

प्रदेश लोक सेवा आयोग, प्रदेश नं.२

स्वास्थ्य सेवा, फिजियोथेरापी समूह, सातौ तह, फिजियोथेरापीष्ट वा सो सरह पदको खुला तथा अन्तर सेवा प्रतियोगितात्मक परीक्षाको पाठ्यक्रम

पाठ्यक्रमको रूपरेखा :- यस पाठ्यक्रमको आधारमा निम्नानुसार दुई चरणमा परीक्षा लिइने छ :

प्रथम चरण :- लिखित परीक्षा

पूर्णाङ्क :- २००

द्वितीय चरण :- सामूहिक परीक्षण र अन्तर्वार्ता

पूर्णाङ्क :- ४०

प्रथम चरण – लिखित परीक्षा योजना (Examination Scheme)

पत्र	विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या X अङ्कभार	समय
प्रथम	Basic Science	१००	४०	वस्तुगत बहुवैकल्पिक (MCQs)	१००X १ = १००	१ घण्टा १५ मिनेट
द्वितीय	Service Specific	१००	४०	विषयगत (Subjective)	१०X १० = १००	३ घण्टा

द्वितीय चरण

विषय	पूर्णाङ्क	परीक्षा प्रणाली	समय
सामूहिक परीक्षण (Group Test)	१०	सामूहिक छलफल (Group Discussion)	३० मिनेट
व्यक्तिगत अन्तर्वार्ता	३०	मौखिक	-

१. लिखित परीक्षाको माध्यम भाषा नेपाली वा अंग्रेजी अथवा नेपाली र अंग्रेजी दुवै हुन सक्नेछ ।

२. पाठ्यक्रमको प्रथम तथा द्वितीय पत्रको विषयवस्तु एउटै हुनेछ ।

३. प्रथम र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।

४. प्रथम तथा द्वितीय पत्रहरूका एकाइहरूबाट सोधिने प्रश्नसंख्या निम्नानुसार हुनेछ :

प्रथम पत्रका एकाई	1.1		1.2		2.1		2.2		2.3	2.4
प्रश्न संख्या	40		30		10		10		5	5
द्वितीय पत्रका खण्ड	A			B		C		D		
द्वितीय पत्रका एकाई	1	2	3	4	5	6	7	8	9	10
प्रश्न संख्या	1	1	1	1	1	1	1	1	1	1

५. वस्तुगत बहुवैकल्पिक (Multiple Choice) प्रश्नहरूको गलत उत्तर दिएमा प्रत्येक गलत उत्तर बापत २० प्रतिशत अङ्क कट्टा गरिनेछ । तर उत्तर नदिएमा त्यस बापत अङ्क दिइने छैन र अङ्क कट्टा पनि गरिने छैन ।

६. बहुवैकल्पिक प्रश्नहरू हुने परीक्षामा कुनै प्रकारको क्याल्कुलेटर (Calculator) प्रयोग गर्न पाइने छैन ।

७. विषयगत प्रश्नका लागि तोकिएका १० अङ्कका प्रश्नहरूको हकमा १० अङ्कको एउटा लामो प्रश्न वा एउटै प्रश्नका दुई वा दुई भन्दा बढी भाग (Two or more parts of a single question) वा एउटा प्रश्न अन्तर्गत दुई वा बढी टिप्पणीहरू (Short notes) सोध्न सकिने छ ।

८. द्वितीय पत्रमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । परीक्षार्थीले प्रत्येक खण्डका प्रश्नहरूको उत्तर सोही खण्डको उत्तरपुस्तिकामा लेख्नुपर्नेछ ।

९. यस पाठ्यक्रम योजना अन्तर्गतका पत्र/विषयका विषयवस्तुमा जेसुकै लेखिएको भए तापनि पाठ्यक्रममा परेका कानून, ऐन, नियम तथा नीतिहरू परीक्षाको मिति भन्दा ३ महिना अगाडि (संशोधन भएका वा संशोधन भई हटाईएका वा थप गरी संशोधन भई) कायम रहेकालाई यस पाठ्यक्रममा परेको सम्झनु पर्दछ ।

१०. पाठ्यक्रम लागू मिति :-

प्रथमपत्र :- Basic Science

1. Applied Anatomy and Physiology

70 Marks

1.1 Applied Anatomy

40 marks

1.1.1 Regional (Muscles, Bones, Joints, Nerves, Blood vessels, Lymphatics)

1.1.1.1 Upper limb

1.1.1.2 Lower limb

1.1.1.3 Head

1.1.1.4 Neck

1.1.1.5 Trunk

1.1.2 Systemic

1.1.2.1 Muscular

1.1.2.2 Skeletal

1.1.2.3 Nervous

1.1.2.4 Cardio-vascular

1.1.2.5 Respiratory

1.1.2.6 Metabolic & Endocrine

1.1.2.7 Excretory

1.1.2.8 Reproductive

1.1.2.9 Integumentary system

1.1.3 Radiological

1.1.3.1 Investigation

1.1.3.2 Finding

1.1.4 Surface Anatomy

1.2 Physiology

30 marks

(Physiology of the following systems)

Muscular

Skeletal

Nervous

Cardio-vascular

Respiratory

Metabolic & Endocrine

Excretory

Reproductive

Integumentary system

2. Pharmacology, Pathology, Microbiology, Biochemistry

30 Marks

2.1 Pharmacology

10 marks

2.1.1 Drug allergy

2.1.2 Drug toxicity

2.1.3 Methods of administration

2.1.4 Hormones

2.1.5 Vitamins

2.1.6 Drugs acting on neuromuscular junction and muscles

2.1.7 Drugs acting on cardio-respiratory system

2.1.8 Drugs acting on CNS, PNS, ANS

2.1.9 Chemotherapeutic agents

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- | | | |
|-------|---|----------|
| 2.2 | Pathology | 10 marks |
| 2.2.1 | Inflammation/ tissue repair/ cell repair | |
| 2.2.2 | Infection/tumors-etiology spreads and types | |
| 2.2.3 | Blood: Anemia, rheumatic and coronary heart diseases | |
| 2.2.4 | Respiratory system: Pneumonia, asthma, bronchitis, bronchiectasis, emphysema | |
| 2.2.5 | Bones and joints disease: auto immune disease, different arthritis, osteomyelitis | |
| 2.2.6 | Skin: leprosy | |
| 2.2.7 | Polio, myopathies, CNS infections and psoriasis | |
| 2.3 | Microbiology | 5 marks |
| 2.3.1 | Sterilization | |
| 2.3.2 | Bacteriology/virology | |
| 2.3.3 | Immunity | |
| 2.3.4 | Allergy and hypersensitivity | |
| 2.4 | Biochemistry | 5 marks |
| 2.4.1 | Metabolism of carbohydrates, vitamins, fats, proteins | |

---The End---

Section A – 30 Marks

1. **Biomechanics and Kinesiology**
 - 1.1 Basics principles of mechanics including Centre of gravity, line of gravity, force, newton's law, friction, stability, equilibrium, levers etc
 - 1.2 Biomechanics of spine, upper extremity and lower extremity
 - 1.3 Biomechanics of posture and its deviations
 - 1.4 Biomechanics of gait and its deviations
2. **Rehabilitation in Neurology:** (Clinical condition and different exercises regimes, therapeutic modalities and equipment's, prosthetics and orthotics used for the management of the condition)
 - 2.1 Cerebral vascular accident
 - 2.2 Acquired brain injury, spinal cord injury
 - 2.3 Tumors
 - 2.4 Degenerative neurological/neuromuscular disorder
 - 2.5 Demyelinating disorders
 - 2.6 Inflammatory/ infectious condition
 - 2.7 Cerebellar/vestibular disorders
 - 2.8 Neuropathies
 - 2.9 Developmental/ birth injuries e.g. CP
 - 2.10 Dementia and other cognitive disorder
3. **Rehabilitation in Musculoskeletal and Sports:** (Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
 - 3.1 Muscle contusion/strain/ ligament sprain/tear/weakness
 - 3.2 Pelvic floor dysfunction
 - 3.3 Tendinopathy, tendon tear/ rupture/ tendonosis
 - 3.4 Joint derangement/dysfunction, fracture, dislocation, subluxation
 - 3.5 Degenerative joint diseases, osteoporosis, osteopenia
 - 3.6 Amputation
 - 3.7 Congenital malformation
 - 3.8 Sports injuries
 - 3.9 Mechanical spinal abnormalities
 - 3.10 Inflammatory/infectious conditions
 - 3.11 Nerve compression/ radiculopathy/ peripheral nerve injuries
 - 3.12

Section B – 30 Marks

4. **Rehabilitation in Cardio-respiratory:** (Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
 - 4.1 Heart diseases, malformation, injury
 - 4.2 Myocardial ischemia, infarction, heart failure, cor-pulmonale
 - 4.3 Tumors
 - 4.4 Pneumonia, atelectasis, ARDS, asthma, COPD, pulmonary edema
 - 4.5 Arterial and venous diseases
 - 4.6 Pleural effusion, cystic fibrosis, tuberculosis

5. **Rehabilitation in Pediatrics:** (Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
- 5.1 Congenital and acquired musculoskeletal disorders
 - 5.2 Congenital and acquired neurological disorders
 - 5.3 Congenital and acquired cardio-pulmonary disorders
 - 5.4 Developmental disorder, learning disorders, burns, vitamins deficiency
6. **Rehabilitation in Gynecology:** (Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
- 6.1 Pregnancy, stages of labour, complications
 - 6.2 Gynecological disorders- salpingitis, parametritis, retro-uterus, prolapse of uterus, pelvic inflammatory diseases, urinary incontinence

Section C – 20 Marks

7. **Rehabilitation in Geriatrics**
(Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
- 7.1 Musculoskeletal disorder
 - 7.2 Cardiopulmonary disorder
 - 7.3 Neurological disorders
 - 7.4 Burns, nutritional disorders
 - 7.5 Dementia, depression
8. **Rehabilitation in Multisystem**
(Clinical condition and different exercises regimes, therapeutic modalities and equipments, prosthetics and orthotics used for the management of the condition)
- 8.1 HIV/AIDS, autoimmune disease, hemophilia
 - 8.2 Fibromyalgia, chronic pain
 - 8.3 Obesity, burns
 - 8.4 Wounds/ ulcers
 - 8.5 Skin condition like dermatitis, psoriasis

Section D – 20 Marks

9. **Ethics, Management, Research, and Evidence based practice**
- 9.1 Ethics
 - 9.1.1 Ethics and professionalism
 - 9.1.2 Standard of practice, competency
 - 9.1.3 Continuing Physical Therapy education, lifelong learning
 - 9.2 Management
 - 9.2.1 People management, communication and team work
 - 9.2.2 Development and implementation of policies and procedures
 - 9.2.3 Budgets
 - 9.2.4 Staffing and Record keeping
 - 9.2.5 Job descriptions, roles and responsibilities
 - 9.2.6 Performance evaluations and appraisals
 - 9.2.7 Interviewing

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9.2.8 Province no. 2, Province Public Service Act, 2077

- 9.3 Research
- 9.3.1 Introduction to research, research design
 - 9.3.2 Questionnaires, surveys and sampling
 - 9.3.3 Ethical issues in research, elements of informed consent
 - 9.3.4 Structure of a research proposal
 - 9.3.5 Reliability and validity
 - 9.3.6 Research design and types of research
 - 9.3.7 Errors in research, hypothesis testing
- 9.4 Evidence based practice

10. Clinical Practice

- 10.1 Data collection
- 10.2 Tests/measurements
- 10.3 Data interpretation
- 10.4 Prognosis
- 10.5 Goal setting and care planning
- 10.6 Implementation
- 10.7 Education/communication with patients and their family members
- 10.8 Intervention progression

---The end---

द्वितीय पत्रहरूका एकाइहरूबाट सोधिने प्रश्नसंख्या निम्नानुसार हुनेछ :

द्वितीय पत्रका खण्ड	A			B		C		D		
द्वितीय पत्रका एकाई	1	2	3	4	5	6	7	8	9	10
प्रश्न संख्या	1	1	1	1	1	1	1	1	1	1

स्वास्थ्य सेवाका विभिन्न समूह/उपसमूह, अधिकृत सातौ तहको पदमा प्रथम चरणको लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र सामूहिक परीक्षण (**Group Test**) लिइने छ ।

सामूहिक छलफल (Group Discussion)

यस प्रयोजनका लागि गरिने परीक्षण १० पूर्णाङ्क र ३० मिनेट अवधिको हुनेछ जुन नेता विहिन सामूहिक छलफल (Leaderless Group Discussion) का रूपमा अवलम्बन गरिने छ । दिइएका प्रश्न वा Topic का विषयमा पालैपालोसँग निर्दिष्ट समय भित्र समूह बीच छलफल गर्दै प्रत्येक उम्मेदवारले व्यक्तिगत प्रस्तुति (Individual Presentation) गर्नु पर्नेछ । यस परीक्षणमा मूल्याङ्कनका लागि ३ जना भन्दा बढीको समिति रहनेछ ।