuss the manifestations of Oral Candidiasis in full denture patients

**Topic Specification:** Fungal Infections

**Key:**

**Denture Stomatitis**  
1 ½ Marks  
Also known as chronic atrophic candidiasis  
Localized to maxillary denture-bearing areas with varying degrees of erythema  
Rarely symptomatic despite angry clinical appearance  
May represent a tissue response by host to microorganisms beneath a denture

**Angular Cheilitis**  
1 ½ Marks  
Involvement of angles of mouth characterized by erythema, fissuring & scaling

Older person with reduced vertical dimension & accentuated folds at corners of mouth susceptible

- 20 % C. albicans alone
- 60 % C. albicans & Staph aureus
- 2 % S. aureus alone

**Book Reference:**  
BDJ London,