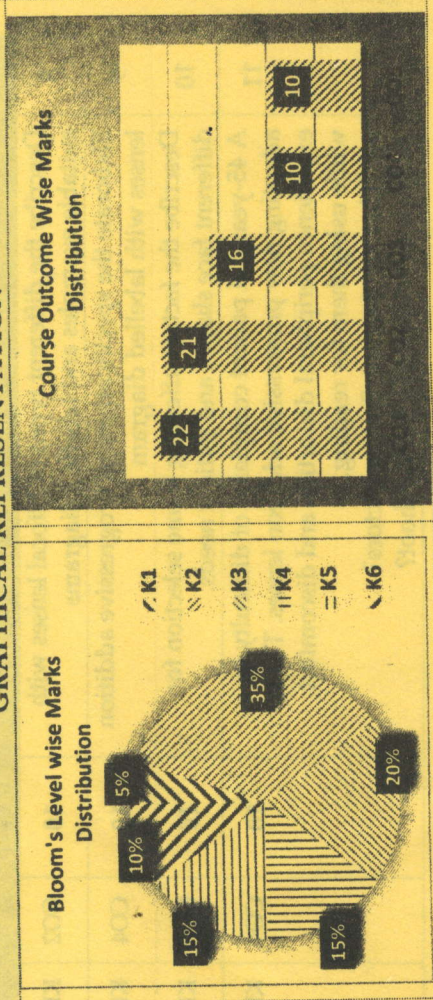


|     |                                                                                                                                             |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------|
| CO1 | Understand to select the tool power for grinding process                                                                                    |
| CO2 | Understand about different types of materials used to make lenses and its characteristics                                                   |
| CO3 | Understand about Spectacle frames, various Lens designs,                                                                                    |
| CO4 | Analyze various dispensing spectacle lens and frames based on the glass prescription                                                        |
| CO5 | Evaluate various facial measurements – Inter pupillary distance measurement and measuring heights (single vision, multifocal, progressives) |

### GRAPHICAL REPRESENTATION



|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                  |                                                                           |                 |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------|
|  | <b>ARKA JAIN University</b><br>Jharkhand                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  | [30-04-2026]<br>END SEM EXAMINATION<br>School of Health & Allied Sciences |                 |
| Program                                                                           | Bachelor of Optometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                  |                                                                           |                 |
| Subject Name                                                                      | Optometry Optics 2 & Dispensing Optics                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                  |                                                                           |                 |
| Semester                                                                          | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Session                                                                          | Even, 2025-26                                                             | April, 2026     |
| Time: 2 Hour<br>Max. Marks : 50                                                   | <ul style="list-style-type: none"><li>• Start writing from 2nd page onwards; don't Write on the 1st Page Backside</li><li>• Answer all Questions of Section A (Compulsory)</li><li>• Answer Any Four out of Six of Section B</li><li>• Answer Any Two out of Four of Section C</li><li>• Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers.</li></ul> |  |                                                                                  |                                                                           |                 |
| Knowledge Level (KL)                                                              | K1 : Remembering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | K3 : Applying                                                                    |                                                                           | K5 : Evaluating |
|                                                                                   | K2 : Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | K4 : Analysing                                                                   |                                                                           | K6 : Creating   |

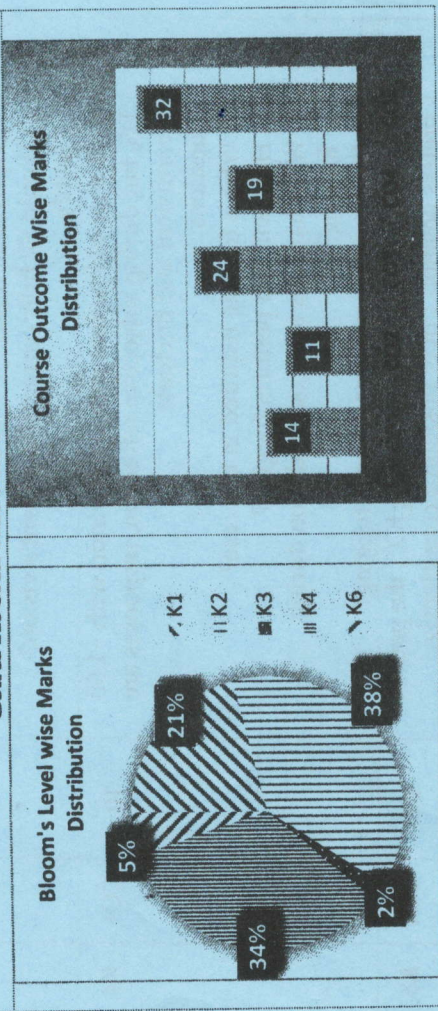
| Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks |                                                                                                                                                |       |     |     |  |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|-----|--|
| Q. N                                                               | QUESTIONS                                                                                                                                      | Marks | COs | KL  |  |
| i                                                                  | In Industrial eye protection, the ideal lens material is:<br>a) Polycarbonate<br>b) CR39<br>c) Anti-reflecting glasses<br>d) None of the above | 01    | CO2 | KL2 |  |
| ii                                                                 | Tinting of lenses decreases the<br>a) Transmittance<br>b) Reflection<br>c) Scratch resistance<br>d) All of the above                           | 01    | CO2 | KL2 |  |
| iii                                                                | The toughest lens used in the industries for eye protection will be<br>a) Crown Glass<br>b) CR39<br>c) Polycarbonate<br>d) Anti-reflecting     | 01    | CO3 | KL3 |  |
| iv                                                                 | In the soft design progressive addition lenses, the intermediate zone will be<br>a) Shorter                                                    | 01    | CO4 | KL4 |  |

|                                                                                    | b) Longer<br>c) Both<br>d) None of the above                                                                                                                      |       |     |     |  |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|-----|--|
| v                                                                                  | The refractive index of the CR39 is<br>a) 1.52<br>b) 1.49<br>c) 1.00<br>d) 2.25                                                                                   | 01    | CO3 | KL3 |  |
| vi                                                                                 | The supra frame is type of<br>a) Metal frame<br>b) Plastic frame<br>c) Semi rimless frame<br>d) Rimless frame                                                     | 01    | CO3 | KL4 |  |
| vii                                                                                | The refractive index of the polycarbonate glass<br>a) 1.59<br>b) 1.49<br>c) 1.00<br>d) 2.25                                                                       | 01    | CO1 | KL2 |  |
| viii                                                                               | In Dispensing optics, the optical center of a lens should ideally coincide with:<br>a) Frame Center<br>b) Geometric Center<br>c) Pupillary Center<br>d) Lens Edge | 01    | CO3 | KL3 |  |
| ix                                                                                 | Which type of lens is used to correcting presbyopia?<br>a) Single lens<br>b) Bifocals lens<br>c) Diverging lens<br>d) Plano lens                                  | 01    | CO4 | KL4 |  |
| x                                                                                  | Which part of the frame rests on the nose for support?<br>a) Temple tips<br>b) Bridge<br>c) End pieces<br>d) Hinges                                               | 01    | CO3 | KL3 |  |
| Section B (Answer any FOUR out of SIX) – 20 Marks<br>(Each question Carry 5 Marks) |                                                                                                                                                                   |       |     |     |  |
| Q. No.                                                                             | QUESTIONS                                                                                                                                                         | Marks | COs | KL  |  |
| 2                                                                                  | What is vertex distance? How will we measure vertex distance?                                                                                                     | 05    | CO3 | KL3 |  |
| 3                                                                                  | What is the importance of pupillary distance measurement and what does it ensures?                                                                                | 05    | CO2 | KL4 |  |

| 4                                                                                   | Write a short note on frame with labelled diagram of each part of it.                                                                                                                                                                                         | 05    | CO2 | KL2 |  |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|-----|--|
| 5                                                                                   | What is pantoscopic tilt? How will we measure it?                                                                                                                                                                                                             | 05    | CO2 | KL2 |  |
| 6                                                                                   | What are the advantages of high index lenses?                                                                                                                                                                                                                 | 05    | CO4 | KL4 |  |
| 7                                                                                   | What are the functions of anti-reflective coating?                                                                                                                                                                                                            | 05    | CO3 | KL3 |  |
| Section C (Answer any TWO out of FOUR) – 20 Marks<br>(Each question Carry 10 Marks) |                                                                                                                                                                                                                                                               |       |     |     |  |
| Q. No.                                                                              | QUESTIONS                                                                                                                                                                                                                                                     | Marks | COs | KL  |  |
| 8                                                                                   | Describe the different types of Bifocal lenses with suitable examples and labelled diagrams                                                                                                                                                                   | 10    | CO2 | KL2 |  |
| 9                                                                                   | Elaborate the specifications of Progressive addition lenses with labelled diagram                                                                                                                                                                             | 10    | CO4 | KL4 |  |
| 10                                                                                  | Describe the factors affecting frame selection for different face shapes and patient needs.                                                                                                                                                                   | 10    | CO3 | KL3 |  |
| 11                                                                                  | A 45-year-old patient complains of difficulty in adapting new progressive addition lenses. They experience peripheral distortion and discomfort while using them for reading.<br>a) What are the contributing factors?<br>b) How to resolve this troubleshot? | 10    | CO4 | KL4 |  |

|     |                                                                                |
|-----|--------------------------------------------------------------------------------|
| CO1 | Understand about accommodation, its anomalies and their practical significance |
| CO2 | Understand about convergence, its anomalies and their clinical significance    |
| CO3 | Have knowledge about retinoscopy and its procedure                             |
| CO4 | Analyze the importance of subjective and objective refraction                  |
| CO5 | Apply the theoretical knowledge on clinical practice                           |

### GRAPHICAL REPRESENTATION



|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------|
| Program                         | Bachelor of Optometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Session                         | Even, 2025-26                    |
| Subject Name                    | Visual Optics - 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Year                            | April, 2026 *                    |
| Semester                        | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 |                                  |
| Time: 2 Hour<br>Max. Marks : 50 | <ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; don't Write on the 1st Page Backside</li> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any Four out of Six of Section B</li> <li>Answer Any Two out of Four of Section C</li> <li>Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u></li> </ul> |                                 |                                  |
| Knowledge Level (KL)            | K1 : Remembering<br>K2 : Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | K3 : Applying<br>K4 : Analysing | K5 : Evaluating<br>K6 : Creating |

| Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks |                                                                                                                                                                                                      |       |     |    |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| Q. N                                                               | QUESTIONS                                                                                                                                                                                            | Marks | COs | KL |
| i                                                                  | During accommodation AC depth will<br>a) Increase<br>b) Decrease<br>c) Remain same<br>d) None                                                                                                        | 01    | CO1 | K2 |
| ii                                                                 | Parasympathomimetic drugs cause<br>a) Insufficiency of accommodation<br>b) Spasm of accommodation<br>c) Total loss of accommodation<br>d) None                                                       | 01    | CO1 | K4 |
| iii                                                                | The convergence is measured in<br>a) Prism Diopter<br>b) Meter angle<br>c) Both<br>d) None                                                                                                           | 01    | CO2 | K1 |
| iv                                                                 | Distance between near point of convergence and far point of convergence is known as<br>a) Amplitude of convergence<br>b) Range of convergence<br>c) Proximal convergence<br>d) Voluntary convergence | 01    | CO3 | K1 |
| v                                                                  | In cycloplegic retinoscopy using 1%atropine, the amount of diopters deducted to compensate ciliary muscle tone is<br>a) 0 D<br>b) 0.5 D                                                              | 01    | CO3 | K4 |

| Q. No. | QUESTIONS                                                                                                                          | Marks | COs | KL |
|--------|------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
|        |                                                                                                                                    |       |     |    |
| 2      | What are the different anomalies of accommodation, and how are they diagnosed and managed?                                         | 05    | CO1 | K3 |
| 3      | How to measure convergence? What are the different forms of convergence anomalies and treatment option available?                  | 05    | CO2 | K4 |
| 4      | What are the various types of retinoscopy, and how do their techniques differ?                                                     | 05    | CO3 | K5 |
| 5      | Which cycloplegic agents are commonly used for refraction, and how do they differ?                                                 | 05    | CO3 | K4 |
| 6      | What is the AC/A ratio, and how does it describe the relationship between accommodation and convergence?                           | 05    | CO2 | K2 |
| 7      | Describe the procedure of the duochrome test in refraction? Define binocular balancing and explain the alternate occlusion method. | 05    | CO4 | K5 |

| Section C (Answer any TWO out of FOUR) – 20 Marks<br>(Each question Carry 10 Marks) |                                                                                                                                                                                                                                                                                                                                           |       |     |    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| Q. No.                                                                              | QUESTIONS                                                                                                                                                                                                                                                                                                                                 | Marks | COs | KL |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                           |       |     |    |
| 8                                                                                   | A patient presents with the following prescription:<br>+2.00 DS / +1.50 DC x 90<br>Questions:<br>a) Transpose the prescription into minus cylinder form.<br>b) Explain the steps involved in transposition.<br>c) Transpose the prescription into Spherical Equivalent form.<br>d) Would SE fully correct this patient's vision? Justify. | 10    | CO3 | K6 |
| 9                                                                                   | A 25-year-old patient shows 6/6 vision with -1.00 DS, but during subjective refraction, responses are inconsistent and fluctuate.<br>Questions:<br>a) Why is fogging required in this case?<br>b) How will you perform fogging?<br>c) What happens to accommodation during fogging?<br>d) What error may occur without fogging?           | 10    | CO4 | K4 |
| 10                                                                                  | While refining cylinder axis using JCC, the patient prefers position 1 over position 2 consistently.<br>Questions:<br>a) What does this indicate?<br>b) How is JCC used to refine axis?<br>c) How is cylinder power refined using JCC?<br>d) What are the endpoints of JCC test?                                                          | 10    | CO4 | K5 |
| 11                                                                                  | A patient can barely see N 12 at a reading distance of 40 cm. They now use large print book N 24 at 30 cm. Total magnification required for the patient?                                                                                                                                                                                  | 10    | CO3 | K3 |

|      |                                                                                                                                                                                                       |    |     |    |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|----|
| vi   | c) 1 D<br>In duochrome test red becomes clear when<br>a) Hypermetropia is fully corrected<br>b) Hypermetropia is over corrected<br>c) Hypermetropia is under corrected<br>d) Myopia is over corrected | 01 | CO4 | K5 |
| vii  | As age increase, the amplitude of accommodation<br>a) Increase<br>b) Decrease<br>c) Remains same<br>d) None                                                                                           | 01 | CO1 | K2 |
| viii | Maddox rod test is used in diagnosis of<br>a) Heterophoria<br>b) Heterotropia<br>c) Astigmatism<br>d) Diplopia                                                                                        | 01 | CO4 | K5 |
| ix   | Parasympathomimetic drugs cause<br>a) Insufficiency of accommodation<br>b) Spasm of accommodation<br>c) Total loss of accommodation<br>d) None                                                        | 01 | CO3 | K4 |
| x    | A X8 loupe has an equivalent power of _____<br>dioptries.<br>a) 2<br>b) 8<br>c) 16<br>d) 32                                                                                                           | 01 | CO5 | K3 |

**Section B (Answer any FOUR out of SIX) – 20 Marks**  
(Each question Carry 5 Marks)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>ARKA JAIN University</b><br>Jharkhand | [06-05-2026]<br><b>END SEM EXAMINATION</b><br>School of Health & Allied Sciences |
| Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Bachelor of Optometry                    |                                                                                  |
| Subject Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ocular Disease-2 & Glaucoma              | Session Even, 2025-26                                                            |
| Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | IV                                       | Year April, 2026                                                                 |
| Time: 2 Hour<br>Max. Marks : 50<br><br><ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; <u>don't Write on the 1st Page Backside</u></li> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any Four out of Six of Section B</li> <li>Answer Any Two out of Four of Section C</li> <li>Possession of Mobile Phones or any kind of Written Material, <u>Arguments with the Invigilator or Discussing with Co-Student</u> will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u></li> </ul> |                                          |                                                                                  |
| Knowledge Level (KL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | K1 : Remembering                         | K5 : Evaluating                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | K2 : Understanding                       | K6 : Creating                                                                    |

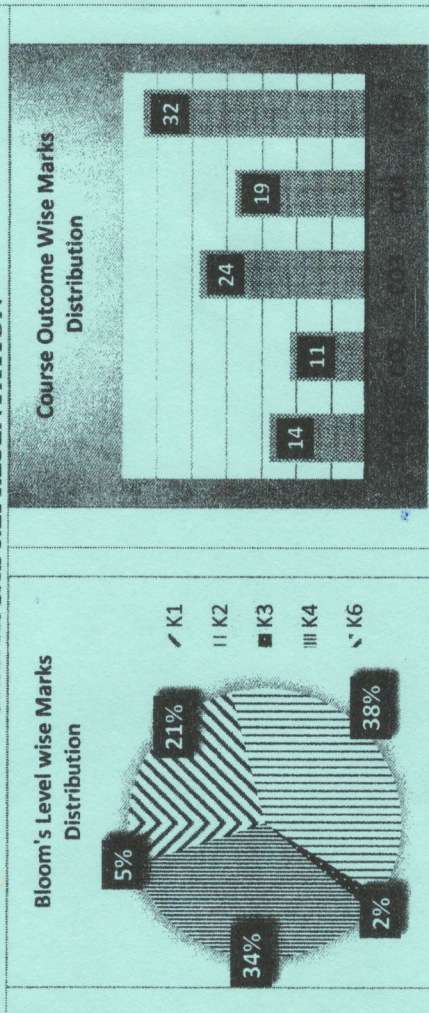
| Q. N | QUESTIONS                                                                  |  | Marks | COs | KL |
|------|----------------------------------------------------------------------------|--|-------|-----|----|
| 1    |                                                                            |  |       |     |    |
| i    | Name one component which can cause chemical burns                          |  | 01    | CO1 | K1 |
| ii   | Name one component which can cause thermal burns                           |  | 01    | CO1 | K1 |
| iii  | Define microsphorophakia                                                   |  | 01    | CO1 | K1 |
| iv   | Name one test used to assess malingering                                   |  | 01    | CO5 | K3 |
| v    | Define Marcus Gun pupil                                                    |  | 01    | CO1 | K1 |
| vi   | Write one cause of secondary Glaucoma                                      |  | 01    | CO3 | K2 |
| vii  | Which neuroimaging test is used to diagnose papilloedema                   |  | 01    | CO3 | K3 |
| viii | Full Form of BRVO and CRVO                                                 |  | 01    | CO3 | K1 |
| ix   | Which type of refractive error is seen in microspherophakia and lenticonus |  | 01    | CO4 | K1 |
| x    | Which type of visual field defect is seen in Glaucoma                      |  | 01    | CO3 | K1 |

**Section A (Each question Carry 01 Marks from Q1-i to x) - 10 Marks**

| Section B (Answer any FOUR out of SIX) – 20 Marks<br>(Each question Carry 5 Marks)  |                                                                                              |       |     |    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------|-----|----|
| Q. No.                                                                              | QUESTIONS                                                                                    | Marks | COs | KL |
| 2                                                                                   | Describe the features of congenital Glaucoma                                                 | 05    | CO3 | K3 |
| 3                                                                                   | Describe the grades of RAPD                                                                  | 05    | CO3 | K2 |
| 4                                                                                   | How congenital cataract is different from developmental cataract                             | 05    | CO3 | K2 |
| 5                                                                                   | Explain about CSCR and its causes                                                            | 05    | CO4 | K2 |
| 6                                                                                   | Difference between close globe and open globe injury                                         | 05    | CO3 | K3 |
| 7                                                                                   | Difference between optic neuritis and optic atrophy                                          | 05    | CO3 | K3 |
| Section C (Answer any TWO out of FOUR) – 20 Marks<br>(Each question Carry 10 Marks) |                                                                                              |       |     |    |
| Q. No.                                                                              | QUESTIONS                                                                                    | Marks | COs | KL |
| 8                                                                                   | Explain different test used to assess malingering                                            | 10    | CO4 | K5 |
| 9                                                                                   | Explain the difference in normal tension glaucoma and ocular hypertension with its treatment | 10    | CO4 | K2 |
| 10                                                                                  | Explain the types of diabetic retinopathy with its investigations and treatment              | 10    | CO4 | K3 |
| 11                                                                                  | Discuss about Nystagmus, its types and management                                            | 10    | CO4 | K3 |

| CO- Course Outcomes, |     | KL- Knowledge Level,                                                                                            | PO – Program Outcome |
|----------------------|-----|-----------------------------------------------------------------------------------------------------------------|----------------------|
| Course Outcomes      | CO1 | Understand the concept of different Ocular diseases of posterior segment of Eye                                 |                      |
|                      | CO2 | Apply the concept of anatomy & Physiology of Eye while understanding the Pathology of different ocular diseases |                      |
|                      | CO3 | Utilize the concept of clinical features of the diseases for the differential diagnosis of the ocular diseases  |                      |
|                      | CO4 | Analyze the concept of clinical features of the diseases for the management of ocular diseases                  |                      |
|                      | CO5 | NA                                                                                                              |                      |

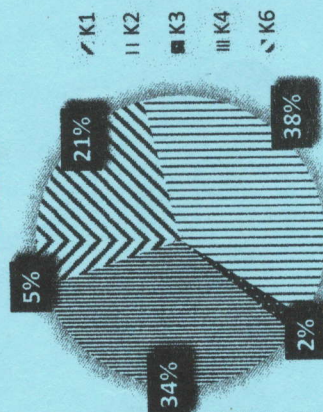
#### GRAPHICAL REPRESENTATION



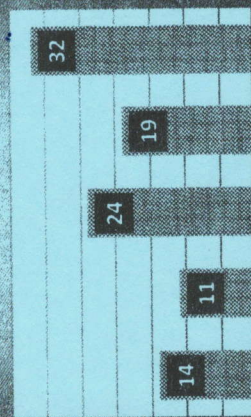
|     |                                                                                                                                               |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------|
| CO1 | Understand the basics of drugs and its different sources as well as pharmaco-dynamics and pharmaco-kinetics.                                  |
| CO2 | Understand the concept & terminologies of Pharmacology and Ocular preparations                                                                |
| CO3 | Understand the advantages and disadvantages of general routes of drug administration and other routes of drug administration in Ophthalmology |
| CO4 | Application of different pharmaceutical agents in the management of Ocular disease as well as managing Ocular Toxicity                        |
| CO5 | Analyze and applying diagnostic and therapeutic drugs in Ophthalmology                                                                        |

### GRAPHICAL REPRESENTATION

Bloom's Level wise Marks Distribution



Course Outcome Wise Marks Distribution



|                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                             |                       |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|
| <b>ARKA JAIN University</b><br>Jharkhand<br><b>NAAC GRADE A</b><br>ACCREDITED UNIVERSITY | [08-05-2026]<br>END SEM EXAMINATION<br>School of Health & Allied Sciences                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                             |                       |
|                                                                                          | Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Bachelor of Optometry       |                       |
|                                                                                          | Subject Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Basic & Ocular Pharmacology | Session Even, 2025-26 |
|                                                                                          | Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IV                          | Year April, 2026      |
| Time: 2 Hour<br>Max. Marks : 50                                                          | <ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; don't Write on the 1st Page</li> <li>Backside</li> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any Four out of Six of Section B</li> <li>Answer Any Two out of Four of Section C</li> <li>Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u></li> </ul> |                             |                       |
| Knowledge Level (KL)                                                                     | K1 : Remembering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | K3 : Applying               | K5 : Evaluating       |
|                                                                                          | K2 : Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | K4 : Analysing              | K6 : Creating         |

### Section A (Each question Carry 01 Marks from Q1-i to x) - 10 Marks

| Q.N  | QUESTIONS                                          | Marks | COs | KL |
|------|----------------------------------------------------|-------|-----|----|
| 1    |                                                    |       |     |    |
| i    | Define Pharmacokinetics                            | 01    | CO1 | K1 |
| ii   | Define pharmacodynamics                            | 01    | CO1 | K1 |
| iii  | Name one drug which affect accommodation           | 01    | CO4 | K3 |
| iv   | Name two drugs which affect pupillary size         | 01    | CO4 | K1 |
| v    | Which drugs can be used in diagnostic purpose      | 01    | CO5 | K2 |
| vi   | Which drug can be used for therapeutic purpose     | 01    | CO5 | K2 |
| vii  | Name one drug which is used as topical anaesthesia | 01    | CO1 | K3 |
| viii | Full form of NSAIDS                                | 01    | CO2 | K1 |
| ix   | Name one components used as tear substitutes       | 01    | CO3 | K2 |
| x    | Name one Anti-hypertensive drugs                   | 01    | CO3 | K2 |

**Section B (Answer any FOUR out of SIX) - 20 Marks**

(Each question Carry 5 Marks)

| Q. No. | QUESTIONS                                                                                           | Marks | COs | KL |
|--------|-----------------------------------------------------------------------------------------------------|-------|-----|----|
| 2      | Draw a flow chart explaining the routes of drug administration                                      | 05    | CO1 | K3 |
| 3      | Draw a flow chart for drugs used for diagnostic purpose in reference to pupil and posterior segment | 05    | CO4 | K3 |
| 4      | Discuss about different tear substitute with its properties                                         | 05    | CO5 | K3 |
| 5      | Discuss about drugs which caused severe ocular toxicity                                             | 05    | CO4 | K4 |
| 6      | Discuss about chemotherapy in detail                                                                | 05    | CO4 | K3 |
| 7      | Discuss about Anti-Diabetics drugs in detail                                                        | 05    | CO4 | K3 |

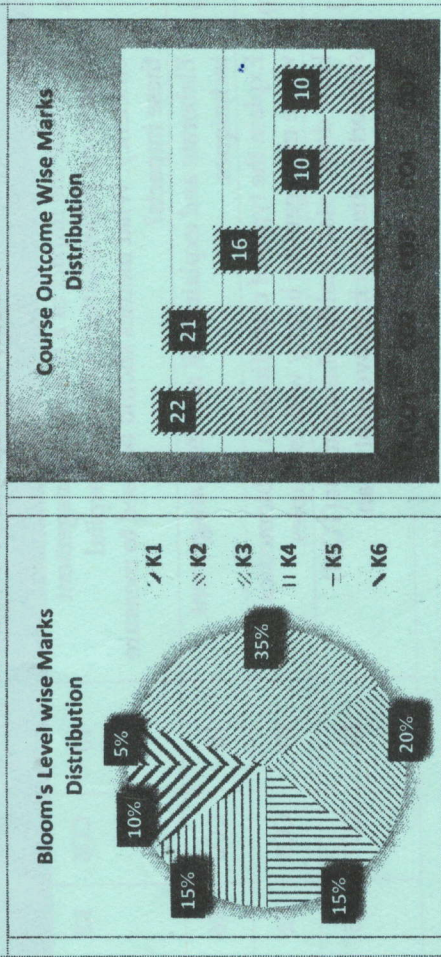
**Section C (Answer any TWO out of FOUR) - 20 Marks**

(Each question Carry 10 Marks)

| Q. No. | QUESTIONS                                                                              | Marks | COs | KL |
|--------|----------------------------------------------------------------------------------------|-------|-----|----|
| 8      | Discuss about different types of Anti-Glaucoma drugs in details                        | 10    | CO5 | K3 |
| 9      | Discuss about Pharmacotherapy of ocular infections for Bacteria and virus              | 10    | CO5 | K3 |
| 10     | Drugs used in allergic inflammatory drugs used in eye                                  | 10    | CO4 | K3 |
| 11     | Discuss about the ocular preparation's formulations and requirements of an ideal agent | 10    | CO5 | K3 |

|     |                                                                                                                      |
|-----|----------------------------------------------------------------------------------------------------------------------|
| CO1 | Understand the concept of Quality assurance of different equipment used in ophthalmic department and its management. |
| CO2 | Understand the concept of basics of emergency care and life support skills.                                          |
| CO3 | Apply concept of biomedical waste management and environment safety.                                                 |
| CO4 | Apply concept of Infection and prevention control.                                                                   |
| CO5 | Understand the basic hospital management system.                                                                     |

#### GRAPHICAL REPRESENTATION



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |                                 |                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------|----------------------------------|
| Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Bachelor of Optometry                    |                                 |                                  |
| Subject Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Introduction to Quality & Patient Safety | Session                         | Even, 2025-26                    |
| Semester                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IV                                       | Year                            | April, 2026                      |
| <p>• Start writing from 2nd page onwards; don't Write on the 1st Page Backside</p> <p>• Answer all Questions of Section A (Compulsory)</p> <p>• Answer Any Four out of Six of Section B</p> <p>• Answer Any Two out of Four of Section C</p> <p>• Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation</u> of the Papers.</p> |                                          |                                 |                                  |
| Time: 2 Hour<br>Max. Marks : 50                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |                                 |                                  |
| Knowledge Level (KL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | K1 : Remembering<br>K2 : Understanding   | K3 : Applying<br>K4 : Analysing | K5 : Evaluating<br>K6 : Creating |

#### Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks

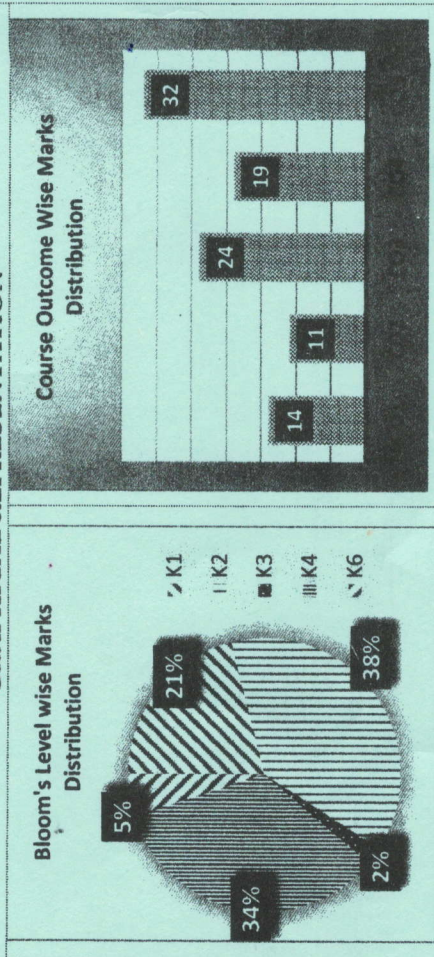
| Q.N | QUESTIONS                                                                                                                                                                     | Marks | COs | KL |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| 1   |                                                                                                                                                                               |       |     |    |
| i   | Biomedical waste is defined as:<br>A. Domestic waste<br>B. Waste generated during diagnosis or treatment<br>C. Industrial waste<br>D. Agricultural waste                      | 01    | CO3 | K1 |
| ii  | Quality control differs from quality assurance as it:<br>A. Focuses on prevention<br>B. Focuses on detection of defects<br>C. Is not needed in healthcare<br>D. Is same as QA | 01    | CO1 | K2 |
| iii | To prevent antibiotic resistance, clinicians should:<br>A. Overprescribe<br>B. Use broad-spectrum always<br>C. Prescribe rationally<br>D. Avoid antibiotics                   | 01    | CO4 | K3 |
| iv  | A rise in hospital infections indicates failure in:<br>A. Finance system<br>B. Infection control measures<br>C. Patient diet<br>D. Infrastructure only                        | 01    | CO4 | K4 |

| v                                                                                         | The best strategy to reduce hospital infections is:<br>A. More antibiotics<br>B. Strict hand hygiene compliance<br>C. More admissions<br>D. Less staff                      | 01    | CO4 | K3 |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| vi                                                                                        | In disaster management, the most critical phase is:<br>A. Recovery<br>B. Preparedness<br>C. Response<br>D. Rehabilitation                                                   | 01    | CO2 | K2 |
| vii                                                                                       | A quality improvement plan should include:<br>A. No monitoring<br>B. Continuous evaluation<br>C. One-time inspection<br>D. No standards                                     | 01    | CO1 | K2 |
| viii                                                                                      | Broken glassware contaminated with blood should be disposed in:<br>A. Yellow bag<br>B. Red bag<br>C. Blue container<br>D. Black bag                                         | 01    | CO3 | K3 |
| ix                                                                                        | Increased antibiotic resistance in a hospital suggests:<br>A. Effective infection control<br>B. Overuse/misuse of antibiotics<br>C. Proper hygiene<br>D. Reduced infections | 01    | CO4 | K4 |
| x                                                                                         | Developing an infection control protocol requires:<br>A. Ignoring guidelines<br>B. Integrating hygiene, sterilization, and monitoring<br>C. Only antibiotics<br>D. Only PPE | 01    | CO4 | K6 |
| <b>Section B (Answer any FOUR out of SIX) – 20 Marks</b><br>(Each question Carry 5 Marks) |                                                                                                                                                                             |       |     |    |
| Q. No.                                                                                    | QUESTIONS                                                                                                                                                                   | Marks | COs | Ks |
| 2                                                                                         | Describe the concept, goals, and scope of quality assurance in healthcare.                                                                                                  | 05    | CO1 | K2 |
| 3                                                                                         | Explain the classification and categories of biomedical waste.                                                                                                              | 05    | CO3 | K2 |
| 4                                                                                         | Explain how you would manage an unconscious patient in a clinical setup                                                                                                     | 05    | CO2 | K3 |

| 5                                                                                          | Explain briefly about AED and its procedure                                                                                                                | 05    | CO2 | K2 |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| 6                                                                                          | Explain the role of disinfectants and sterilization in infection prevention, and how are they used in different healthcare settings.                       | 05    | CO4 | K5 |
| 7                                                                                          | Explain the difference between quality assurance and quality control                                                                                       | 05    | CO1 | K4 |
| <b>Section C (Answer any TWO out of FOUR) – 20 Marks</b><br>(Each question Carry 10 Marks) |                                                                                                                                                            |       |     |    |
| Q. No.                                                                                     | QUESTIONS                                                                                                                                                  | Marks | COs | Ks |
| 8                                                                                          | Evaluate the impact of a hospital management system on patient satisfaction and hospital efficiency. What metrics should be used to measure these impacts? | 10    | CO5 | K5 |
| 9                                                                                          | Elaborate and explain CPR and its management techniques.                                                                                                   | 10    | CO2 | K6 |
| 10                                                                                         | Explain the types of classification of biomedical waste management briefly with examples.                                                                  | 10    | CO3 | K2 |
| 11                                                                                         | How does Total Quality Management (TQM) support continuous improvement in an organisation?                                                                 | 10    | CO1 | K5 |

|     |                                                                                                 |
|-----|-------------------------------------------------------------------------------------------------|
| CO1 | Understand the basic concepts of infection, Inflammation and repair                             |
| CO2 | Understand the clinical features of various diseases like Tuberculosis, Leprosy, Syphilis       |
| CO3 | Understand the clinical features of Anemia, Leukemia, Bleeding disorders                        |
| CO4 | Understand the clinical features Circulatory disturbances like Thrombosis, Infarction, Embolism |
| CO5 | Analyze the urine report, blood smear                                                           |

## GRAPHICAL REPRESENTATION



|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------|
| Program                         | Bachelor of Optometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                 |                                  |
| Subject Name                    | Pathology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Session                         | Even, 2025-26                    |
| Semester                        | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Year                            | April, 2026                      |
| Time: 2 Hour<br>Max. Marks : 50 | <ul style="list-style-type: none"> <li>Start writing from 2nd page onwards; don't Write on the 1st Page Backside</li> <li>Answer all Questions of Section A (Compulsory)</li> <li>Answer Any Four out of Six of Section B</li> <li>Answer Any Two out of Four of Section C</li> <li>Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u></li> </ul> |                                 |                                  |
| Knowledge Level (KL)            | K1 : Remembering<br>K2 : Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | K3 : Applying<br>K4 : Analysing | K5 : Evaluating<br>K6 : Creating |

## Section A (Each question Carry 01 Marks from Q1-i to x) - 10 Marks

| Q.N  | QUESTIONS                                                                                          | Marks | COs | KL  |
|------|----------------------------------------------------------------------------------------------------|-------|-----|-----|
| i    | The period between entry of the pathogen and appearance of symptoms is known as the _____ period.  | 01    | CO1 | KL2 |
| ii   | The final stage of tissue repair involving collagen deposition and scar formation is called _____. | 01    | CO1 | KL1 |
| iii  | Redness during inflammation is called _____.                                                       | 01    | CO1 | KL1 |
| iv   | Tuberculosis mainly affects the _____ in the human body.                                           | 01    | CO2 | KL1 |
| v    | Hansen's disease is another name for _____.                                                        | 01    | CO2 | KL1 |
| vi   | A painless _____ appears in the primary stage of syphilis.                                         | 01    | CO2 | KL1 |
| vii  | Fungi grow best in _____ and moist conditions.                                                     | 01    | CO2 | KL3 |
| viii | _____ trachomatis causes trachoma.                                                                 | 01    | CO4 | KL2 |
| ix   | Anaphylaxis is a severe _____ hypersensitivity reaction.                                           | 01    | CO5 | KL2 |

|                                                                                            |                                                                                                                                         |  |  |  |       |     |     |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-------|-----|-----|
| x                                                                                          | The primary antibody produced during the initial immune response is _____.                                                              |  |  |  | 01    | CO5 | KL3 |
| <b>Section B (Answer any FOUR out of SIX) – 20 Marks</b><br>(Each question Carry 5 Marks)  |                                                                                                                                         |  |  |  |       |     |     |
| Q. No.                                                                                     | QUESTIONS                                                                                                                               |  |  |  | Marks | COs | KL  |
| 2                                                                                          | What does the presence of glucose in urine indicate, and why is it important in optometric practice?                                    |  |  |  | 05    | CO5 | KL3 |
| 3                                                                                          | What are the common causes of infarction, and how can it impact vision?                                                                 |  |  |  | 05    | CO4 | KL4 |
| 4                                                                                          | What is the difference between benign and malignant tumors?                                                                             |  |  |  | 05    | CO3 | KL2 |
| 5                                                                                          | What is syphilis? How syphilis is commonly transmitted?                                                                                 |  |  |  | 05    | CO2 | KL3 |
| 6                                                                                          | What is inflammation? Name any two signs of ocular inflammation.                                                                        |  |  |  | 05    | CO1 | KL2 |
| 7                                                                                          | How can infections spread to the eye? Mention any two routes.                                                                           |  |  |  | 05    | CO1 | KL4 |
| <b>Section C (Answer any TWO out of FOUR) – 20 Marks</b><br>(Each question Carry 10 Marks) |                                                                                                                                         |  |  |  |       |     |     |
| Q. No.                                                                                     | QUESTIONS                                                                                                                               |  |  |  | Marks | COs | KL  |
| 8                                                                                          | Apply the concept of tissue repair in corneal healing.                                                                                  |  |  |  | 10    | CO1 | KL4 |
| 9                                                                                          | Define inflammation. Describe the types, cardinal signs, and the role of inflammation in ocular diseases.                               |  |  |  | 10    | CO1 | KL3 |
| 10                                                                                         | Explain the causes, clinical features, and ocular complications of leprosy.                                                             |  |  |  | 10    | CO2 | KL3 |
| 11                                                                                         | Describe the procedure and significance of blood smear examination. How does it help in diagnosing systemic diseases affecting the eye? |  |  |  | 10    | CO5 | KL5 |

|                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                |                                                                           |               |
|----------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------|---------------|
|  <b>ARKA JAIN University</b><br>Jharkhand |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                | [13-05-2026]<br>END SEM EXAMINATION<br>School of Health & Allied Sciences |               |
| Program                                                                                                                    |  | Bachelor of Optometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                                                                           |               |
| Subject Name                                                                                                               |  | Medical Psychology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                | Session                                                                   | Even, 2025-26 |
| Semester                                                                                                                   |  | IV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Year           | April, 2026                                                               |               |
| Time: 3 Hour<br>Max. Marks : 70                                                                                            |  | <ul style="list-style-type: none"><li>• Start writing from 2nd page onwards; <u>don't Write on the 1st Page Backside</u></li><li>• Answer all Questions of Section A (Compulsory)</li><li>• Answer Any Four out of Six of Section B</li><li>• Answer Any Two out of Four of Section C</li><li>• Possession of <u>Mobile Phones</u> or any kind of <u>Written Material, Arguments with the Invigilator or Discussing with Co-Student</u> will come under <u>Unfair Means</u> and will <u>Result in the Cancellation of the Papers.</u></li></ul> |                |                                                                           |               |
| Knowledge Level (KL)                                                                                                       |  | K1 : Remembering                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | K3 : Applying  | K5 : Evaluating                                                           |               |
|                                                                                                                            |  | K2 : Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | K4 : Analysing | K6 : Creating                                                             |               |

| Section A (Each question Carry 01 Mark from Q1-i to xii) – 12 Marks |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |     |    |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| Q. N                                                                | QUESTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Marks | COs | KL |
| 1                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |       |     |    |
| i                                                                   | <p>In Medical Psychology, the term 'Self-Concept' primarily refers to:</p> <p>a. The social status of the patient within their family milieu.</p> <p>b. The patient's clinical diagnosis recorded in a medical file.</p> <p>c. The totality of a person's thoughts and feelings about themselves as an object.</p> <p>d. The therapist's professional certification and years of experience.</p>                                                          | 01    | CO1 | K1 |
| ii                                                                  | <p>Which statement best describes the relationship between 'Body Integrity' and physical disability?</p> <p>a. Body integrity is only relevant for patients with vision loss.</p> <p>b. Physical disability always results in a complete loss of body integrity.</p> <p>c. Body integrity refers to the patient's ability to perform physical exercise.</p> <p>d. A disruption in physical form can lead to a psychological crisis of body integrity.</p> | 01    | CO2 | K2 |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                               |    |     |         |                                                                                                                                                                                                                                                                                                                                                                          |    |     |    |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|----|
| iii | A patient has developed a phobia of needles after a painful injection. According to learning principles, the needle has become a:<br>a. Latent Learner<br>b. Conditioned Stimulus<br>c. Positive Reinforcer<br>d. Unconditioned Stimulus                                                                                                                                                                                      | 01 | CO3 | K3 viii | If a therapist demonstrates 'Empathy' rather than 'Sympathy', they are:<br>a. Understanding the patient's perspective while maintaining a professional boundary.<br>b. Remaining cold and distant to ensure professional distance.<br>c. Feeling sorry for the patient and crying with them.<br>d. Agreeing with everything the patient says to avoid conflict           | 01 | CO4 | K3 |
| iv  | In a 'Therapeutic Milieu', how does 'Over-protection' by nursing staff affect a patient's recovery?<br>a. It improves the patient's self-concept by making them feel loved.<br>b. It has no impact on the psychological state of the patient.<br>c. It speeds up recovery by ensuring the patient never exerts themselves.<br>d. It can foster 'Learned Helplessness', where the patient stops trying to care for themselves. | 01 | CO4 | K4      |                                                                                                                                                                                                                                                                                                                                                                          |    |     |    |
| v   | Why is 'Chronic Stress' classified as a 'Malady of the Age' in Medical Psychology?<br>a. Because it only affects people over the age of sixty.<br>b. Because it can be cured instantly with a single dose of medication.<br>c. Because it is predominantly caused by modern lifestyle pressures and environmental factors.<br>d. Because it is a newly discovered virus that affects the nervous system.                      | 01 | CO5 | K       |                                                                                                                                                                                                                                                                                                                                                                          |    |     |    |
| vi  | A patient with high 'Intrinsic Motivation' is more likely to:<br>a. Stop treatment if the hospital does not provide financial rewards.<br>b. Require constant 'Positive Reinforcement' from nurses to stay on track.<br>c. Follow their diet only when their doctor is watching.<br>d. Adhere to exercise protocols because they value their own health and vitality.                                                         | 01 | CO1 | K xi    | In the study of Medical Psychology, 'Crystallized Intelligence' refers to:<br>a. The accumulation of knowledge, facts, and skills acquired through experience.<br>b. The ability to solve new problems quickly without prior knowledge.<br>c. A patient's ability to imagine their future physical recovery.<br>d. The physical structure of the brain's memory centers. | 01 | CO1 | K1 |
| vii | How does 'Sensory Deprivation' (e.g., loss of vision) impact a person's 'Body Image'?<br>a. It improves body image by preventing the person from seeing their flaws.<br>b. It results in an immediate increase in IQ to compensate for the loss.<br>c. It forces a total re-evaluation of the 'Body Schema' and physical autonomy.<br>d. It has no effect because body image is only based on what we see in the mirror.      | 01 | CO2 | Kii     | A patient experiencing 'Body Image Distortion' after a minor surgery is likely suffering from a conflict between:<br>a. Their intelligence and their memory capacity.<br>b. The hospital milieu and the therapist's commitment.<br>c. Their 'Ideal Body Image' and their perceived 'Actual Body Image'.<br>d. Intrinsic and Extrinsic motivation.                        | 01 | CO2 | K2 |
|     |                                                                                                                                                                                                                                                                                                                                                                                                                               |    |     | ix      | Why is 'Commitment' described as a dual-responsibility?<br>a. Because the hospital administration must pay for the treatment.<br>b. Because both the healthcare professional and the patient must be dedicated to the long-term goal.<br>c. Because it only matters if the patient's family is committed.<br>d. Because it involves two different types of medication.   | 01 | CO1 | K1 |
|     |                                                                                                                                                                                                                                                                                                                                                                                                                               |    |     | x       | A patient refuses to finish a course of antibiotics because they 'feel better'. This represents a failure in:<br>a. Actual Body Image.<br>b. Fluid Intelligence.<br>c. Short-term Memory.<br>d. Medical Learning and Adherence.                                                                                                                                          | 01 | CO3 | K3 |

**Section B (Answer any FOUR out of SIX) - 28 Marks**  
(Each question Carry 07 Marks)

| Q. No. | QUESTIONS                                                                                                         | Marks | COs | K1 |
|--------|-------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| 2      | Define Psychology and explain the specific scope of Medical Psychology in a hospital setting.                     | 07    | CO1 | K1 |
| 3      | Provide three practical guidelines for establishing an effective Therapist-Patient relationship in a busy clinic. | 07    | CO3 | K3 |
| 4      | Discuss how a patient's Personality type can influence their reaction to a new medical diagnosis.                 | 07    | CO2 | K2 |
| 5      | Evaluate the challenges a patient faces when "Adapting to changes in Vision".                                     | 07    | CO4 | K1 |
| 6      | Analyze the correlation between Personality Type (Type A/B).                                                      | 07    | CO5 | K1 |
| 7      | Develop a 3-step psychological counseling plan for a patient who has recently lost their sight                    | 07    | CO4 | K1 |

**Section C (Answer any TWO out of FOUR) - 30 Marks**  
(Each question Carry 15 Marks)

| Q. No. | QUESTIONS                                                                                                                                                                                                                            | Marks | COs | K1 |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----|
| 8      | Compare and contrast the impact of illness on the 'Ideal Body Image' versus the 'Actual Body Image.' Evaluate how this discrepancy leads to psychological distress and describe the role of Medical Psychology in bridging this gap. | 15    | CO5 | K1 |
| 9      | Design a patient counselling plan to help someone for an eye examination.                                                                                                                                                            | 15    | CO4 | K1 |
| 10     | Differentiate between types of intelligence and how each might influence a patient's understanding of treatment.                                                                                                                     | 15    | CO2 | K1 |
| 11     | Create a comprehensive learning-based protocol to help a patient adapt to a prosthetic eye.                                                                                                                                          | 15    | CO3 | K1 |

CO- Course Outcomes, KL- Knowledge Level, PO - Program Outcome

| Course Outcomes                                                            | CO1 | CO2 | CO3 | CO4 | CO5 |
|----------------------------------------------------------------------------|-----|-----|-----|-----|-----|
| Understand the concept of Medical Psychology.                              |     |     |     |     |     |
| Apply the concept of Medical Psychology in the clinic.                     |     |     |     |     |     |
| Apply the concepts of learning, personality, and motivation in the clinic. |     |     |     |     |     |
| Utilize the patient-therapist relationship in the clinic.                  |     |     |     |     |     |
| Analyze the mentality of the patient regarding their present illness       |     |     |     |     |     |

**GRAPHICAL REPRESENTATION**

