Indicative Syllabus for written test and selection criteria for recruitment to the post of Pharmacist, Pay level 5 (Advt. No NITM.1/(2C-Estt)/MP/R-N/2022/R-903, dated 11th March 2025)

Paper I

Verbal Aptitude Basic English grammar: Tenses, articles, adjectives, prepositions, conjunctions, verbnoun agreement, and other parts of speech Basic vocabulary: words, idioms, and phrases in context Reading and comprehension Narrative sequencing

Quantitative Aptitude: Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-dimensional plots, maps, and tables Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry Elementary statistics and probability

Analytical Aptitude: Logic: deduction and induction; Analogy Numerical relations and reasoning

Spatial Aptitude: Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions.

Paper II

- 1. **Historical Perspective:** Physical Education and Sports in Ancient Greece, Rome, and India. Ancient Olympics Games.
- 2. **Philosophical Perspective:** Philosophies of Education as applied to Physical Education-Idealism, Pragmatism, Naturalism and Realism.
- 3. **Psychological Perspective:** Psycho-physical unity of human organism, laws of learning, their application to sports situations. Theories of play, learning stages, Motor Skill Learning, Learning Curve, Transfer of Training. Sports Psychology Theories. Personality and its types. Concepts of Motivation, Stress and Anxiety. Leadership. Group Cohesion.
- 4. **Sociological Perspective:** Orthodoxy, Customs, Religion, Festivals, Traditions and Physical Education. Socialization through Physical Education & Sports, Social Conglomeration and Social group, Primary group and Remote group. Features and Importance of Culture. Impact of Culture on life style.
- 5. Anatomy and Physiology: Levels of Structural Organization of Human Body. Growth and Development. Various Systems of the Human Body. Skeleton System, Circulatory System and Blood, Respiratory System, Muscular System, Digestive System, Excretory System, Endocrine System, Energy System, Nervous System. Structural Classification and the functions of Muscles. Movements of Muscles.
- 6. **Health Education:** Nutrition. Balanced Diet. Proteins, Carbohydrates, Fats, Vitamins, and Minerals. Sources of Nutrition and Micro-nutrients. Personal Hygiene. Environment and Health. Communicable Disease.
- 7. **Sports Training:** Methods of Sports Training. Periodization. Environmental factors and Sports Performance. Effect of Exercise on Body Systems. Drugs and Doping in Sports.

- 8. **Kinesiology & Sports Bio-Mechanics:** Terminology of fundamental Movements; Planes and Axis. Body levers. Centre of Gravity. Equilibrium. Newton's Laws of Motion. Force; direction and application. Speed, Acceleration, Velocity and Momentum. Postural Deformities. Common Sports Injuries. First Aid.
- 9. **Introduction to Research:** Types of Research. Research Problem. Review of Literature. Hypothesis. Sampling Methods. Data Collection. Data Analysis and Evaluation. Research Report Writing.
- 10. Test, Measurement and Evaluation in Physical Education: Formative and summative evaluation; Classification of Test: Knowledge test, Criterion for the selection test: Validity, reliability, objectivity, norms and standard. Physical Fitness Tests: AAHPER Youth Fitness Tests, National Physical Fitness Tests, Indiana Motor Fitness Tests, JCR Tests. Skill Tests for various games and sports.
- 11. **Sports Management:** Organization and Administration of Games and Sports. Intramural, Extramural and competitions. Sports Facilities.
- 12. **Major Sports Competitions and Awards:** Modern Olympics Games, Asian Games, Common Wealth Games, National Games. Recent Events in Sports.
- 13. Rules, Regulations and Records of Games and Sports: Athletics, Swimming, Tennis, Basketball, Football, Hockey, Cricket, Kabaddi, Wrestling, Kho-Kho, Handball, Volleyball, Badminton, Boxing, Yoga.
- 14. National Sports Scheme and Policy, Administrative and Academic Institutes of Excellence: Sports Authority of India, N.S. National Institute of Sports, N.C.T.E., N.C.E.R.T., U.G.C., L.N.I.P.E. Institute of Sports, National Education Policy. National Sports Association/Federation their Composition and functions. Recent Developments in Physical Education.

| Post Name: Pharmacist – Scheme of Examination, Selection criteria and Instructions | | |
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| Scheme of Examination | Selection Criteria | Instructions |
| Paper –I: Questions: 100 Marks: 100 Duration: 2 hours Paper II: | a) Candidates fulfilling the minimum eligibility criteria will be considered provisionally eligible to appear for the written tests. b) Paper I is qualifying in nature for evaluation of Paper II. | Paper I consists of multiple choice questions. Paper II consist of two parts, part A and Part B. Part A is having 50 multiple choice questions for 50 marks and Part-B is of descriptive type for 50 |
| Marks: 100 Duration: 02 hours | c) Minimum qualifying mark for both paper-I and paper II is 50 marks. d) Final merit list is prepared based on the performance in Paper II. e) Success in the examination confers no right of appointment unless the Institute is satisfied after conducting enquiry that the candidate is suitable in all respects of appointment to the service/post. | For each incorrect answer, there will be negative marking of ¼ of the marks for multiple choice questions. The unanswered questions will not attract negative marks. Compensatory time for persons with Benchmark Disabilities (Divyangjan) will be provided as per the extant orders of Government of India. |