

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

**Term-End Examination**

**December, 2013**

**BAHI-072 : ANAESTHESIA EQUIPMENT**

*Time : 3 Hours*

*Maximum Marks : 70*

**PART - A**

1. (a) Fill in the blanks. **1x10=10**
- (i) Jackson Rees circuit is a modification of \_\_\_\_\_ breathing system.
  - (ii) One of the uses of Magill's forceps is.
  - (iii) Pressure in a half filled cylinder of N<sub>2</sub>O is \_\_\_\_\_
  - (iv) Full form of DISS is \_\_\_\_\_
  - (v) Pin Index of CO<sub>2</sub> is \_\_\_\_\_
  - (vi) The flow rate of O<sub>2</sub> flush is \_\_\_\_\_
  - (vii) Equal mixture of N<sub>2</sub>O and O<sub>2</sub> is called \_\_\_\_\_
  - (viii) Endotracheal tube used for maxillofacial surgery is called \_\_\_\_\_
  - (ix) \_\_\_\_\_ tube is used for one lung ventilation.
  - (x) Mask used for paediatric patients is called \_\_\_\_\_ mask.

(b) State whether the statement are true or false :

**1x10=10**

- (i) Cracking of cylinder means opening the valve a little to allow a small amount of gas to escape before fitting the cylinder to the yoke.
- (ii) Goldman vaporiser is used for isoflurane
- (iii) The circle system is very useful in laparoscopic surgery.
- (iv) Pressure in full O<sub>2</sub> cylinder is 1800 psi
- (v) High volume low pressure cuff causes more injury to tracheal mucosa.
- (vi) CO<sub>2</sub> detector is used to confirm correct placement of endotracheal tube.
- (vii) Colour of CO<sub>2</sub> cylinder is orange
- (viii) Soda lime is not re - activated at rest.
- (ix) Check valve assembly prevents the transfer of gas from one cylinder to another cylinder (with a lower pressure) in a double yoke.
- (x) Pipeline pressure of O<sub>2</sub> is 90 psi

### **PART - B**

Answer *any three* questions. Each question carries **10** marks.

- 2. Draw a diagram and describe the flowmeter. **10**  
What are the safety features of a flowmeter ?
- 3. How will you check the Boyle's apparatus before use ? **10**
- 4. Describe the circle system. What are the advantages and disadvantages of this system ? **10**

5. Describe a classic LMA with diagram. What are the advantages and disadvantages of LMA over endotracheal tube ? 10
6. Describe a face mask with a diagram. Enumerate types of face masks and describe any one of them 10

**PART - C**

7. Write short notes on *any five* of the following : 4x5=20
- (a) Pin Index safety system
  - (b) Anaesthesia workstation
  - (c) Jackson Rees circuit
  - (d) Classification of vaporizers
  - (e) Keyed filling systems
  - (f) Pre formed tubes
  - (g) O<sub>2</sub> storage system
  - (h) Care of rigid laryngoscopes.
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