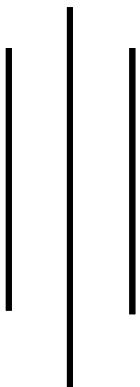
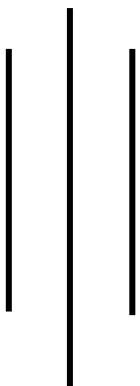


नेपाली सेना
श्री भर्ना छनौट निर्देशनालय,
जंगी अड्डा



प्राविधिक उपसेनानी (टेक्सटायल) खुला पदको लिखित
परीक्षाको पाठ्यक्रम

(सैनिक प्राविधिक सेवा/सैनिक इन्जिनियरिङ/उत्पादन उपसमूहसंग सम्बन्धित)



२०८२

प्राविधिक उपसेनानी टेक्सटायल ईन्जिनियर (खुला) पदको लिखित परीक्षाको
पाठ्यक्रम

समय: ४ घण्टा

पूर्णाङ्क: १५०

उत्तीर्णाङ्क :६०

यो पाठ्यक्रम सैनिक प्राविधिक सेवा, ईन्जिनियरिङ समूह अन्तर्गत उत्पादन उपसमूहसंग सम्बन्धित नेपाली सेनाको प्राविधिक उपसेनानी प्रा.उ.से. टेक्सटायल ईन्जिनियर (खुला) पदको उम्मेदवार छनौट परीक्षाको लागी निर्धारण गरिएको हो । लिखित परीक्षामा सहभागी हुने उम्मेदवारहरूको पेशा सम्बन्धी विषयहरूलाई आधार मानी प्रश्नहरू सोधिने छन् ।

(क) लिखित परीक्षाको माध्यम नेपाली/अंग्रेजी वा दुवै भाषा हुनेछ ।

(ख) लिखित परीक्षाबाट छनौट भएका उम्मेदवारहरूलाई मात्र अर्को चरणको परीक्षामा सम्मिलित गराईनेछ ।

(ग) प्रश्नपत्र निर्माण गर्दा पाठ्यक्रममा समावेश भएका सबै विषयहरूलाई यथासंभव समेटिनेछ ।

(घ) बस्तुगत र विषयगत संयुक्त रूपमा पूर्णाङ्क र उत्तीर्णाङ्क कायम गरिनेछ ।

(ङ) बस्तुगत र विषयगत परीक्षाको पाठ्यक्रम एउटै हुनेछ ।

(च) बस्तुगत र विषयगत विषयको लिखित परीक्षा एकैपटक वा छुट्टाछुट्टै गरी लिन सकिनेछ ।

(छ) यो पाठ्यक्रम मिति २०८२/८३/२४ गतेबाट लागु हुनेछ ।

विषय	पूर्णाङ्क	उत्तीर्णाङ्क	परीक्षा प्रणाली	प्रश्न संख्या अङ्क	समय	
पेशा सम्बन्धी	७५	६०	बस्तुगत (Objective)	बहु वैकल्पिक प्रश्न (MCQs)	७५ प्रश्न x १ अङ्क= ७५	१ घण्टा
	७५		विषयगत (Subjective)	छोटो उत्तर लामो उत्तर	११ प्रश्न x ५ अङ्क= ५५	३ घण्टा
				२ प्रश्न x १० अङ्क= २०		

प्रा.उ.से. टेक्सटायल इंजिनियर (खुला) पदको लिखित परीक्षाको पाठ्यक्रम

1. BASICS OF ENGINEERING (15)

1.1 Bearings and Lubrication

- 1.1.1. Brief study
- 1.1.2. Need and importance of bearing
- 1.1.3. Different types of bearings and their use in Textile Machines
- 1.1.4. Factors for selection of bearings
- 1.1.5. Purpose of lubrication and types of lubrication systems
- 1.1.6. Desirable qualities of a good lubricant
- 1.1.7. Study of Continuous lubrication methods: Gravity feed lubrication, Pressure feed Lubrication and oil bath Lubrication

1.2 Transmission of motion and power

- 1.2.1. Brief study
- 1.2.2. Different types of drives flat, V belt and gear belt drives – merits and demerits
- 1.2.3. Advantages and disadvantages spur, helical, worm gear drives
- 1.2.4. Advantages and disadvantages Cams, different types of cams and followers
- 1.2.5. Applications of the above drives in textile machines

1.3 Basics of Electrical

- 1.3.1. Definition of electrical quantities: Voltage, current, power and resistance
- 1.3.2. Units of these quantities, Formula for calculation of electrical power and energy in a DC circuit
- 1.3.3. Alternating current, Direct current, frequency
- 1.3.4. Instruments used to measure voltage, current, Power and energy

2. BASICS OF TEXTILE ENGINEERING (30)

2.1 Textile in general

- 2.1. Terminology relating to textile
- 2.2. Fiber production, spinning, weaving, dyeing, printing and finishing
- 2.3. Metric units of measurement and their conversion to other system of units

2.2 Textile Fibers

- 2.2.1. Fiber classification
- 2.2.2. Method of identification of textile fibers
- 2.2.3. Properties of textile fibers
- 2.2.4. Uses of textile fibers

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Date: 20/01/2018
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2.3 Yarn production

- 2.3.1. Types of yarns and their classification
- 2.3.2. Different kinds of yarn processing systems
- 2.3.3. New methods of yarn manufacturing
- 2.3.4. Properties of yarn
- 2.3.5. Spinning machineries

2.4 Fabric Production

- 2.4.1. Types of fabric, classification and definition
- 2.4.2. Methods of fabric production (Woven, Knitted and Non-woven)
- 2.4.3. Production process of fabric and their function
- 2.4.4. Properties of fabric
- 2.4.5. Fabric production machineries
- 2.4.6. Fabric structure and design
- 2.4.7. Defects in fabric

2.5. Dyeing, Printing and Finishing

- 2.5.1. Classification and application of dyestuffs
- 2.5.2. Preparation of fabric for dyeing/printing (Singing, de-sizing, scouring, bleaching, mercerization)
- 2.5.3. Dyeing Methods and machineries
- 2.5.4. Identification of different kinds of dyestuffs
- 2.5.5. Printing methods and machineries
- 2.5.6. Finishing method and machineries
- 2.5.7. Chemicals used in dyeing, printing and finishing

3. TEXTILE MACHINERY (30)

- 3.1. Engraving machine and its function, working mechanism
- 3.2. Raising Machine and its working procedure
- 3.3. Garments machines and their function

4. MAINTENANCE OF TEXTILE MACHINERY (30)

4.1 Basics of Maintenance, Assessment of maintenance

- 4.1.1. Preventive and Break Down Maintenance of machinery
- 4.1.2. Importance of co-ordination between maintenance, quality and production departments
- 4.1.3. Application of Computers for maintenance

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4.2 Gauges and Erection

- 4.2.1. Study of tools and gauges used in Spinning and Weaving Mills
- 4.2.2. Study of Erection procedures, tools and gauges used in erection of Spinning and Weaving Machines

4.3 Testing of Textile Materials

- 4.3.1. Testing of Fiber
- 4.3.2. Testing of Yarn
- 4.3.3. Testing of Fabric dimension and properties
- 4.3.4. Fastness testing of fabric (Washing, rubbing, light and Perspiration)

5. STANDARDIZATION AND QUALITY CONTROL (10)

- 5.1. Quality control activities in textile industries
- 5.2. Basic concept of ISO 9000 (Quality Management System)

6. INDUSTRIAL ENVIRONMENT (10)

- 6.1. Major Pollution in textile industries
- 6.2. Basic concept of Cleaner Production (Waste minimization)
- 6.3. Occupation Health and Safety measure in textile industries

7. EXISTING LEGISLATIONS (15)

- 7.1. Industrial Policy, 2067
- 7.2. Industrial Enterprise Act, 2076
- 7.3. Industrial Enterprise Regulation, 2078
- 7.4. Foreign Investment and Technology Transfer Act, 2075
- 7.5. Nepal Standard (Certification Mark) Act, 2037
- 7.6. Nepal Standard (Certification Mark) Regulation, 2040
- 7.7. Standard Measurement and Weight Act, 2025
- 7.8. Standard Measurement and Weight Regulation, 2076
- 7.9. Environment Protection Act, 2076
- 7.10. Environment Protection Regulation, 2077

8. TEXTILE INDUSTRIES IN NEPAL (10)

- 8.1. Past and current status of textile industries in Nepal
- 8.2. Contribution of Nepalese textile industries (Carpet, Pashmina, Woolen garments, readymade garments etc.) in national economy
- 8.3. Industrial statistics
- 8.4. Export potential of Nepalese textile products including garments and carpets

यस पेशा सम्बन्धी विषयको पाठ्यक्रमका ईकाईबाट सोधिने प्रश्नहरूको संख्या निम्नानुसार हनेछ।

विषय	Weightage	परीक्षा प्रणाली			कै.	
		वस्तुगत (Objective)	विषयगत (Subjective)			
		बहुवैकल्पिक प्रश्न (MCQs) (प्रश्नxअंडा)	छोटो उत्तर (प्रश्नxअंडा)	लामो उत्तर (प्रश्न x अंडा)		
1.	45	15x1	4x5	-		
2.		10x1				
3.	60	10x1	4x5	1x10		
4.		20x1				
5.	35	5x1	2x5			
6.		5x1		1x10		
7.		5x1				
8.	10	5x1	1x5	-		
Total	150	75x1=75	11x5=55	2x10=20		

प्राविधिक उपसेनानी टेक्सटायल इन्जिनियर (खुला) पदको प्रयोगात्मक परीक्षाको पाठ्यक्रम

समय: ९० मिनेट

पूर्णाङ्क: ५०
उत्तीर्णाङ्क : २५

S.N.	Topic	Marks	Time (Minutes)
1.	Identification of machine and tools for Production process of blanket, knitted product and garments	10	15
2.	Production process of fabric/blanket manufacturing	5	15
3.	Production process of knitted fabric manufacturing	5	10
4.	Production process of garments manufacturing	5	10
5.	Fabric structure and design	5	5
6.	Finishing (dyeing, printing, washing)/Raising and engraving process	5	5
7.	Textile testing and quality control	5	15
8.	Viva	10	15
	Total	50	90