

**B.Sc. IN ANAESTHESIA AND CRITICAL CARE
TECHNOLOGY (BACT)**

00022

Term-End Examination

December, 2011

BAHI-072 : ANAESTHESIA EQUIPMENT

Time : 3 hours

Maximum Marks : 70

PART - A

1. (a) Fill in the blanks : **1x10=10**
- (i) The flow in O₂ flush valve is _____ L/min.
 - (ii) Full form of RAE tubes is _____.
 - (iii) Pressure in a full O₂ cylinder is _____ psi.
 - (iv) The capacity of paediatric circuit reservoir bag is _____ litre.
 - (v) _____ minimizes the formation of dust in Soda Lime.
 - (vi) _____ tube is used for surgery on the larynx.
 - (vii) _____ is the instrument used to direct the endotracheal tube into the larynx.
 - (viii) _____ is an indicator in Soda Lime which changes colour from white to pink when exhausted.
 - (ix) The oropharyngeal airway used for fibreoptic intubation is called _____.
 - (x) Cylinder attached directly to Anaesthesia Machine is _____ type.

(b) State whether the statements are *true* or *false* : 1x10=10

- (i) Two Bodok's seals can be used while fitting the cylinder to the Boyle's apparatus.
- (ii) The cylinder on Boyle's apparatus is supported by retaining screw, nipple and pin index.
- (iii) Cracking the cylinder means closing the valve tightly before transporting.
- (iv) The second stage reducing device reduces the pressure of N_2O to 26 psi.
- (v) The APL valve in Magill's circuit is situated near the machine end.
- (vi) 100 gm. of Soda Lime can absorb 26 litres of CO_2 .
- (vii) Rendell Baker Saucek mask is used for paediatric patients.
- (viii) If the flow meter of Anaesthesia Machine is damaged, it is sufficient to replace only the part which is damaged.
- (ix) Decreased pollution of the OT atmosphere is one of the advantages of the circle system.
- (x) Guedel's airway is a nasal airway.

PART - B

Answer *any three* questions.

Each question carries **10** marks.

2. Classify breathing systems with diagrams and describe any one. **10**
3. Compare and contrast O₂ and N₂O cylinders. **10**
4. Enlist the points to check the Boyle's apparatus before use. Explain the importance of FIO₂ monitor. **10**
5. Draw a labelled diagram of a cuffed endotracheal tube. Name five different types of endotracheal tubes. How will you check and prepare an endotracheal tube for intervention ? **3+3+4**
6. Describe a face mask with diagram. What are the advantages and disadvantages of a face mask ? Enumerate the types of face masks. **4+4+2**

PART - C

7. Write short notes on *any five* of the following : 4x5=20
- (a) Pin Index Safety System
 - (b) Bourdon Pressure Gauge
 - (c) Keyed filling system
 - (d) Endotracheal tube cuffs
 - (e) DISS
 - (f) Anaesthesia Work Station
 - (g) Reservoir bag
 - (h) Spiral Embedded Tubes
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