Vocational Practical Question Bank
First Year
Ophthalmic Technician
Course Code: 613

State Institute of Vocational Education
O/o the Commissioner of Intermediate Education,
Telangana, Hyderabad
&
Board of Intermediate Education,
Telangana, Hyderabad
OPHTHALMIC TECHNOLOGY
FIRST YEAR
SUBJECT : ANATOMY, PHYSIOLOGY & PHARMACOLOGY
PAPER - I

Time : 3 Hours  Max. Marks : 50

Section - I  (1 x 8 = 8 Marks)
1. Draw the sketch diagram of Eye and label the parts.
2. Draw the sketch diagram of cornea and mark the layers.
3. Draw the sketch diagram of lacrimal apparatus and mark the parts.
4. What are the commonly used Antibiotics in Ophthalmology.
5. Write about Accommodation.
6. Write about methodology of application of medication in eye.

Section - II  (1 x 8 = 8 Marks)
7. Write about inflammation.
8. Write about importance of Urine examination.
9. Write the physiology of Colour vision.
10. What is Antiseptic?
11. Write about human crystalline lens.
12. Write about visual fields.

Section - III  (1 x 8 = 8 Marks)
13. Draw the Accommodation process in Eye.
15. Draw the pupillary reflexes.
16. Write about anatomy of cornea.
17. Write about importance of tear film.
18. Write about Aqueous dynamics.

Section - IV  (2 x 4 = 8 Marks)
19. (a) Anatomy of the Eye
   (b) Cornea
20. (a) Different layers of Cornea
    (b) Tear - Film
21. (a) Aqueous Dynamics
    (b) Vitreous Importance
22. (a) Sterilization of Operation theatre
    (b) Aseptic Techniques
23. (a) Diabetes and Hypertension
    (b) Importance of Urine Examination
24. (a) Visual Fields
    (b) Evaluating Visual fields
Section - V  
Describe  
(4 x 2 = 8 Marks)

25. (a) Various parts of Eye  
(b) Pupillary Reflexes  
(c) Cornea and Layers of cornea  
(d) Lens and Accommodation  
26. (a) Anterior segment of Eye  
(b) Posterior segment of Eye  
(c) Aqueous Humour  
(d) Vitreous Humour  
27. (a) Physiology of Colour Vision  
(b) Aseptic Techniques  
(c) Inflammation  
(d) Urine Examination  
28. (a) Importance of Iris  
(b) Ciliary body  
(c) Choroid  
(d) Sclera  
29. (a) Diabetes and relation with Eye  
(b) Hypertension  
(c) Urine examination  
(d) Pupillary reflexes  
30. (a) Antibiotics of Ophthalmology  
(b) Aseptic Techniques  
(c) Confrontation test in Visual fields  
(d) Application of bandage to eye.

Section - VI
Record  
Viva  
(5 Marks)

Viva  
(5 Marks)
OPTHALMIC TECHNOLOGY
First Year
MODEL QUESTION PAPER
Subject : Anatomy, Physiology & Pharmacology
Paper - I

Time : 3 hours  Max. Marks : 50

Section - I  1 x 8 = 8 marks
4. Draw the sketch diagram of Eye and mark all parts.

Section - II  1 x 8 = 8 Marks
8. Write about Accommodation and its mechanism.

Section - III  2 x 4 = 8 Marks
17. Write aqueous humour and Vitreous humour.

Section - IV  2 x 4 = 8 Marks
22. (a) Sterilization process of Operation theatre.
(b) Physiology of Colour vision.

Section - V  4 x 2 = 8 Marks
25. (a) Anterior segment of Eye.
(b) Posterior segment of Eye.
(c) Colour vision tests.
(d) Diabetes and Hypertension.

Section - VI
Record  5 Marks
Viva  5 Marks

Note : The Serial numbers of the questions mentioned above are the serial numbers in question bank. In practical examination only the serial number of the questions will be given, the examiner shall decode it with question bank and give the questions.
OPHTHALMIC TECHNOLOGY
First Year
PRACTICAL SCHEME OF VALUATION
Subject: Anatomy, Physiology & Pharmacology
Paper - I

Time: 3 hours Max. Marks: 50

Section - I,II,III Major Questions (1 x 8 = 8 Marks)
1. Principle / Objective / Purpose : 1 mark
2. Material : 1 mark
3. Procedure / Method : 4 marks
4. Result / Observation / Comment : 2 marks

Section - IV (2 x 4 = 8 Marks)
1. Purpose / Use / Objective : 1 mark
2. Method / Description : 2 marks
3. Result or Remark : 1 mark

Section - V Identification and Use (4 x 2 = 8 Marks)
(a) Uses of Mydriatics
(b) Lachrymal test
(c) Visual fields recording
(d) Eliciting of Pupillary reflexes

Section - VI
Record : 5 Marks
Viva : 5 Marks
OPHTHALMIC TECHNOLOGY
First Year
Subject: PHYSICAL & PHYSIOLOGICAL ASPECTS OF SPECTACLES
Paper - II

Time : 3 Hours                     Max. Marks : 50

Section - I
(1 x 8 = 8 Marks)
1. Draw the sketch diagram of Refractive errors.
2. Draw the sketch diagram of principles of Refraction.
3. Draw the sketch diagram of forms of Lenses.
4. Describe the prismatic effect.
5. Describe the optical aberrations.

Section - II
(1 x 8 = 8 Marks)
6. Write about principle of Retinoscopy.
7. Write about prisms.
8. Write about Low vision aids.
9. What is Presbyopia.
10. What is Myopia.
11. What is Hypermetropia.

Section - III
(1 x 8 = 8 Marks)
12. How are convex lens made.
13. Write about Astigmatic lenses.
14. Write about ophthalmic lenses.
15. How are concave lenses made.
16. Write about uses of Prism.
17. Write about contact lenses.

Section - IV
(2 x 4 = 8 Marks)
18. (a) Advantages of Contact lenses.
    (b) Advantages CR39 Lenses.
19. (a) Describe optical aberrations
    (b) Identification of lenses.
20. (a) Eye as refractive apparatus
    (b) Lens forms
21. (a) List of Ophthalmic lenses.
    (b) Types of Contact lenses
22. (a) Convex lenses and their uses.
    (b) Prism and its uses.
23. (a) Presbyopia and its correction.
    (b) Concave lenses and their uses.
Section - V  
(4 x 2 = 8 Marks)

24. (a) Principles of Reflection  
    (b) Refraction  
    (c) Reflection  
    (d) Absorption  

25. (a) Properties of light  
    (b) Ray of light  
    (c) Visible wave length  
    (d) Infrared light  

26. (a) Contact lenses  
    (b) Ophthalmic lenses  
    (c) Prisms  
    (d) CR39 lenses  

27. (a) Low vision Aids  
    (b) Presbyopia  
    (c) Astigmatism  
    (d) Myopia & Hyperopia  

28. (a) Aphakia  
    (b) I.O.L  
    (c) Pseudophakia  
    (d) Aphakic glasses  

29. (a) Optical Aberrations  
    (b) Pin-cushion Distortion  
    (c) Aspheric lens  
    (d) High-Index Lens  

Section - VI  

Record  
Viva  

5 Marks  
5 Marks
OPTHALMIC TECHNOLOGY
First Year
MODEL QUESTION PAPER
Subject : Physical & Physiological Aspects of Spectacles
Paper - II

Time : 3 hours Max. Marks : 50

Section - I 1 x 8 = 8 marks
3. Define all refractive errors along with diagrams.

Section - II 1 x 8 = 8 Marks
10. Write about Prisms and their uses.

Section - III 1 x 8 = 8 Marks
14. Write about contact lenses and their advantages.

Section - IV 2 x 4 = 8 Marks
19. (a) Describe principles of Refraction
(b) Forms of Ophthalmic lenses.

Section - V 4 x 2 = 8 Marks
25. (a) Convex lens
(b) Concave lens
(c) Prism
(d) Aspheric lens

Section - VI
Record 5 Marks
Viva 5 Marks

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OPHTHALMIC TECHNOLOGY
First Year
PRACTICAL SCHEME OF VALUATION
Subject : Physical & Physiological Aspects of Spectacles
Paper - II

Time : 3 hours Max. Marks : 50

Section - I,II,III  Major Questions  (1 x 8 = 8 Marks)
1. Principle / Objective / Purpose : 1 mark
2. Materials : 1 mark
3. Procedure / Method : 4 marks
4. Result / Observation / Comment : 2 marks

Section - IV  (2 x 4 = 8 Marks)
1. Purpose / Use / Objective : 1 mark
2. Method / Description : 2 marks
3. Result or Remark : 1 mark

Section - V  Identification and Use  (4 x 2 = 8 Marks)
(a) Diagrams of refraction
(b) Practical demonstration of refraction through Prism
(c) Refraction through convex lens
(d) Refraction through concave lens

Section - VI
Record : 5 Marks
Viva : 5 Marks
OPHTHALMIC TECHNOLOGY
First Year
Subject: Community Ophthalmology & Health Education
Paper - III

Time : 3 Hours
Max. Marks : 50

Section - I
(1 x 8 = 8 Marks)
1. What is blindness?
2. What are the specific measures to prevent injuries?
3. What is cataract?
4. Signs of Vitamin, A deficiency.
5. What are the reading problems in children.
6. What is incidence of disease?

Section - II
(1 x 8 = 8 Marks)
7. Write about Eye donation.
8. What is Glaucoma?
9. What are epidemics.
10. What is conjunctivitis?
11. What are the causes for blindness?
12. Write about examination of eye.

Section - III
(1 x 8 = 8 Marks)
13. Write about eye injuries.
14. Write about occupational hazards to eye.
15. Write about xerosis.
16. Write about Trachoma.
17. Write about nutrition to Eye.
18. Detection of blindness.

Section - IV
(2 x 4 = 8 Marks)
19. (a) Write about cataract
   (b) Causes of cataract
20. (a) Screening of school children
    (b) Survey of school children.
21. (a) Signs of conjunctivitis
    (b) Symptoms of conjunctivitis
22. (a) Write about Eye donation
    (b) Importance of Eye camps
23. (a) Eye screening of Industrial workers.
    (b) Eye protection from Industrial hazards.
24. (a) Reading problems in children.
    (b) Vitamin-A deficiency.
Section - V  
(4 x 2 = 8 Marks)
Identify the following
25. (a) Retinoscope  
(b) Direct Ophthalmoscope  
(c) Occcluder  
(d) Muscle test torch  
26. (a) Fixation light  
(b) Snellen’s chart  
(c) Chart for illiterates  
(d) Slit-Lamp  
27. (a) Lensometer  
(b) Prism lenses  
(c) Protective Eye wear  
(d) Prism bar  
28. (a) Eye bandage  
(b) Punctum dilator  
(c) Tonometer  
(d) Occluder  
29. (a) Pin-hole  
(b) Maddox rod  
(c) Prentice ruler for near vision  
(d) IPD measuring scale  
30. (a) Lens marker  
(b) Digital lens-meter  
(c) Sterilizer  
(d) Eye protection cup.

Section - VI
Record  5 Marks
Viva  5 Marks
OPHTHALMIC TECHNICIAN
First Year
MODEL QUESTION PAPER
Subject : Community Ophthalmology & Health Education
Paper - III
Time : 3 hours Max. Marks : 50

Section - I 1 x 8 = 8 marks
1. Write about signs and symptoms of glaucoma.

Section - II 1 x 8 = 8 Marks
10. Write about management of vitamin-A, deficiency.

Section - III 1 x 8 = 8 Marks
17. Screening and survey of school children.

Section - IV 2 x4 = 8 Marks
21. (a) Eye camps
(b) Industrial Eye Protection

Section - V 4 x 2 = 8 Marks
26. (a) Xerosis
(b) Trachoma
(c) Conjunctivitis
(d) Cataract

Section - VI
Record 5 Marks
Viva 5 Marks

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OPHTHALMIC TECHNICIAN
First Year
PRACTICAL SCHEME OF VALUATION
Subject: Community Ophthalmology & Health Education
Paper - III

Time: 3 hours  Max. Marks: 50

Section - I, II, III  Major Questions  (1 x 8 = 8 Marks)
1. Principle / Objective / Purpose  : 1 mark
2. Materials  : 1 mark
3. Procedure / Method  : 4 marks
4. Result / Observation / Comment  : 2 marks

Section - IV  (2 x 4 = 8 Marks)
1. Purpose / Use / Objective  : 1 mark
2. Method / Description  : 2 marks
3. Result or Remark  : 1 mark

Section - V  Identification and Use  (4 x 2 = 8 Marks)
(a) Conducting outdoor Eye camps
(b) Conducting Industrial Eye camps
(c) Conducting School Eye camps
(d) Old age homes

Section - VI
Record  : 5 Marks
Viva  : 5 Marks