

BLDE (DEEMED TO BE UNIVERSITY)

July-2023

B.Sc. in Operation Theatre Technology

[Time: 3 Hours]

[Max. Marks: 80]

III SEMESTER

PAPER - I (Introduction to Operation Theatre)

QP CODE: 8345

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Biomedical Waste Management. Explain in detail with Colour coding.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Explain in brief about Bain's Circuit.
3. Explain in Brief about doughing and downing steps.
4. Explain Video Laryngoscopy.
5. Write in detail about duties of nurses.
6. Write in detail about Pre-Operative Consent.
7. Explain Zones of operation theatre.
8. Explain Central Venous and arterial cannulation.
9. Write in detail about Face mask and Ambubag.
10. Explain Post-Operative Care.
11. Explain Infusion and Syringe Pumps.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

12. Explain in brief about Laryngoscopes.
13. Explain in brief about Autoclave Oven.
14. Explain about Pulse oximeter.
15. Explain Xylocaine sensitivity.
16. Describe types and uses of cautery.
17. Explain ECG monitoring and Defibrillators.
18. Explain Fumigation of OT.
19. Describe types of Ventilator Circuit.
20. Write in detail about Chemical Sterilization.
21. Write in detail about endotracheal tube and its uses.

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III SEMESTER

PAPER - II (Introduction to Anaesthesia Technology)

QP CODE: 8346

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Define Sterilization. Discuss about the various methods of Sterilization

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. ETO sterilization
3. Explain about intraoperative holding areas
4. Spinal Anesthesia
5. Surgical Wound
6. Zonal distribution of operating area
7. Role and responsibilities of OT Technician
8. Dressing and Bandages
9. Hand washing technique
10. Operating Table

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Name 3 absorbable suture material
12. Objectives of CSSD
13. Gown technique
14. Activities for controlling the infection in OT
15. Operative steps of Appendectomy
16. Glove technique
17. Disinfection
18. Name 3 abdominal incisions
19. Name 3 non absorbable suture material
20. Staff Members of CSSD
21. Different position of patients for operations

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III SEMESTER

PAPER - III (Principles of Anaesthesia)

QP CODE: 8347

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Explain spinal anesthesia, its complications and indications and contraindications.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Explain in brief about uses of IMA
3. Explain in Brief about color code of IV cannula and their uses
4. Describe steps of positioning for induction of anesthesia.
5. Write in detail about Indications and complication of blood transfusion.
6. Write in detail about complications of intubation
7. Write in detail about colonoscopy.
8. Explain different kinds of IV fluids with their composition and uses.
9. Write in detail about ET tube
10. Explain the mechanism of action of local anesthesia
11. Explain indication and contraindication of general anesthesia.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

12. Explain in brief about surgical anesthesia
13. Enlist a few inhalation induction agents.
14. Explain about uses of endotracheal intubation.
15. Explain Pin index system.
16. Describe what is MAC.
17. Explain the uses of face mask.
18. Explain CSSD.
19. Describe indication for inhalation induction.
20. Write in detail about Parts of Laryngoscope
21. Write in detail about ASA grading.

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III SEMESTER

PAPER - IV (ATOT Directed Clinical Education I)

QP CODE: 8348

Your answer should be specific to the questions asked.

Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Define anesthetic room. Discuss about various anesthetic equipments used in operation theatre.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Day/ambulatory surgery
3. Recovery from anaesthesia
4. patient controlled analgesia
5. Epidural anaesthesia
6. Induction of anaesthesia
7. Nerve block anaesthesia
8. Tourniquets
9. ASA-(American Society of Anesthesiologists) score
10. Informed consent

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Types of endo tracheal tubes
12. Parts of laryngoscope
13. Endoscopy unit
14. Qualities and Role of OT staff
15. Criteria of Preoperative management
16. CPR (Cardio Pulmonary Resuscitation)
17. Colour codes for various gas cylinders
18. Techniques for post-operative pain relief
19. Role of operative theater Assistant
20. Nerve block anaesthesia
21. Role of OT Technician

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BLDE (DEEMED TO BE UNIVERSITY)

B.Sc. in Optometry

[Time: 3 Hours]

[Max. Marks: 80]

III SEMESTER
PAPER - I (Physical Optics)
QP CODE: 8340

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Discuss the Newton's ring experiment and explain how it is used to determine the wave length of Sodium light.

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Airy's Disc
3. Chromatic Aberrations.
4. Electromagnetic spectrum.
5. Weber's law.
6. Population inversion in laser.
7. Michelson interferometer.
8. Ruby laser.
9. Fresnel and Fraunhofer diffractions.
10. Infra-red spectrum.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Dual nature theory.
12. Laws of Photoelectric effect.
13. Uses of laser in the medical field.
14. Define Visual acuity.
15. Define dispersion of light
16. Applied aspect of diffraction.
17. What do you mean by resolving power of optical instrument?
18. Fermat's principle
19. Emission and absorption spectra
20. Interference phenomenon in optics
21. Demonstration of fluorescence

B.Sc. in Optometry

[Time: 3 Hours]

[Max. Marks: 80]

**III SEMESTER
PAPER - II (Geometrical Optics)
QP CODE: 8341**

Your answer should be specific to the questions asked.
Write Question No. in left side of margin.

Long Questions

10X1 = 10 Marks

1. Describe simple and compound microscope and also explain its magnifying power

Short Essays: (Any – 8)

5 X 8 = 40 Marks

2. Refraction at plane surface according to Huygen.
3. Total internal reflection.
4. Gullstrand's schematic eye.
5. Spherical aberrations in lenses.
6. Cylindrical lens.
7. Interference in thin films.
8. Chromatic Aberrations.
9. Explain the terms first principal focus and second principal focus in a lens.
10. Prism diopter.

Short Answers: (Any – 10)

3 X 10 = 30 Marks

11. Laws of reflection and refraction of light.
12. Power of a lens
13. Refractive index of prism.
14. Prentice Rule.
15. Emmetropia and Ametropia.
16. Angular Magnification.
17. Back vertex power.
18. Abbe's number.
19. Snell's Law.
20. Fermat's Principle.
21. Define dispersion of light.