

त्रिभुवन विश्वविद्यालय
सेवा आयोग

स्वास्थ्य समूह, प्राविधिक अधिकृत तृतीय श्रेणी (जनस्वास्थ्य) पदको आन्तरिक प्रतियोगितात्मक लिखित परीक्षाको
पाठ्यक्रम
२०८१

लिखित परीक्षा योजना

लिखित परीक्षा :

कुल पूर्णाङ्क : २००

पत्र/विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या × अङ्क	समय
प्रथम	१००	४०	विषयगत प्रश्न	६ प्रश्न × १० अङ्क ४ प्रश्न × ५ अङ्क	३ घण्टा
			समस्या समाधान	१ प्रश्न × २० अङ्क	
द्वितीय	१००	४०	विषयगत प्रश्न	८ प्रश्न × १० अङ्क ४ प्रश्न × ५ अङ्क	३ घण्टा

द्रष्टव्य :

- लिखित परीक्षाका लागि १००/१०० पूर्णाङ्कका दुई पत्रहरू हुनेछन् ।
- प्रथमपत्र र द्वितीय पत्रको लिखित परीक्षा छुट्टाछुट्टै हुनेछ ।
- विषयगत प्रश्नको हकमा 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 ।
- विषयगत प्रश्नमा प्रत्येक खण्डका लागि छुट्टाछुट्टै उत्तरपुस्तिकाहरू हुनेछन् । उम्मेदवारले प्रत्येक खण्डका प्रश्नको उत्तर सोही खण्डका उत्तरपुस्तिकामा लेख्नुपर्नेछ ।
- प्रत्येक पत्रको उत्तीर्णाङ्क पूर्णाङ्कको ४० प्रतिशत हुनेछ ।
- भाषा विषयवाहेक अन्य विषयका लागि उत्तरको माध्यम अंग्रेजी वा नेपाली हुनेछ ।

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प्रथम पत्र: उच्चशिक्षा, त्रिभुवन विश्वविद्यालय र विषयगत

पूर्णाङ्क : १००

समय : ३ घण्टा

खण्ड (क): उच्चशिक्षा र त्रिभुवन विश्वविद्यालयसम्बन्धी (४० अंक)

1. नेपालको संविधान (१ प्रश्न: १ × १० = १० अङ्क)

- १.१ संविधानको प्रस्तावना र भाग १, २, र ३
- १.२ संघीय कार्यपालिका, व्यवस्थापिका, र न्यायपालिका
- १.३ संघिय शासन प्रणाली र नेपालमा यसको प्रयोग
- १.४ प्रमुख संवैधानिक अंगहरु

2. नेपालमा उच्च शिक्षा (१ प्रश्न: १ × १० = १० अङ्क)

- २.१ उच्च शिक्षाको विकासक्रम
- २.२ उच्च शिक्षाको राष्ट्रिय नीति
- २.३ उच्च शिक्षामा देखिएका चुनौती र समाधानका उपायहरु
- २.४ उच्च शिक्षामा त्रिभुवन विश्वविद्यालयको भूमिका
- २.५ विश्वविद्यालय अनुदान आयोग उद्देश्य, कार्य उपलब्धि र चुनौती

3. त्रिवि ऐन तथा नियमहरु (१ प्रश्न: १× १० = १० अङ्क)

- ३.१ त्रि.वि.ऐन, २०४९
- ३.२ त्रि.वि.शिक्षक कर्मचारी सेवासम्बन्धी विनियम, २०५०
- ३.३ त्रि.वि.संगठन तथा शैक्षिक प्रशासनसम्बन्धी नियम, २०५०
- ३

4. त्रिविको संगठन तथा व्यवस्थापन (१ प्रश्न: १ × १० = १० अङ्क)

- ४.१ त्रि.वि.को संगठनात्मक स्वरूप
- ४.३ त्रि.वि.का विभिन्न संगठन र तीनको जिम्मेवारी
- ४.४ त्रिविमा शैक्षिक र प्रशासनिक संगठनबीचको अन्तरसम्बन्ध
- ४.५ त्रि.वि.को संगठनमा देखिएका चुनौतीहरु र समाधानका उपायहरु

खण्ड (ख): विषयगत (४० अंक)

5. Health Policies and Issues (1x10)

- 5.1 National health policies 1991 and 2019
- 5.2 Nepal Health Sector Program (NHSP), NHSP I, II, Nepal Health Sector Strategy III (2015-2020) and NHSS (2023-2030)
- 5.3 National Health Financing Strategy in Nepal (2023-2033)
- 5.4 Health Sector in Current Five-Year Plan

6. Health Related Rules and Regulations (1x10)

- 6.1 Right of Health in Constitution of Nepal
- 6.2 Health act, 2053 and Health regulation, 2054
- 6.3 National Health Professional Council (NHPC), act and related regulations

7. Public Health Management (1x10)

- 7.1 Personnel management: concept, objectives and principles
- 7.2 Human resource management: concept and functions

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Community organization: Concepts, principles and process

- 7.4 Supervision, monitoring and evaluation of health care system: principles, importance, tools and practice
- 7.5 Inter and intra-sectoral coordination, multisectoral coordination in health services, coordination in decentralized health system

8. Major National Health Programs and Organizations(1x10)

- 8.1 Introduction and objectives: Family Planning, Safe Motherhood, Immunization Program, Nutrition, Integrated management of Childhood illness (IMCI), Malaria, Tuberculosis, Leprosy, Sexually transmitted Infections (STI) and HIV/AIDS
- 8.2 National Health Training Center: Objectives and Roles
- 8.3 National Health Education Information and Communication Center: Functions and Roles

खण्ड (ग)

(१ प्रश्न × २० अङ्क)

९. पद र सेवासँग सम्बन्धित समस्या र समाधान

९.१ पद र सेवासँग सम्बन्धित कुनै पनि समस्या समाधान गर्न सक्ने क्षमताको परीक्षण (उम्मेद्वारको विश्लेषणात्मक सीप, नीतिगत ज्ञान र समाधानका वैकल्पिक उपायहरू सुझाउन सक्ने क्षमताको जाँच) का लागि समसामयिक र मौलिक विषयमा प्रश्न सोधिनेछ । सोधिएको प्रश्नको अध्ययन विश्लेषण गरी प्रचलित कानूनलाई समेत आधार मानी उपयुक्त उत्तर दिनु पर्नेछ ।

द्वितीय पत्र : सेवा सम्बन्धी
Section (A) : 50 Marks

1. Health, Health Planning and Management

- 1.1 Meaning, concept and spectrum of health and disease; factors that influence health, social determinants, dimension of disease, measurement of health, disease and well being
- 1.2 Public health: historical development, changing concept, scope and evidence based public health
- 1.3 Health planning and management
 - 1.3.1 Approaches, models, methods and practices
 - 1.3.2 Need assessment, planning cycle, elements, types, methods of planning
 - 1.3.3 Planning in decentralized health system of Nepal
 - 1.3.4 Concept, importance and methods of quality assurance in health care
 - 1.3.5 National health surveys and importance of research in health system
 - 1.3.6 Use of artificial intelligence (AI) in health system : opportunities & challenges
- 1.4 Meaning, concept and scope of public health management and administration
- 1.5 Components of health service management in Nepal
- 1.6 Various approaches of health service delivery in Nepal
- 1.7 Electronic Health Service Management, Information System (e-HMIS)
- 1.8 District Health Information System 2 (DHIS-2)
- 1.9 Electronic Medical Record (EMR) and Electronic Health Record (EHR)
- 1.10 Organizational structure of health system in Nepal, Organization and Management (O and M) Survey
- 1.11 Logistics management and electronic logistics management center (e-LMIS)
- 1.12 Financial management, health sector budget, National Health Insurance Program, National Health Accounts
- 1.13 Health economics, health care financing: basic concepts and economic evaluation of health care services

2. General Epidemiology, Demography and Health Statistics

- 2.1 Epidemiology: historical development, definition and scope; terminology used in epidemiology; epidemiological methods, incidence, prevalence, association and causation, disease prevention and control; epidemiology of communicable and non-communicable diseases; dynamics of disease transmission; investigation of an epidemics; screening of diseases; health indicators
- 2.2 Demography: population trends-world and national; measures of population dynamics; factors affecting fertility, mortality and migration; urbanization, life expectancy, demographic dividend, dependency ratio
- 2.3 Health statistics: sources of health information, health information system; tabulation, graphic and diagrammatic presentation of data; statistical methods; measures of central tendency, measures of variability, correlation, regression,

permutations, combinations, probability and distribution, sampling theory, sampling distribution, estimation and hypothesis testing

3. **Applied Epidemiology and Disease Control**

- 3.1 Epidemiology, prevention and control of communicable diseases : viral, bacterial, fungal and protozoal infections, helminthes infestation, zoonotic diseases and others (trachoma), food poisoning
- 3.2 Risk factors, prevention and control of non-communicable diseases: CVD, COPD, cancer, diabetes, accidents, mental health, suicide, drug abuse and snake bites.
- 3.3 Concept of control, elimination and eradication of diseases
- 3.4 Introduction and consequences of conflict and disaster, disaster planning, preparedness and prevention, conflict management and its importance in health service management, and outbreak investigation steps in field epidemiology

4. **Family Health, Child Health, and Food and Nutrition**

- 4.1 Family health: concept and historical development of family health; roles of family health in prevention, promotion, treatment and rehabilitation of health; reproductive health and safe motherhood program; pattern of communicable and non-communicable diseases concerned to reproductive health and safe motherhood; family planning principles and methods and importance of counseling; life cycle approach in health; healthy and active ageing and disability
- 4.2 Child health: child health and national health care system; malnutrition and vaccine preventable diseases; indicators used in child health program in Nepal
- 4.3 Food and nutrition: food classification, sources and daily requirement of calorie; unhygienic food and effect in health; food borne diseases; food hygiene and its importance; food security and nutrition; nutritional profiles; nutritional problems; assessment of nutritional status; food toxication, additives and fortification

Section (B) : 50 Marks

5. **Environmental and Occupational Health**

- 5.1 Environmental and occupational health: meaning, scope, component, application and importance
- 5.2 Management and control of basic and fundamental factors - water, air, lighting, noise, housing; solid waste disposal and control; excreta disposal and control
- 5.3 Medical entomology: definition and classification of important arthropods and rodents, diseases and health hazards associated with arthropods and rodents; prevention and control of diseases and health hazards, Integrated Vector Management (IVM)
- 5.4 Biodiversity and human health; basic concept of biodiversity, environmental toxicology, prevention and control; health impact of pesticide use, global warming and climate change
- 5.5 Management and prevention of occupational hazards; measures for general health protection of workers
- 5.6 Concept and importance of One Health Approach

6. **Health Promotion and Education**

- 6.1 Health promotion and education: history, meaning, concept, principles and scope
- 6.2 Principles of learning; methods and media for health education and health promotion; behavior change communication (BCC); community organization, community participation and empowerment
- 6.3 Communication and information: concepts, types and importance
- 6.4 Planning of health education and promotion program; importance of health education and promotion planning; steps of health education planning; PRECEDE-PROCEED framework of health education diagnosis; approaches in health promotion and education planning; monitoring and indicator of health education and promotion programs
- 6.5 School health program: concepts, areas and importance, health promoting school
- 6.6 Culture and health: definition of culture, characteristics, elements and types of culture; health behavior, illness behavior and sickness role; socio-cultural influences in health behavior; models of health behavior
- 6.7 Rational use of social media in health promotion and education

7. **Management Issues in Health Services**

- 7.1 Primary health care (PHC), Selective and Comprehensive PHC, Essential health care services (EHCS), Alma-Ata Declaration, , Astana Declaration
- 7.2 Introduction, objectives, strategies, targets and current status of national health programs - family planning, safe motherhood, immunization program, nutrition, community based integrated management of neonatal and childhood illness (CB-IMNCI), vector borne diseases, tuberculosis, leprosy, sexually transmitted infections (STIs) and HIV/AIDS
- 7.3 International health organization, development partners, their priorities and critical analysis on their role in health sector
- 7.4 Indigenous and traditional health care system including ayurveda and other system, importance and scope in public health
- 7.5 Ethical issues in health and responsible code of conduct
- 7.6 Sustainable development goals (SDGs) and health
- 7.7 Concept and importance of governance in health system

8. **Basic Science**

- 8.1 Anatomy: definition of terminologies used in anatomy; cell; basic types of tissues with their characteristic features and organ systems
- 8.2 Physiology: introduction to different components of cell and their function; different tissue of body and their characteristics; body fluids and electrolyte balance their classification and composition and homeostasis
- 8.3 Biochemistry: introduction and application of biochemistry in public health; basic concept of acid, base and salt; definition, classification, properties of carbohydrates, protein, fats and vitamins
- 8.4 Microbiology: introduction to microbial world; introduction to community acquired microbial infection

- 8.5 Bacteriology: classification of bacteria; concept of opportunistic and pathogenic organisms; mechanism of infection
- 8.6 Parasitology: classification of human parasite; introduction to parasitic diseases associated with poor personal and public hygiene; Blood parasites (malaria parasite, kala-azar, microfilaria) - treatment, prevention and control; Intestinal protozoa (entamoeba histolytica, Giardia lamblia and Cryptosporia) - treatment, prevention and control; Intestinal worms (roundworm, hookworm, pinworm, whipworm) - treatment, prevention and control
- 8.7 Virology: introduction, classification of virus, viral disease of community concern, prevention and control of viral diseases
- 8.8 Immunology: introduction to immunology, defense mechanism of body and basic concept of immunology in diagnosis of viral diseases
- 8.9 Pharmacy and pharmacology: meaning of pharmacokinetics and pharmacodynamics ; classification of drugs, indication and contraindication of life saving drugs; concept of essential medicines and its implementation in Nepal; essential medicines under free health services; anti-microbial resistance and rationale use of antibiotics; concept of Good Manufacturing Practice (GMP), Good Laboratory Practice (GLP) and Good Clinical Practice (GCP)

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स्वास्थ्य समूह, अधिकृत तृतीय श्रेणी, प्राविधिक अधिकृत (जनस्वास्थ्य) पदको आन्तरिक प्रतियोगितात्मक लिखित
परीक्षाको पाठ्यक्रम
(Specification Chart)

२०८१

प्रथम पत्र : उच्चशिक्षा, त्रिभुवन विश्वविद्यालय र कार्यक्षेत्रसँग सम्बन्धी

पूर्णांक: १००

समय: १ घण्टा ३० मिनेट

खण्ड	एकाई	विषय शीर्षक	अङ्क	प्रश्न संख्या	प्रश्न संख्या × अङ्क भार
A	1.	नेपालको संविधान	10	1	8 प्रश्न x 10 अङ्क
	2.	नेपालमा उच्च शिक्षा	10	1	
	3.	त्रिवि ऐन तथा नियमहरू	10	1	
	4.	त्रिवि संगठन तथा व्यवस्थापन	10	1	
B	5.	Health Policies and Issues	10	1	
	6.	Health Related Rules and Regulations	10	1	
	7.	Public Health Management	10	1	
	8.	Major National Health Programs and Organizations	10	1	
	9.	पद र सेवासँग सम्बन्धित समस्या र समाधान	20	1	1x20
कुल जम्मा			100		

द्वितीय पत्र : विषयगत (सेवासम्बन्धी)

पूर्णांक: १००

समय: ३ घण्टा

खण्ड	एकाई	विषय शीर्षक	अङ्क	प्रश्न संख्या	प्रश्न संख्या × अङ्क भार
A	1.	Health, Health Planning and Management	10+5	2	8 प्रश्न × 10 अङ्क 4 प्रश्न × 5 अङ्क
	2.	General Epidemiology, Demography and Health Statistics	10	1	
	3.	Applied Epidemiology and Disease Control	10	1	
	4.	Family Health, Child Health, and Food and Nutrition	10+5	2	
B	5.	Environmental and Occupational Health	10	1	
	6.	Health Promotion and Education	10	1	
	7.	Management Issues in Health Services	10+5	2	
	8.	Basic Science	10+5	2	
कुल जम्मा			100	12	