



झारखण्ड सरकार,

झारखण्ड कर्मचारी चयन आयोग

एफ-49/50, सेक्टर-III, धुर्वा, राँची-834004.

विवरणिका

विज्ञापन संख्या-10/2015

संयुक्त पारामेडिकल स्टाफ प्रतियोगिता परीक्षा-2015

CPSCE-2015

1. कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार के पत्र संख्या-11/क.च.आ.-02-21/2014 का. 5789 (अनु.) दिनांक 01.07.2015, पत्र संख्या-11/क.च.आ.-02-21/2014 का. 6123 (अनु.) दिनांक 09.07.2015 द्वारा स्वास्थ्य विभाग अन्तर्गत क्रमशः प्रयोगशाला प्रावैधिक, फार्मासिस्ट एवं परिचारिका श्रेणी 'ए' पदों के अधीन संसूचित रिक्तियों के विरुद्ध नियुक्ति के लिए सुयोग्य उम्मीदवारों के चयन हेतु भारत के नागरिकों से विहित प्रपत्र में संयुक्त पारामेडिकल स्टाफ प्रतियोगिता परीक्षा-2015 के लिये ऑनलाईन आवेदन आमंत्रित किये जाते हैं। उम्मीदवार अर्हता अनुसार निम्नांकित शैक्षणिक योग्यता तथा निर्धारित आयु सीमा के अन्तर्गत आवेदन दे सकते हैं। ऑन-लाईन (Online) आवेदन आयोग के वेबसाईट www.jssc.in पर लॉगईन (Login) करके समर्पित किया जा सकता है।

2. रिक्तियों का विवरण :-

क्रम सं.	पदनाम	आरक्षण कोटि	पदों की संख्या				
			कुल	क्षैतिज आरक्षण			
				महिला	दृष्टि निःशक्तता	मूक बाधिर निःशक्तता	चलन निःशक्तता
1	2	3	4	5	6	7	8
1.	प्रयोगशाला प्रावैधिक	1.अनारक्षित	120	6	1	1	1
		2.अनुसूचित जनजाति	74	4	1	1	0
		3.अनुसूचित जाति	34	2	1	0	0
		4.अत्यन्त पिछड़ा वर्ग(अनु-I)	12	1	0	0	0
		योग :-	240	13	3	2	1
2.	फार्मासिस्ट	1.अनारक्षित	134	7	2	1	1
		2.अनुसूचित जनजाति	92	5	1	1	0
		3.अनुसूचित जाति	33	2	1	0	0
		4.अत्यन्त पिछड़ा वर्ग(अनु-I)	9	0	0	0	0
		योग :-	268	14	4	2	1
3.	परिचारिका श्रेणी 'ए'	1.अनारक्षित	146	7	2	1	1
		2.अनुसूचित जाति	69	3	1	1	0
		3.अत्यन्त पिछड़ा वर्ग(अनु-I)	35	2	1	0	0
		4.पिछड़ा वर्ग (अनु-II)	7	0	0	0	0
		योग :-	257	12	4	2	1

3. परीक्षा के लिए आवेदन देने के पूर्व अभ्यर्थी यह सुनिश्चित हो लें कि वे विज्ञापित पद की पात्रता के विषय पर प्रकाशित सभी शर्तों को पूरा करते हैं। परीक्षा में बैठने की अनुमति पूर्णतः

औपबन्धिक होगी। परीक्षा के लिए प्रवेश पत्र निर्गत होना प्रमाणित नहीं करता है कि अभ्यर्थी विज्ञापित पद पर नियुक्ति के लिए चयन हेतु निर्धारित पात्रता पूरी करते हैं क्योंकि आयोग मुख्य परीक्षा के बाद सफल अभ्यर्थियों की पात्रता से सम्बन्धित प्रमाण पत्रों की जाँच कर सकता है।

4. इस विज्ञापन के साथ विज्ञापन संख्या-11/2015 संयुक्त पारामेडिकल स्टाफ प्रतियोगिता परीक्षा (बैकलॉग रिक्तियाँ)-2015 अलग से प्रकाशित की जा रही है। जिसमें फार्मासिस्ट तथा प्रयोगशाला प्रावैधिक के पदों के लिए अनुसूचित जनजाति श्रेणी में रिक्तियाँ हैं। विज्ञापन संख्या-10/2015 तथा 11/2015, दोनों विज्ञापनों के लिए अर्हता प्राप्त अभ्यर्थी एक साथ एक ही आवेदन कर सकेंगे और आशय का विकल्प Online आवेदन भरने में उपलब्ध रहेगा। दोनों विज्ञापनों के लिए एक साथ एक आवेदन करने की स्थिति में एक ही परीक्षा शुल्क देय होगा। यदि कोई अभ्यर्थी सिर्फ एक विज्ञापन के विरुद्ध आवेदन देते हैं, वैसी स्थिति में उन्हें एक परीक्षा शुल्क देना होगा।

इन दोनों विज्ञापनों के लिए एक ही परीक्षा "संयुक्त पारामेडिकल स्टाफ प्रतियोगिता परीक्षा - 2015" आयोजित की जायेगी।

5. कंडिका- 2 में वर्णित पदों का वेतनमान एवं न्यूनतम शैक्षणिक योग्यता निम्नवत् है:-

क्रम सं.	पदनाम	वेतनमान	न्यूनतम शैक्षणिक योग्यता	अनिवार्य तकनीकी योग्यता एवं शर्त
1	2	3	4	5
1	प्रयोगशाला प्रावैधिक	वेतन बैंड पी.बी. I - रु. 5200-20200 ग्रेड वेतन - रु. 2800	आई.एस.सी./10+2 (विज्ञान) उत्तीर्ण।	विधि द्वारा स्थापित मेडिकल कॉलेजों एवं सक्षम प्राधिकार द्वारा मान्यता प्राप्त संस्थान से प्रयोगशाला प्रावैधिक का डिप्लोमा कोर्स उत्तीर्ण एवं झारखण्ड पारामेडिकल काउंसिल से पंजीकृत।
2	फार्मासिस्ट	वेतन बैंड पी.बी. I - रु. 5200-20200 ग्रेड वेतन - रु. 2800	आई.एस.सी./10+2 (विज्ञान) उत्तीर्ण अथवा 1994 के पूर्व मैट्रिक उत्तीर्ण।	विधि द्वारा स्थापित एवं सक्षम प्राधिकार द्वारा मान्यता प्राप्त संस्थान से फार्मासिस्ट का डिप्लोमा कोर्स उत्तीर्ण एवं झारखण्ड अथवा अन्य राज्यों के फार्मसी काउंसिल से पंजीकृत।
3	परिचारिका श्रेणी 'ए'	वेतन बैंड पी.बी. I - रु. 9300-34800 ग्रेड वेतन - रु. 4200	10+2 या आई.एस.सी. (भौतिक, रसायन शास्त्र एवं जीवविज्ञान के साथ)	तीन वर्ष छः माह का जी.एन.एम. नर्सिंग (मिडवाइफरी) प्रशिक्षण उत्तीर्ण एवं झारखण्ड नर्सिंग काउंसिल से निबंधित।

शैक्षणिक योग्यता के निर्धारण के लिए online आवेदन देने की अंतिम तिथि को आधार तिथि (Reference Date) माना जायेगा। यदि कोई अभ्यर्थी इस तिथि तक निर्धारित शैक्षणिक एवं तकनीकी योग्यता नहीं धारित करते हैं तथा ऊपर उल्लेखित शर्त पूरा नहीं करते हैं तो वे आवेदन भरने के लिए अयोग्य समझे जायेंगे।

6. आयु सीमा :-

उम्र की गणना दिनांक 01.08.2015 के आधार पर की जायेगी।

पद:- प्रयोगशाला प्रावैधिक एवं फार्मासिस्ट

न्यूनतम उम्र :- 20 वर्ष

अधिकतम उम्र :-

(क) अनारक्षित	- 35 वर्ष।
(ख) अत्यन्त पिछड़ा वर्ग- (अनुसूची- 1)	- 37 वर्ष।
(ग) अनुसूचित जनजाति/अनुसूचित जाति (पुरुष एवं महिला)	- 40 वर्ष।
(घ) झारखण्ड राज्य की स्थानीय निवासी महिला (अनारक्षित), अत्यन्त पिछड़ा वर्ग (अनुसूची- 1) एवं पिछड़ा वर्ग अनुसूची-2	- 38 वर्ष।

टिप्पणी:- (i) प्रयोगशाला प्रावैधिक एवं फार्मासिस्ट पदों के विरुद्ध पिछड़ा वर्ग अनुसूची-2 की 38 वर्ष तक की महिला अभ्यर्थी अनारक्षित कोटा में क्षेत्रीय आरक्षण के अन्तर्गत महिलाओं के लिए कर्णांकित रिक्तियों के विरुद्ध ही सिर्फ चयनित हो सकेंगी। पिछड़ा वर्ग अनुसूची-2 के लिए प्रयोगशाला प्रावैधिक एवं फार्मासिस्ट के लिए पद आरक्षित नहीं हैं अतः इस श्रेणी के पुरुष उम्मीदवारों की अधिकतम उम्र सीमा अनारक्षित श्रेणी के लिए अधिकतम उम्र सीमा (35 वर्ष) ही होगी।

पद:- परिचारिका श्रेणी 'ए'

न्यूनतम उम्र :- 18 वर्ष

अधिकतम उम्र :-

(क) अनारक्षित	- 35 वर्ष।
(ख) अत्यन्त पिछड़ा वर्ग- (अनुसूची- 1) एवं पिछड़ा वर्ग- (अनुसूची- 2)	- 37 वर्ष।
(ग) झारखण्ड राज्य की स्थानीय निवासी महिला (अनारक्षित), अत्यन्त पिछड़ा वर्ग (अनुसूची- 1) एवं पिछड़ा वर्ग अनुसूची-2	- 38 वर्ष।

टिप्पणी:- (i) परिचारिका श्रेणी 'ए' पद के विरुद्ध अनुसूचित जनजाति की 38 वर्ष तक की महिला अभ्यर्थी अनारक्षित कोटा में क्षेत्रीय आरक्षण के अन्तर्गत महिलाओं के लिए कर्णांकित रिक्तियों के विरुद्ध ही सिर्फ चयनित हो सकेंगी। अनुसूचित जनजाति के लिए परिचारिका श्रेणी 'ए' के पद आरक्षित नहीं हैं अतः इस श्रेणी के पुरुष उम्मीदवारों की अधिकतम उम्र सीमा अनारक्षित श्रेणी के लिए अधिकतम उम्र सीमा (35 वर्ष) ही होगी।

7. झारखण्ड राज्य के सभी कोटि के निःशक्त अभ्यर्थियों जिनकी निःशक्तता का प्रतिशत 40 अथवा इससे अधिक हो (मात्र झारखण्ड राज्य के स्थानीय निवासी श्रेणी के लिए) को आयु सीमा में पाँच वर्षों की अतिरिक्त छूट दी जायेगी।

8. दृष्टि निःशक्त एवं चलन निःशक्तता श्रेणी के उम्मीदवारों को उनके अनुरोध पर स्क्राइब की सुविधा दी जायेगी। निःशक्त श्रेणी के उम्मीदवारों को परीक्षा में उत्तर देने के लिए 20 मिनट प्रति घंटा की दर से अतिरिक्त समय दिया जायेगा। यह सुविधा सभी निःशक्त अभ्यर्थियों को दी जायेगी।

निःशक्त अभ्यर्थियों के लिए सुविधा :-

अंध/नेत्रहीन/कम दृष्टि, दोनों हाथ एवं बाँह में चलन निःशक्तता तथा सेरेब्रल पालसी से ग्रसित अभ्यर्थियों, जिसकी निःशक्तता प्रतिशत 40% अथवा इससे अधिक हो एवं पढ़ने-लिखने में असमर्थ हों, वैसे अभ्यर्थियों को श्रुतलेखक/स्क्राइब की सुविधा देय है। निम्नांकित शर्तों पर निःशक्त अभ्यर्थी श्रुतलेखक/स्क्राइब की सुविधा प्राप्त कर सकते हैं:-

- (क) वैसे निःशक्त अभ्यर्थियों को ही श्रुतलेखक/स्क्राइब की सुविधा मिलेगी जिनके प्रवेश पत्र (Admit Card) में Category के समक्ष आरक्षण वर्ग के पश्चात PH- Cerebral Palsy या Vision मुद्रित हो।
- (ख) निःशक्त अभ्यर्थियों को श्रुतलेखक/स्क्राइब की व्यवस्था स्वयं करनी होगी।
- (ग) श्रुतलेखक/स्क्राइब 10वीं कक्षा से अधिक शिक्षित नहीं हो तथा वह अभ्यर्थी का निकट संबंधी नहीं हो।
- (घ) 10वीं कक्षा की परीक्षा में श्रुतलेखक/स्क्राइब को 50 प्रतिशत से अधिक अंक प्राप्त न हो।
- (ङ) श्रुतलेखक/स्क्राइब की सुविधा प्राप्त करने के लिए निःशक्त अभ्यर्थी परीक्षा के एक दिन पूर्व प्रवेश पत्र (Admit card) में निर्धारित परीक्षा केन्द्र के केन्द्राधीक्षक को अपना आवेदन पत्र, स्वयं व्यवस्था किए गए श्रुतलेखक/स्क्राइब की विहित प्रपत्र (परिशिष्ट-IV) में विवरणी तथा निःशक्तता प्रमाण की स्व-आभिप्रमाणित प्रति के साथ उपलब्ध करायेंगे।
- (च) परीक्षा की तिथि को श्रुतलेखक/स्क्राइब के साथ अभ्यर्थी परीक्षा के 1½ घंटा पूर्व परीक्षा केन्द्र पर निश्चित रूप से उपस्थित होंगे। जो अभ्यर्थी अपने साथ श्रुतलेखक/स्क्राइब नहीं लायेंगे, उन्हें यह सुविधा नहीं मिलेगी और इसके लिए वे स्वयं उत्तरदायी होंगे।
- (छ) केन्द्राधीक्षक द्वारा निःशक्त अभ्यर्थियों को सभी पालियों की परीक्षा में प्रति घंटा 20 मिनट की दर से अतिरिक्त समय दिया जायेगा।
- (ज) वैसे अभ्यर्थी जिनकी Locomotor disability एवं Cerebral Palsy से लिखने की क्षमता 40 प्रतिशत से ज्यादा किन्तु आंशिक रूप से प्रभावित हुई है, उन्हें श्रुतलेखक/स्क्राइब की सुविधा देय नहीं होगी, किन्तु उन्हें सभी पालियों में प्रति घंटा 20 मिनट की दर से अतिरिक्त समय दिया जायेगा।
- (झ) श्रुतलेखक/स्क्राइब की सुविधा इस कोटि के अभ्यर्थी द्वारा केन्द्राधीक्षक को परीक्षा के एक दिन पूर्व दिये गये आवेदन पर ही दिया जायेगा। जो अभ्यर्थी यह सुविधा प्राप्त करने के लिये आवेदन नहीं देंगे उन्हें यह सुविधा देय नहीं होगी। परीक्षा के दिन श्रुतलेखक/स्क्राइब हेतु आवेदन पत्र स्वीकार नहीं किये जायेंगे।

9. आरक्षण :-

- (I) आवेदन में नियत प्रविष्टि के अधीन इंगित आरक्षण का दावा नहीं करने पर आरक्षण का लाभ नहीं मिलेगा।
- (II) आरक्षण का लाभ एवं उम्र सीमा में छूट केवल झारखण्ड राज्य के स्थानीय निवासी को ही देय होगा। झारखण्ड राज्य के बाहर के सभी उम्मीदवार अनारक्षित/सामान्य वर्ग के माने जायेंगे।
- (III) झारखण्ड सरकार द्वारा लागू आरक्षण सम्बन्धी सभी नियम प्रभावी होंगे। आरक्षण का दावा करने वाले झारखण्ड के स्थानीय निवासी उम्मीदवार को निम्न प्रमाण-पत्र आयोग द्वारा प्रमाण-पत्रों की जाँच के अवसर पर समर्पित करना अनिवार्य होगा:-
- (i) स्थानीय निवासी प्रमाण पत्र (नियोजन के लिए)- जिला/अनुमंडल के उपायुक्त/अनुमंडल पदाधिकारी से विहित-प्रपत्र में अद्यतन निर्गत स्थानीय निवासी प्रमाण पत्र। (परिशिष्ट-I पर अंकित प्रपत्र)

- (ii) जाति प्रमाण पत्र— जिला/अनुमंडल के उपायुक्त/अनुमण्डल पदाधिकारी से विहित-प्रपत्र (अनुसूचित जाति/अनुसूचित जनजाति के लिए) परिशिष्ट-II पर अंकित प्रपत्र तथा अत्यंत पिछड़ा वर्ग (अनुसूची-1) एवं पिछड़ा वर्ग अनुसूची-2 के लिए परिशिष्ट-III पर अंकित प्रपत्र में अद्यतन निर्गत जाति प्रमाण-पत्र।
- (iii) अत्यंत पिछड़ा वर्ग (अनुसूची-1) एवं पिछड़ा वर्ग (अनुसूची-2) के लिए दिनांक 31.03.2015 के पश्चात् विहित-प्रपत्र (परिशिष्ट-III पर अंकित प्रपत्र) में निर्गत जाति प्रमाण पत्र मान्य होगा।

स्थानीय निवासी प्रमाण पत्र एवं जाति प्रमाण पत्र का प्रपत्र परिशिष्ट के रूप में विवरणिका में संलग्न है।

- (iv) स्क्राईब हेतु आवेदन पत्र प्रपत्र परिशिष्ट-IV पर उपलब्ध है।

10. ON LINE आवेदन पत्र को भरना एवं (Submit) करना :- ऑन-लाईन आवेदन को भरने के लिए दिए गये दिशा निदेश का अक्षरशः पालन करें। आवेदन पत्र में दी गई सूचनाओं से पूर्ण संतुष्ट होने के पश्चात् ही आवेदन पत्र को जमा (Submit) करें। आवेदन पत्र भरने के लिए आयोग के वेबसाइट www.jssc.in पर जाएँ एवं **Online Application for CPSCE-2015** पर Click करें तथा आवेदन पत्र भरें। आवेदन पत्र भरने के क्रम में अनुसूचित जनजाति के आवेदक बैकलॉग रिक्ति (विज्ञापन संख्या-12/2015) के लिए विकल्प दे सकते हैं। आवेदकों को सूचित किया जाता है कि आवेदन Submit करने के पूर्व भरे गये आवेदन को ठीक से देख लें। यदि कोई त्रुटि है तो उसे सुधार कर ही आवेदन Submit करें। एक बार आवेदन Submit करने के पश्चात् परीक्षाफल को प्रभावित करने वाले किसी भी प्रविष्टि में सुधार का कोई भी दावा मान्य नहीं होगा और भरे गये आवेदन के आधार पर ही आवेदक की परीक्षा ली जायेगी।

11. परीक्षा का स्वरूप एवं पाठ्यक्रम :-

परीक्षा एक चरण में ली जायेगी। तीनों पदों के लिए दो पत्रों में परीक्षा आयोजित की जायेगी। पदवार परीक्षा का स्वरूप निम्नवत् होगा :-

(क) प्रयोगशाला प्रावैधिक एवं फार्मासिस्ट के पदों के लिए :-

- (i) प्रश्न पत्र-1 दोनों पदों के लिए समान होगा। इस पत्र में 20 प्रश्न कम्प्यूटर के सामान्य ज्ञान तथा 80 प्रश्न सामान्य ज्ञान से संबंधित होंगे। सामान्य ज्ञान अंतर्गत समसामयिक विषय, खेल, वैज्ञानिक उपलब्धि, भारतीय इतिहास, भूगोल, अंतरराष्ट्रीय मुद्रा आदि तथा झारखण्ड राज्य से संबंधित प्रश्न पूछे जाएंगे। प्रश्न पत्र-1 की भाषा हिन्दी होगी एवं परीक्षा अवधि 2 घंटे की होगी।
- (ii) प्रश्न पत्र-2 यह पत्र अभ्यर्थियों की तकनीकी योग्यता जाँच से संबंधित होगा। प्रश्नों की कुल संख्या 100 होगी। प्रयोगशाला प्रावैधिक पद के अभ्यर्थियों को तथा फार्मासिस्ट पद के अभ्यर्थियों को उनके विषय से संबंधित प्रश्न उपलब्ध कराये जाएंगे। प्रश्न पत्र-2 की भाषा अंग्रेजी होगी एवं परीक्षा अवधि 2 घंटे की होगी। प्रयोगशाला प्रावैधिक पद के तथा फार्मासिस्ट पद से संबंधित तकनीकी विषयों का पाठ्यक्रम क्रमशः अनुलग्नक 5 एवं 6 पर देखा जा सकता है।

(ख) परिचारिका श्रेणी 'ए' पद के लिए :-

- (i) प्रश्न पत्र-1 इस पत्र में हिन्दी एवं सामान्य ज्ञान विषयों की परीक्षा ली जायेगी। प्रश्न पत्र-1 के दो भाग होंगे। भाग 1 में 50 प्रश्न हिन्दी भाषा जाँच से संबंधित होंगे जिसमें 20 प्रश्न अनुच्छेद आधारित होंगे तथा 30 प्रश्न व्याकरण से संबंधित होंगे। व्याकरण विषय में प्रश्न संज्ञा, सर्वनाम, विशेषण, क्रिया, क्रिया विशेषण, काल समानार्थक शब्द, विपरितार्थक शब्द, संधि, समास, वाक्य शुद्धिकरण, अनुप्रास आदि से संबंधित होंगे। प्रश्न पत्र-1 के भाग-2 में 50 प्रश्न सामान्य ज्ञान के पूछे जायेंगे। सामान्य ज्ञान अंतर्गत समसामयिक विषय, खेल, वैज्ञानिक उपलब्धि, भारतीय इतिहास, भूगोल, अंतर्राष्ट्रीय मुद्रा आदि तथा झारखण्ड राज्य से संबंधित प्रश्न पूछे जाएंगे। प्रश्न पत्र-1 की भाषा हिन्दी होगी एवं परीक्षा अवधि 2 घंटे की होगी।
- (ii) प्रश्न पत्र-2 यह पत्र अभ्यर्थियों की तकनीकी योग्यता जाँच से संबंधित होगा। प्रश्नों की कुल संख्या 100 होगी। प्रश्न पत्र-2 की भाषा अंग्रेजी होगी एवं परीक्षा अवधि 2 घंटे की होगी। परिचारिका श्रेणी 'ए' पद से संबंधित तकनीकी विषयों का पाठ्यक्रम अनुलग्नक 7 पर देखा जा सकता है।

तीनों पदों के लिए सभी प्रश्न वस्तुनिष्ठ प्रकृति के होंगे और उत्तर के लिए चार विकल्प उपलब्ध होंगे। अभ्यर्थियों को सही विकल्प का चुनाव करना है। प्रत्येक सही उत्तर के लिए 3 अंक दिए जाएंगे और प्रत्येक गलत उत्तर के लिए 1 अंक की कटौति की जायेगी।

12. मेधा सूची:-

- (i) मुख्य परीक्षा के परीक्षा फल के आधार पर कोटिवार मेधासूची गठित की जायेगी। एक से अधिक उम्मीदवारों के प्राप्तांक समान (Equal Marks) रहने पर मेधा का निर्धारण उम्मीदवारों की जन्म तिथि के आधार पर किया जायेगा तथा अभ्यर्थी, जिनकी उम्र ज्यादा होगी, उन्हें अपेक्षाकृत ऊपर स्थान मिलेगा। यदि एक से अधिक उम्मीदवारों के प्राप्तांक और जन्म तिथि समान पायी जाती है, तो ऐसी स्थिति में उनके नाम के अंग्रेजी वर्तनी (Spelling) के वर्णक्रम के अनुसार मेधा का निर्धारण किया जायेगा और इसके निर्धारण के लिये आवेदन में अंकित अंग्रेजी में लिखे गये नाम को आधार माना जायेगा।
- (ii) मेधा के आधार पर अनारक्षित पद के लिये तैयार मेधा सूची में समान मापदंड पर आरक्षित वर्ग के अभ्यर्थी के आने की स्थिति में उक्त अभ्यर्थी की गणना अनारक्षित वर्ग के अनुमान्य पदों के विरुद्ध की जायेगी और उनके नाम के सामने उनका आरक्षण वर्ग भी वही होगा। इस सम्बन्ध में राज्य सरकार से प्राप्त अद्यतन निर्देशों का पालन किया जायेगा।
- (iii) मुख्य परीक्षा के आधार पर सामान्य मेधा-सूची तैयार की जायेगी और तदुपरान्त रिक्तियों के अनुसार आरक्षणवार सूची गठित होगी। परीक्षा में निम्न न्यूनतम अर्हतांक से कम अंक पाने वाले अभ्यर्थियों को मेधा-सूची में शामिल नहीं किया जायेगा:-

(क) प्रयोगशाला प्रावैधिक एवं फार्मासिस्ट के पदों के लिए न्यूनतम अर्हतांक :-

- | | | |
|------------------------------------|---|---------------------|
| (I) अनारक्षित (पुरुष एवं महिला) | - | 40 (चालीस) प्रतिशत |
| (II) अनुसूचित जनजाति/अनुसूचित जाति | - | 32 (बत्तीस) प्रतिशत |
| (पुरुष एवं महिला) | | |

(III) अत्यन्त पिछड़ा वर्ग –(अनुसूची-1) पुरुष – 34 (चौंतीस) प्रतिशत

(IV) झारखण्ड राज्य की स्थानीय महिला – 32 (बत्तीस) प्रतिशत
(अनारक्षित एवं अत्यन्त पिछड़ा वर्ग (अनुसूची-1))

(ख) परिचारिका श्रेणी 'ए' पद के लिए न्यूनतम अर्हतांक :-

- | | |
|---|-------------------------------|
| (I) अनारक्षित (पुरुष एवं महिला) | - 40 (चालीस) प्रतिशत |
| (II) अनुसूचित जाति (पुरुष एवं महिला) | - 32 (बत्तीस) प्रतिशत |
| (III) अत्यन्त पिछड़ा वर्ग –(अनुसूची-1) पुरुष | - 34 (चौंतीस) प्रतिशत |
| (IV) पिछड़ा वर्ग अनुसूची-2 (पुरुष) | - 36.5 (साढ़े छत्तीस) प्रतिशत |
| (V) झारखण्ड राज्य की स्थानीय महिला
(अनारक्षित, पिछड़ा वर्ग अनुसूची-2 एवं
अत्यन्त पिछड़ा वर्ग (अनुसूची-1)) | - 32 (बत्तीस) प्रतिशत |

(iv) मुख्य परीक्षा के आधार पर मेधा-सूची प्रारूप गठित करने के पश्चात् यथा समय अपनी सुविधा के अनुसार आयोग के द्वारा कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग के सहयोग से प्रमाण पत्रों की जांच करायी जायेगी।

प्रमाण पत्रों की जांच के क्रम में यदि किसी कोटि के उम्मीदवार के दावों का सत्यापन नहीं हो पाता है और उनकी उम्मीदवारी रद्द हो जाती है, तो ऐसी स्थिति में सम्बन्धित कोटि में रिक्त पदों की उपलब्धता के आलोक में मेधा सूची से क्रम के अनुसार उम्मीदवारों को प्रमाण-पत्रों के जाँच के लिए आमंत्रित किया जायेगा।

13. परीक्षा शुल्क:-

परीक्षा शुल्क रू0 460 (चार सौ साठ रूपये) है।

परीक्षा शुल्क में छूट:- झारखण्ड राज्य के अनुसूचित जनजाति/अनुसूचित जाति के अभ्यर्थियों के लिये परीक्षा शुल्क रू0 115 (एक सौ पन्द्रह रूपये) है। झारखण्ड राज्य के स्थानीय निवासी अनुसूचित जनजाति/अनुसूचित जाति कोटि से इतर कोटि के अभ्यर्थियों द्वारा रियायती दर पर परीक्षा शुल्क भरे जाने की स्थिति में उनके आवेदन पत्र को रद्द करते हुए उनकी उम्मीदवारी समाप्त कर दी जा सकती है। बिना परीक्षा शुल्क भुगतान किये आवेदन पत्र स्वीकार नहीं होंगे और वे रद्द किये जा सकेंगे। परीक्षा शुल्क अप्रतिदेय (Non Refundable) होगा।

परीक्षा शुल्क के अतिरिक्त अभ्यर्थियों को बैंक चार्ज के रूप में निम्नवत राशि का भुगतान भी करना होगा-

- (क) स्टेट बैंक ऑफ इंडिया एवं इसके सहयोगी बैंको के नेट बैंकिंग एवं डेबिट कार्ड द्वारा परीक्षा शुल्क भुगतान करने पर अतिरिक्त देय राशि रू0 11.40।
- (ख) स्टेट बैंक ऑफ इंडिया के अलावा अन्य बैंको के नेट बैंकिंग से परीक्षा शुल्क भुगतान करने पर अतिरिक्त देय राशि रू0 17.10।

- (ग) स्टेट बैंक ऑफ इंडिया के अलावा अन्य बैंको के डेबिट कार्ड एवं किसी भी क्रेडिट कार्ड से परीक्षा शुल्क भुगतान करने पर अतिरिक्त देय राशि रू0 12.54।
- (घ) स्टेट बैंक ऑफ इंडिया के किसी भी ब्रांच में चालान के द्वारा परीक्षा शुल्क भुगतान करने पर अतिरिक्त देय राशि रू0 57.00।

14. ऑन-लाईन (Online) आवेदन को भरने के लिए दिशा निदेशः—

- (I) आवेदक अपने नाम की वर्तनी (spelling) वही लिखेंगे जो मैट्रिक/10वीं के सर्टिफिकेट/अंक पत्र में अंकित है। सर्टिफिकेट/अंक पत्र में अंकित नाम और आवेदन पत्र में भरे गये नाम की वर्तनी (spelling) में अंतर नहीं होना चाहिये। आवेदन में नाम से संबंधित सूचना में नाम के आगे श्री/मिस्टर/श्रीमान् आदि शब्दों का व्यवहार नहीं किया जाय।
- (II) आवेदक के मैट्रिक सर्टिफिकेट/अंक पत्र में जो उनकी जन्म तिथि अंकित यथा— तिथि, महीना और वर्ष है, वही आवेदन पत्र के यथा निर्धारित स्थान पर लिखेंगे।
- (III) आवेदन पत्र भरने के लिए सर्वप्रथम आयोग के वेबसाइट www.jssc.in पर जाएँ एवं **Online Application for CPSCE-2015** को **Click** करें। तत्पश्चात् अपना पंजीकरण (Registration) करें। पंजीकरण प्रक्रिया पूर्ण होते ही आपके मोबाईल फोन एवं ईमेल पर पंजीकरण संख्या एवं पासवर्ड आ जायेगा। पंजीकरण संख्या एवं पासवर्ड को नोटकर सुरक्षित रखें क्योंकि भविष्य में लॉगिन करने के लिए इन दोनों की आवश्यकता होगी। पंजीकरण संख्या एवं पासवर्ड प्राप्त होते ही आप पुनः लॉगिन करें एवं आप अपने बारे में विस्तृत सूचना तथा अपना स्कैन (Scanned) किया हुआ फोटोग्राफ एवं हस्ताक्षर अपलोड कर दें। ऑनलाईन आवेदन के प्रत्येक पृष्ठ को **Save and Continue** करने के पश्चात् अगले पृष्ठ की सूचना भरा जाना आवश्यक है अन्यथा भरे गये आवेदन का प्रिंटआउट नहीं निकल पायेगा। जिस तिथि को आप यह कार्य पूरा कर लेते हैं उसकी अगली तिथि को 12.00 बजे मध्याह्न के पश्चात् पुनः लॉगिन करें एवं परीक्षा शुल्क का भुगतान कर दें। परीक्षा शुल्क भुगतान करने के दो दिनों के बाद पुनः लॉगिन कर आप भरे हुए आवेदन का प्रिंटआउट ले सकते हैं।

आवेदन पत्र में सभी सूचनाएँ भरा जाना अनिवार्य है अन्यथा आवेदन Online Submit नहीं हो पायेगा। ऑन-लाईन आवेदन भरने के लिए लिंक दिनांक 05.11.2015 के 11.00 बजे पूर्वाह्न से उपलब्ध होगा तथा आवेदन को भेजने (Submit) करने की अन्तिम तिथि दिनांक 05.12.2015 संध्या 05.00 बजे तक है। 05.12.2015 के बाद दिनांक 10.12.2015 तक लिंक मात्र परीक्षा शुल्क जमा करने के लिए उपलब्ध होगा। दिनांक 10.12.2015 के बाद ऑन-लाईन आवेदन का लिंक बंद कर दिया जायेगा।

15. नियुक्तिः—

- (i) परीक्षा में सफलता सेवा पदों पर नियुक्ति के लिये कोई अधिकार प्रदत्त नहीं करेगा, जब तक झारखण्ड सरकार का, ऐसी जांच के पश्चात्, जो आवश्यक समझी जाय, समाधान नहीं हो जाता है कि अभ्यर्थी लोक सेवा में नियुक्ति के लिये अपने चरित्र और पूर्व वृत्त के सम्बन्ध में सभी प्रकार से उपयुक्त है।

- (ii) सेवा में नियुक्तियाँ समय-समय पर कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार द्वारा अनुसूचित जाति, अनुसूचित जनजाति, अत्यन्त पिछड़ा वर्ग (अनुसूची-1), के लिये सेवा में विशेष प्रतिनिधित्व के सम्बन्ध में आदेशों के अध्यक्षीन होगी।

16. अन्यान्य:—

1. आयोग द्वारा परीक्षाओं के संचालन के अवसर पर झारखण्ड परीक्षा संचालन अधिनियम, 2001 के प्रावधान प्रभावी होगा।
2. आवेदन में अंकित सूचनाओं एवं प्रविशिष्टियों की पूर्ण जिम्मेवारी आवेदक की होगी तथा किसी भी प्रकार की गलत जानकारी के लिए आवेदक स्वयं उत्तरदायी होंगे।
3. आयोग द्वारा आयोजित परीक्षा के विषय पर अभ्यर्थी/उनके माता-पिता/अभिभावक द्वारा:—
 - (i) आवेदन प्रपत्र में गलत सूचना देने/गलत प्रमाण पत्र समर्पित करने/जालसाजी,
 - (ii) परीक्षा के दौरान अवैध तरीका अपनाने/नकल करने/फर्जी अभ्यर्थी को अपनी जगह पर परीक्षा में बैठाने/कदाचार करने में लिप्त पाये जाने,
 - (iii) प्रमाण पत्रों की प्रारम्भिक जाँच के अवसर पर आयोजित काउन्सेलिंग (counselling) के दौरान फर्जी प्रमाण-पत्रों/फर्जी पहचान के आधार पर नियुक्ति हेतु चयन सूची में स्थान पा जाने की स्थिति में वे निम्न दण्ड के भागी होंगे :—
 - (क) अभ्यर्थी की उम्मीदवारी समाप्त कर दी जायेगी।
 - (ख) अभ्यर्थी को आयोग द्वारा आयोजित परीक्षा में भाग लेने के लिये अगले 2 वर्षों के लिये वंचित कर दिया जायेगा।
 - (ग) अपराधिक घटना की स्थिति में अभ्यर्थी/उनके माता-पिता/अभिभावक यथास्थिति जो भी उत्तरदायी हो, के विरुद्ध विधि के अनुरूप कार्रवाई की जायेगी।
4. आयोग द्वारा आयोजित परीक्षाओं में अभ्यर्थियों की आवेदन पत्र/उम्मीदवारी निम्न अवस्थाओं में रद्द किया जा सकेगा :—
 - (i) अभ्यर्थी की उम्र परीक्षा में भाग लेने के लिये निर्धारित उम्र सीमा में नहीं होना।
 - (ii) शैक्षणिक योग्यता सहित निर्धारित अर्हताओं को पूरा नहीं करना।
 - (iii) निर्धारित परीक्षा शुल्क जमा नहीं करना।
 - (iv) प्रमाण पत्रों की जाँच के अवसर पर उम्मीदवारी के समर्थन में आवश्यक अर्हताओं से सम्बन्धित यथा निर्धारित प्रमाण पत्रों की मूल प्रति निर्धारित समय सीमा के अन्दर प्रस्तुत नहीं करना।
 - (v) आयोग की परीक्षा में नकल करना।

- (vi) आयोग की परीक्षा में अपने बदले किसी अन्य व्यक्ति को फर्जी ढंग से शामिल करना।
- (vii) अभ्यर्थी द्वारा आवेदन में गलत तथ्य देकर परीक्षा में शामिल होने का अधिकार पा जाना, जो किसी भी समय प्रमाणित हो। इस विषय पर आयोग को निर्णय लेने का अधिकार सुरक्षित होगा।
- (viii) आयोग की परीक्षा में शामिल होने के लिये प्रवेश पत्र जारी होना अभ्यर्थी की उम्मीदवारी को संरक्षित नहीं कर सकेगा।
- (ix) अभ्यर्थी की उम्मीदवारी रद्द करने के विषय पर निर्णय लेने के पूर्व उसे अपना पक्ष रखने के लिये समुचित अवसर दिया जायेगा तथा पूरे मामले पर सम्यक रूप से विचार करने के उपरान्त आयोग विधिसम्मत निर्णय लेगा।
- (x) उम्मीदवारी को रद्द करने के विषय पर निर्णय की जानकारी अभ्यर्थी को यथासमय दी जायेगी।
- (xi) परीक्षाफल प्रकाशन होने के 7 दिनों के अन्दर कोई भी परीक्षार्थी विहित प्रपत्र में निर्धारित शुल्क के साथ पुर्नमूल्यांकन के लिए आवेदन दे सकेगा। इसका यथाशीघ्र निष्पादन आयोग द्वारा करते हुए परीक्षार्थी को सूचित किया जायेगा।
- (xii) किसी परीक्षा केन्द्र पर अभ्यर्थियों द्वारा सामूहिक नकल/कदाचार किये जाने की शिकायत होने और जाँच में इसे प्रमाणित पाये जाने पर उक्त परीक्षा केन्द्र पर संपादित परीक्षा को रद्द करने का अधिकार आयोग के पास सुरक्षित रहेगा। परीक्षा रद्द होने की स्थिति में पुनः उसकी परीक्षा नहीं ली जायेगी।
- (xiii) परीक्षा की अवधि में किसी भी अभ्यर्थी को परीक्षा केन्द्र के बाहर जाने की अनुमति नहीं होगी। परीक्षा प्रारम्भ होने के बाद किसी भी अभ्यर्थी को परीक्षा केन्द्र में प्रवेश की अनुमति नहीं होगी।
- (xiv) अभ्यर्थियों को सलाह दी जाती है कि Online भरा हुआ आवेदन पत्र Submit करने के पूर्व उसे एक बार भली भाँति जाँच ले ताकि कोई त्रुटि न रह जाये।
- (xv) वैसे अभ्यर्थी प्रारंभिक प्रतियोगिता परीक्षा में सम्मिलित होने के हकदार नहीं होंगे जिन्हे संघ लोक सेवा आयोग/झारखण्ड लोक सेवा आयोग/झारखण्ड कर्मचारी चयन आयोग/अन्य चयन आयोग द्वारा निर्दिष्ट अवधि तक कदाचार के मामलों में परीक्षा से वंचित कर दिये जाने का आदेश पारित किया गया हो। उम्मीदवारों के परीक्षा में बैठने की पात्रता या अपात्रता के बिन्दु पर आयोग का निर्णय अंतिम होगा।
- (xvi) परीक्षा केन्द्र के अन्दर मोबाइल फोन, पेजर अथवा इस प्रकार का कोई भी इलेक्ट्रॉनिक उपकरण ले जाना वर्जित होगा। अभ्यर्थियों को सलाह दी जाती है कि परीक्षा केन्द्र के अन्दर किसी प्रकार का मुल्यवान अथवा कीमती वस्तु नहीं ले जाँय। अभ्यर्थियों को यह भी सलाह दी जाती है कि परीक्षा में उपयोग होने वाले वस्तुओं को ही ले जाँय। परीक्षा केन्द्र परिसर में शांति एवं अनुशासन बनाये रखना परीक्षार्थियों का दायित्व होगा।

(xvii) प्रवेश पत्र (Admit Card) आयोग के website पर upload होगा जिसे अभ्यर्थी Download कर परीक्षा में शामिल होंगे। प्रवेश पत्र (Admit Card) डाक से अलग से नहीं भेजा जायेगा। बिना प्रवेश पत्र (Admit Card) के परीक्षा में बैठने की अनुमति नहीं दी जायेगी।

प्रवेश पत्र (Admit Card) में किसी प्रविष्टि अथवा फोटो में त्रुटि हो तो अभ्यर्थी संबंधित परीक्षा केन्द्र पर केन्द्राधीक्षक को आवेदन देकर परीक्षा में शामिल हो सकेंगे तथा आवेदन के साथ स्व:प्रमाणित प्रवेश पत्र (Admit Card) एवं फोटोयुक्त पहचान पत्र की प्रति देना अनिवार्य होगा। साथ ही फोटो पहचान पत्र मूल में अभ्यर्थी को परीक्षा अवधि में अपने साथ रखना होगा।

(xviii) परीक्षा में OMR ANSWER SHEET का उपयोग होगा तथा परीक्षा के बाद Computer के माध्यम से मूल्यांकन कार्य सम्पादित होता है। सभी अभ्यर्थी को हिदायत की जाती है कि OMR ANSWER SHEET पर आवश्यक प्रविष्टि (Entry) के अलावे उस पर किसी प्रकार का अन्य चिन्ह नहीं बनावे अन्यथा मूल्यांकन में त्रुटि के लिए वे स्वयं उत्तरदायी होंगे। OMR ANSWER SHEET पर उत्तर के लिए संबंधित गोला को इस प्रकार Black Ball Point Pen से पूरा काला (Darken) करें जिससे कि किसी अन्य गोला पर कोई निशान/चिन्ह नहीं बनने पाये अन्यथा मूल्यांकन प्रभावित होने पर अभ्यर्थी स्वयं उत्तरदायी होंगे।

(xxi) परीक्षा से संबंधित सभी सूचनाएँ आयोग के वेबसाईट पर दिया जायेगा।

(xxii) आयोग को अपरिहार्य कारणों से परीक्षा के कार्यक्रम में परिवर्तन का अधिकार सुरक्षित रहेगा।

(xxiii) अभ्यर्थियों की जानकारी के लिए परीक्षा के परिणाम प्रकाशित होने के बाद अभ्यर्थियों का अंक आयोग के वेबसाईट पर upload होगा। प्रमाण पत्रों की जाँच के अवसर पर अभ्यर्थियों को परीक्षा में प्राप्त अंको की जानकारी नहीं दी जायेगी।

ह०/—

परीक्षा नियंत्रक।

परिशिष्ट (I)

कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार के पत्रांक-
7/बि0बि0आ0-019-03/2002-4156 दिनांक- 17 जुलाई, 2002 द्वारा निर्धारित प्रपत्र

प्रपत्र

कार्यालय का नाम :-

स्थानीय निवासी प्रमाण पत्र (नियोजन के लिए)

संख्या :-.....

तिथि:.....

प्रमाणित किया जाता है कि श्री/श्रीमती/सुश्री
पिता/ पति श्री पता-ग्राम/वार्ड/शहर..... पो0 .
....., थाना, जिला के स्थानीय निवासी हैं और
यह प्रमाण-पत्र कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार की अधिसूचना
संख्या- 3389, दिनांक- 22 दिसम्बर, 2001 के साथ संलग्न बिहार सरकार के श्रम एवं नियोजन विभाग
के पत्र संख्या- 3/स्था0नि0 5014/81-806, दिनांक- 03 मार्च, 1982 में उल्लेखित प्रावधानों के
आलोक में निर्गत किया गया है। यह प्रमाण पत्र मात्र नियोजन के संदर्भ में मान्य होगा।

स्थान :-

दिनांक :-

कार्यालय का मुहर

प्रमाण पत्र निर्गत करने वाले
पदाधिकारी का हस्ताक्षर

नाम

पदनाम

परिशिष्ट (II)

कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार के पत्रांक- 7/जा.नि.
-19-11/2008 का.-5682 दिनांक- 22 अक्टूबर, 2008 द्वारा निर्धारित प्रपत्र

झारखण्ड सरकार

प्रपत्र-I

.....
(कार्यालय का नाम)
जाति प्रमाण-पत्र
(सभी कार्यों के लिये)

संख्या-.....

तिथि:-.....

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी
पुत्र/पुत्री/पत्नी, श्री निवासी, ग्राम/कस्बा/मोहल्ला
डाकघर..... थाना जिला राज्य.....
अनुसूचित जाति*/अनुसूचित जनजाति* श्रेणी के अन्तर्गत..... जाति/उप जाति
के सदस्य हैं, जो झारखण्ड राज्य के लिये अनुसूचित जाति*/अनुसूचित जनजाति* के रूप में
मान्यता प्राप्त है।

2. श्री/श्रीमती/कुमारी..... एवं/अथवा उनका/उनकी परिवार साधारणतः
गांव/कस्बा....., शहर....., जिला....., राज्य.....में
निवास करते हैं।

स्थान :-

सक्षम पदाधिकारी का हस्ताक्षर
नाम

दिनांक :-

पदनाम

(कार्यालय की मुहर)

(नोट:- जो लागू नहीं हो, उसे काट दिया जाय।)

1. * बिहार पुनर्गठन अधिनियम, 2000 की धारा-23 एवं 24 के अन्तर्गत 5वीं तथा 6वीं अनुसूची में अंकित क्रमशः संविधान (अनुसूचित जाति) संशोधन आदेश 1950 एवं संविधान (अनुसूचित जनजाति) संशोधन आदेश 1950
2. * अनुसूचित जाति एवं अनुसूचित जनजाति आदेश (संशोधन) अधिनियम, 2002.

परिशिष्ट (III)

कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग, झारखण्ड सरकार के पत्रांक-
7/जाति-19-11/2008 का.-10007 दिनांक- 29 अगस्त, 2012 द्वारा निर्धारित प्रपत्र

प्रपत्र-II

झारखण्ड सरकार के अधीन पदों पर नियुक्ति हेतु आवेदन करने के लिए अत्यन्त पिछड़ा वर्ग/पिछड़ा वर्ग द्वारा प्रस्तुत कया जाने वाला जाति प्रमाण पत्र

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी
पुत्र/पुत्री ग्राम/शहर
थाना जिला झारखण्ड के रहने वाले/की रहने वाली हैं,
जो झारखण्ड पदों एवं सेवाओं की रिक्तियों में आरक्षण (अनुसूचित जातियों, अनुसूचित जनजातियों एवं अन्य पिछड़े वर्गों के लिए) अधिनियम-2001*,** की धारा-2 के अन्तर्गत अत्यन्त पिछड़ा वर्ग (अनुसूची-1) तथा पिछड़ा वर्ग (अनुसूची-2) के अधीन अत्यन्त पिछड़ा वर्ग/पिछड़ा वर्ग के रूप में मान्यता प्राप्त समुदाय से आते/आती हैं।

यह भी प्रमाणित किया जाता है कि वे कार्मिक, प्रशासनिक सुधार तथा राजभाषा विभाग के संकल्प संख्या-3482 दिनांक- 10.06.2002 द्वारा अंगीकृत कार्मिक तथा प्रशिक्षण विभाग, भारत सरकार के कार्यालय ज्ञापन संख्या-36012/22/93-स्था0 (एस.सी.टी.) दिनांक- 08.09.1993 की अनुसूची के स्तम्भ-3 में उल्लिखित व्यक्ति/वर्ग (क्रीमी लेयर) में शामिल नहीं हैं।

स्थान :-

सक्षम पदाधिकारी का हस्ताक्षर

नाम

दिनांक :-

पदनाम

(कार्यालय की मुहर)

(नोट:- जो लागू नहीं हो, उसे काट दिया जाय।)

- * झारखण्ड पदों एवं सेवाओं की रिक्तियों में आरक्षण (अनुसूचित जाति, अनुसूचित जनजाति एवं अन्य पिछड़े वर्गों के लिए) अधिनियम, 2001 की अनुसूची-1 एवं अनुसूची-2 में अंकित जातियाँ/उप जातियाँ।
- ** झारखण्ड पदों एवं सेवाओं की रिक्तियों में आरक्षण (अनुसूचित जाति, अनुसूचित जनजाति एवं अन्य पिछड़े वर्गों के लिए) अधिनियम, 2001 की धारा-2 में सन्निहित अत्यन्त पिछड़ा वर्ग/पिछड़ा वर्ग की जातियों की सूची, जो संकल्प संख्या-3885, दिनांक 05.11.2001, 801 दिनांक 11.02.2003, 3436 दिनांक 28.06.2004, 6337 दिनांक 08.12.2004, 6374 दिनांक 11.12.2004, 368 दिनांक 19.01.2006, 2759 दिनांक 01.06.2006, 3706 दिनांक 15.07.2006, 4447 दिनांक 24.08.2006, 5182 दिनांक 26.09.2006, 1604 दिनांक 28.03.2007, 243 दिनांक 11.01.2008, 5108 दिनांक 23.09.2008, 4450 दिनांक 01.08.2001, 5826 दिनांक 19.09.2011, 697 दिनांक 26.09.2011, 6580 दिनांक 20.10.2011, 8060 दिनांक 17.12.2011 एवं 144 दिनांक 06.01.2012, 2855 दिनांक 27.03.2012 एवं समय-समय पर यथा संशोधित।

SYLLABUS FOR DIPLOMA (LAB. TECHNICIAN)

- 1. Introduction**
 - Human Health and Medical Care Developing Countries
 - Organization of the Clinical Laboratory and Role of Medical Laboratory Technicians
 - Safety Regulation, First Aid and Clinical Laboratory Records
 - Introduction to Laboratory Equipment and Basic Laboratory Operations
 - General Comments on Specimen Collection
 - Units of Measurement, Preparation of Reagent Solutions and Laboratory Calculation
 - Quality Control of Laboratory Findings

- 2. Haematology**
 - Introduction to Haematology
 - Specimen Collection and Laboratory Preparation in Haematology
 - Routine Haematological Tests
 - Special Haematological Tests
 - Interpretation of Laboratory Finding in Haematology
 - Introduction of Haemostasis and Coagulation
 - Laboratory Investigation of Bleeding Disorders

- 3. Immuno-haematology or Blood banking**
 - Principles of Immuno-haematology and Clinical Significance of Blood Transfusion
 - Collection and Processing of Blood for Transfusion
 - Routine Laboratory Procedures in Blood Bank
 - Transfusion Reaction and Haemolytic Disease of the Newborn

- 4. Clinical pathology**
 - Urine Analysis
 - Laboratory Examination of the Miscellaneous Body Fluids
 - Semen Analysis
 - Stool Examination

- 5. Microbiology**
 - Introduction to Diagnostic Microbiology & Microbiological Techniques
 - Diagnostic Bacteriology
 - Laboratory Diagnosis of mycotic infection
 - Laboratory Diagnosis of parasitic infection

- 6. Serology**
 - Introduction and Procedures
 - Laboratory procedures in serology

- 7. Clinical Biochemistry**
 - Normal and Abnormal Biochemical Processes of the Body
 - Specimen Processing for Biochemical Analysis
 - Principles of the Analytic Techniques
 - Automation In Clinical Biochemistry Laboratory
 - Routine Biochemical Tests
 - Biochemical Tests Profile
 - Toxicological Investigation and Therapeutic Drug Monitoring

- 8. Histology and Cytology**
 - Introduction to Histo technology and Cyto technology
 - Laboratory Techniques in Histology
 - Laboratory Techniques in Diagnostic Exfoliative Cytology .

SYLLABUS FOR DIPLOMA IN PHARMACY**PHARMACEUTICS**

1. Introduction of different dosage forms. Their classification with examples- their relative applications. Familiarization with new drug delivery systems.
2. Introduction to Pharmacopocias with special reference to Indian Pharmacopocia.
3. Metrology- Systems of weights and measures. Calculations including conversion from one to another system. Percentage calculation and adjustments of products. Use of allegation method in calculation. Isotonic solutions.
4. Packing of Pharmaceuticals- desirable features of a container, types of containers, study of glass and plastics as materials of containers and rubber as material for closures- their merits and demerits. Introduction to aerosol packaging.
5. Size reduction objectives and factors affecting size reduction, method of size reduction- Study of Hammer mill, Ball mill, Fluid Energy mill and disintegrator.
6. Size separation- Size separation by sifting. Official Standard for powders. Sedimentation methods of size separation. Construction and working of cyclone separator.
7. Mixing and Homogenization – Liquid mixing and powder mixing, mixing of semisolids, study of Silverson Mixer- Homogenizer, Planctary Mixer, Agitated powder mixer, Triple roller mill, Propeller mixer, Colloid mill and hand homogenizer. Double cone mixer.
8. Classification and filtration – theory of filtration, filter media, filter aids and selection of filters. Study of following filtration equipments- Filter Press, Sintered filters, Filter candles, Metafilter.
9. Extraction and Galenicals- (a) Study of percolation and maceration and their modification. Continuous hot extraction, - Application in extraction of tincture and extracts. (b) Introduction to Ayurvedic dosages forms.
10. Heat processes Evaporation- Definition. Factors affecting evaporation. Study of evaporating stills and evaporating pans.
11. Distillation- Simple distillation and fractional distillation, steam distillation and vacuum distillation. Study of vacuum still, preparation of purified water I.P. and water for injection I.P. Construction and working of still used for the same.
12. Introduction to drying processes- Study of tray dryers, vacuum dryer and freeze dryer.
13. Sterilization- Concept of sterilization and its differences from disinfection, thermal resistance of micro organism, detail studies of – (a) Sterilization with moist heat, (b) dry heat sterilization, (c) Sterilization by radiation, (d) Sterilization by Filtration and (e) Gaseous sterilization. Aseptic techniques. Study of sterilization process in hospitals particularly with reference to surgical dressing and intravenous fluids, precautions for safe and effective handling of sterilization equipments.
14. Processing of tablets- Definition, different types of compressed tablets and their properties, Processes involved in production of tablets, Tablets excipients, defects in tablets, physical standards including disintegration and dissolution. Tablet coating- sugar coating, enteric coating and microencapsulation.
15. Processing of capsules- Hard and soft gelatinous capsule, different sizes capsules, filling of capsules, handling and storage of capsules, special application of capsules.
16. Study of immunological products like vaccines, toxoids and their preparation.

1. Dispensing Pharmacy:

- (a) Reading and understanding of prescription; Latin terms commonly used (Detail study is not necessary), modern methods of prescribing, adoption of metric system, calculation involved in dispensing.
- (b) Incompatibilities in Prescriptions- Study of various types of incompatibilities- Physical, Chemical and therapeutic.
- (c) Posology- Dose and doses of drugs, Factors influencing dose, Calculation of doses on basis of age, sex and surface area, Veterinary doses.
2. Dispensed medication:
(Note- A detailed study of the following dispensed medication is necessary, methods of preparation with theoretical and practical aspects, use of appropriate containers and closures, special labeling requirements and storage conditions should be highlighted).
- (i) Powders- Advantages and disadvantages of powders, Granules, Cachets and Tablet triturates. Preparation of different types of powders encountered in prescriptions, weighing methods, possible errors in weighing, minimum weighable amounts and weighing of material below the minimum weighable amount, geometric dilution and proper usage and care of dispensing balance.
- (ii) Liquid - Oral Dosage Forms:
(a) Monophasic- Theoretical aspects including commonly used vehicles, essential adjuvant like stabilizers, colorants and flavors with examples. Review of the monophasic liquids with details of formulation and practical methods.

Liquids for internal irritation	Liquids for external administration or used on mucus membranes
Concentrates and soups. Elixirs	Gargles, Mouth washes, Throat paints, Douches, Ear drops, Nasal drops & sprays, Liniments, Lotions,

(b) Biphasic Liquid Dosages forms:

(i) Suspension (elementary study) - Suspension containing diffusible solids and liquids and their preparation. Study of adjuvants used like thickening agents, wetting agents, their necessity and quantity to be incorporated. Suspensions of precipitate forming liquids like tinctures, their preparation and stability. Suspensions produced by chemical reaction. An introduction of flocculated, non flocculated suspension system.

(ii) Emulsions- Types of emulsions, identification of emulsion system, formulation of emulsions, selection of emulsifying agents. Instabilities in emulsions. Preservation of emulsions.

(iii) Semi- Solid Dosages Forms:

(a) Ointments- Types of ointments, classification and selection of dermatological vehicles. Preparation and stability of ointments by the following processes:

(i) Titration (ii) Fusion (iii) Chemical reaction (iv) Emulsification.

(b) Pastes- Difference between ointments and pastes, bases of pastes. Preparation of paste and their preservation.

(c) Jellies- An introduction to the different types of Jellies and their preparation.

(d) An elementary study of poultice.

(e) Suppositories and pessaries- Their relative merits and demerits, types of suppositories, suppository bases, classification, properties. Preparation and packing of suppositories. Use of suppositories for drug absorption.

(iv) Dental and Cosmetic Preparation: Introduction to Dentrifices, Facial cosmetics. Deodorants, Antiperspirants, Shampoos, Hair dressing and hair removers.

(v) Sterile dosage forms: (a) Parenteral dosage forms- Definition, General requirements for parenteral dosage forms. Types of parenteral formulations, vehicles, adjuvants, processing, personnel, facilities and Quality control, Preparation of Intravenous fluids and admixtures- Total parenteral nutrition, dialysis fluids.

(b) Sterility testing, Particulate matter monitoring – Faulty seal packaging.

(c) Ophthalmic products- Study of essential characteristics of different ophthalmic preparations. Formulation additives, special precautions in handling and storage of ophthalmic products.

PHARMACEUTICAL CHEMISTRY

1. General discussion on following inorganic compounds including important physical and chemical properties, medicinal and pharmaceutical uses, storage condition and chemical incompatibility.
 - (a) Acids, bases and buffers. Boric acid, Hydrochloric acid, strong ammonium hydroxide, Calcium hydroxide, sodium hydroxide and official buffers.
 - (b) Antioxidants- Hypophosphorous acid, sulphur dioxide, Sodium bisulphite, Sodium metabisulphite, Sodium thiosulphate, Nitrogen and Sodium Nitrite.
 - (c) Gastrointestinal agents- (i) Acidifying agents, dilute Hydrochloric acid. (ii) Antacids- Sodium bicarbonate, Aluminium hydroxide gel, Aluminium Phosphate, Calcium carbonate, Magnesium carbonate, Magnesium trisilicate, Magnesium oxide, Combination of antacid preparations. (iii) Protective and Adsorbents- Bismuth subcarbonate and Kaolin. (iv) Saline Cathartics- Sodium Potassium tartrate and Magnesium sulphate.
 - (d) Topical Agents- (i) Protective- Talc, Zinc oxide, Calamine, Zinc stearate, Titanium dioxide, Silicon Polymers. (ii) Antimicrobials and Astringents- Hydrogen peroxide, Potassium permanganate, Chlorinated lime, Iodine, Solutions of Iodine, Povidone iodine, boric acid, Borax, Silver nitrate, Mild silver protein, Mercury, Yellow Mercuric oxide, Ammoniated Mercury. (iii) Sulphur and its compounds- Sublimed sulphur, precipitated sulphur, Selenium sulphide. (iv) Astringents- Alum and Zinc sulphate.
 - (e) Dental products- Sodium fluoride, Stannous fluoride, Calcium carbonate, Sodium meta phosphate, Dicalcium phosphate, Strontium chloride, Zinc chloride.
 - (f) Inhalants- Oxygen, Carbon dioxide, Nitrous oxide.
 - (g) Respiratory stimulants- Ammonium carbonate.
 - (h) Expectorants and Emetics- Ammonium chloride, Potassium iodide, Antimony Potassium tartrate.
 - (i) Antidote- Sodium nitrate.
2. Major Intra and Extracellular electrolytes-
 - (a) Electrolytes used for replacement therapy- Sodium chloride and its preparations, Potassium chloride and its preparations.
 - (b) Physiological Acid- base balance and electrolytes used- Sodium acetate, Potassium acetate, Sodium bicarbonate injection, Sodium citrate, Potassium citrate, Sodium lactate injection, Ammonium chloride and its injection.
 - (c) Combination of oral electrolyte powder and solutions.
3. Inorganic official compounds of Iron, Iodine AND Calcium ferrous sulphate and Calcium gluconate.
4. Radio pharmaceuticals and Contrast media- Radio activity- Alpha, Beta and Gamma radiation, Biological effects of radiation, measurement of radio activity, G.M. Counter, Radio isotopes- their uses, storage and precautions with special reference to the official preparation. Radio opaque. Contrast media- Barium sulphate.
5. Quality control of drugs and pharmaceuticals- Importance of quality control, significant errors, methods used for quality control, sources of impurities in pharmaceuticals. Limit test for Arsenic, Chloride, sulphate, Iron and heavy metals.

6. Identification test for cations and anions as per Indian Pharmacopoeia.
7. Introduction to the nomenclature of organic chemical system with particular reference to heterocyclic system containing up to 3 rings.
8. The chemistry of following pharmaceutical compound, covering their nomenclature, chemical structure, uses and important physical and chemical properties (Chemical structure of only those compounds marked with *.
9. The stability and storage conditions and the different types of Pharmaceutical formulation of drugs and their popular brand names.

Antiseptics and Disinfectants- Proflavine*, Benzal- koniumchlorides, Cetrimide, Chlorocresol*, Chloroxylene, Formaldehyde solution, Hexachlorophene, Liquefied phenol, Nitrofurantoin.

Sulfonamides- Sulfadiazene, Sulfaguanidine*.

Phthalyl sulfa thiazole, Succinylsulfathiozole, Sulfamethoxy pyridazine, Sulfamethoxazole, co-trimoxazole, Sulfacetamide*.

Antileprotic drugs- Clofazimine, Thiambutosine, Dapsone*, Solapson.

Anti tubercular drugs- Isoniazid*, PAS*, Streptomycin, Rifampicine, Ethambutol*, Thiacetazone, Ethionamide, Cycloserine, Pyrazinamides*.

Anti amoebic and Anthelminthic Drugs- Emetine, Metronidazole*, Halogenated Hydroxyquinolines, diloxanidefuroate, Paramomycin Piperazine*, Mebenazole, D.E.C.*.

Antibiotics- Benzyl Penicillin*, Phenoxy methyl.

Penicillin*, Benzathine Penicillin, Ampicillin*, Cloxacillin, Carbenicillin, Gentamicin, Neomycin, Erythromycin, Tetracyclin, Cephalixin, Cephaloridine, Cephalothin, Grisofulvin, Chloramphenicol.

Antifungal agents- Undecylenic acid, Tolnaftate, Nystatin, Amphotericin, Hamycin.

Antimalarial drugs- Chloroquin*, Amodiaquine, Primaquine, Proguanil, Pyrimethamine*, Quinine, Trimethoprim.

Tranquilizers- Chlorpromazine*, Prochlorperazine, Thiothixene, Haloperidol*.

Triperidol, Oxypertine, Chlordiazepoxide, Diazepam*, Lorazepam, Meprobamate.

Hypnotics-, Butobarbitone, Cyclobarbitone, Nitrazepam, Phenobarbitone Glutethimide*, Methypylone, Paraldehyde, Triclofor sodium.

General Anaesthetics- Halothane*, Cyclopropane*, Diethyl ether*, Methohexial sodium, Thiopental sodium, Trichloroethylene.

Antidepressant drugs- Amitriptyline, Nortriptyline, Imipramine*, Phenelzine, Tranylepromine.

Analeptics- Theophylline, Caffeine*, Coramine*, Dextroamphetamine.

Adrenergic Drugs- Adrenaline*, Noradrenaline, Isoprenaline*, Salbutamol, Terbutaline, Ephedrine*, Pseudoephedrine.

Adrenergic Antagonist- Tolazine, Propranolol*, Practolol.

Cholinergic Drugs- Neostigmine*, Pyridostigmine, Pralidoxime, Pilocarpine, Physostigmine*.

Cholinergic Antagonist- Atropine*, Hyoscine, Homatropine, Propantheline*, Benztropine, Tropicamide, Biperiden*.

Diuretic drugs- Furosemide, Chlorothiazide, Hydrochlorothiazide*, Benzthiazide, Urea*, Mannitol*, Ethacrynic acid.

Cardiovascular Drugs- Ethyle nitrite, Glyceryl trinitrate, Alpha methyl dopa, Guanethidine, .

Hypoglycemic Agents- Insulin, Chlorpropamide*, Tolbutamide, Glibenclamide, Phenformin*, Metaformin.

Coagulants and Anti- Coagulants- Heparin, Thrombin, Menadione*, Bishydroxycoumarine, Warfarin Sodium.

Local Anaesthetics- Lignocaine*, Procaine*, Benzocaine.

Histamine and Anti- Histamine Agents- Histamine, Diphenhydramine*, Promethazine, Cyprohepatadine, Mepyramine, Pheniramine, Chlorpheniramine*.

Analgesics and Anti- pyretics- Morphin, Pethidine*, Codeine, Methadone, Aspirin*, Paracetamol*, Analgin, Dextropropoxyphene, Pentazocine.

Non steroidal anti inflammatory Agents- Indomethacine*, Phenylebutazone*, Oxyphenbutazone, Ibuprofen, Thyroxine and Antihydroids-Thyroxine*, Methimazole, Methylethiouracil, Propylthiouracil.

Diagnostic agents- Iopanoic acid, Propyliodone, Sulfobromophthalein.

SodiumIndigotindisulfonate, Indigo Carmine, Evans blue, Congo red, Fluorescein Sodium.

Anticonvulsant, cardiac glycosides, Antiarrhythmic antihypertensives& vitamins.

Steriodal drugs-Betamethazone, Cortisone, prednisolone, Progesterone, Oestradiol, Nandrolone.

PHARMACOGNOSY

1. Definition, history and scope of Pharmacognosy including Indian system of medicine.
2. Various systems of classification of drugs of natural origin.
3. Adulteration and drug evaluation; significance of Pharmacopocial standards.
4. Brief outline of occurrence, distribution, outline of isolation, identification tests, therapeutic effects and pharmaceutical application of alkaloids, terpenoids, glycosides, volatile oils, tannins and resins.
5. Occurrence , distribution, organoleptic evaluation, chemical constituents including tests wherever applicable and therapeutic efficacy of following categories of drugs-
 - (a) Laxatives: Aloes, Rhuburb, Castor oil, Ispaghula, Senna.
 - (b) Cardiotonics- Digitalis, Arjuna.
 - (c) Carminatives &G.I. regulators- Umbelliferous fruits, Coriander, Fennel, Aijwain, Cardamom, Ginger, Black pepper, Asafoetida, Nutmeg, Cinnamon, Clove.
 - (d) Astrigents- Catechu.
 - (e) Drugs acting on nervous system- Hyoscyamus, Belladonna, Aconite, Ashwagandha, Ephedra, Opium, Cannabis, Nux vomica.
 - (f) Antihypertensives- Raulwolfia.
 - (g) Antitussives- Vasaka, Tolu balsam, Tulsi.
 - (h) Antirheumatics- Guggul, Colchium.
 - (i) Antitumour- Vinaca.
 - (j) Antileprotics- Chaulmoogra oil.
 - (k) Antidiabetics- Pterocarpus, Gymnema, Sylvestro.
 - (l) Diuretics- Gokhru, Punarnava.
 - (m) Antidysentrics- Ipecacuanha.
 - (n) Antiseptic and disinfectants- Benzoin, Myrrh, Nim, curcuma.
 - (o) Antimalarials- Cinchona.
 - (p) Oxytocics- Ergot.
 - (q) Vitamins- Shark liver oil and Amla.
 - (r) Enzymes- Papaya, Diastase, Yeasts.
 - (s) Perfumes and flavouring agents- Peppermint oil, Lemon oil, Orange oil, Lemon grass oil, Sandalwood.
 - (t) Pharmaceutical aids- Honey, Arachis oil, Kaolin, Pectin, Olive oil, Lanolin, Bees wax, Acacia, Tragacanth, Sodium alginate, Agar, Gaur gum, Gelatin.
 - (u) Miscellaneous- Liquorice, Garlic, Picrorhiza, Dioscorea, Linseed, Shatawari, Shankpushpi, Pyrethrum, Tobacco.
6. Collection and preparation of crude drug for the market as exemplified by Ergot, Opium, Rauwolfia, Digitalis, Senna.
7. Study of source, preparation and identification of fibres used in sutures and surgical dressings- cotton, silk, wool and regenerated fibres.

8. Gross anatomical studies of Senna, Datura, Cinnamon, Cinchona, Fennel, Clove, Ginger, Nux vomica & Ipecacuanha.

BIOCHEMISTRY AND CLINICAL PATHOLOGY.

1. Introduction to biochemistry.
2. Brief Chemistry and role of proteins, polypeptides and amino acids, classification, Quantitative tests, Biological value, Deficiency diseases.
3. Brief chemistry and role of carbohydrates.
4. Brief chemistry and role of Lipids, Classification, qualitative tests, Diseases related to lipid metabolism.
5. Brief chemistry and role of vitamins and enzymes.
6. Role of minerals and water in life process.
7. Enzymes: Brief concept of enzymic action, factors affecting it, therapeutic and pharmaceutical importance.
8. Brief concept of normal and abnormal metabolism of proteins, carbohydrates and lipids.
9. Introduction to pathology of blood and urine.
 - (a) Lymphocytes and Platelets, their role in health and disease.
 - (b) Erythrocytes – Abnormal cells and their significance.
 - (c) Abnormal constituents of urine and their significance in disease.

HUMAN ANATOMY AND PHYSIOLOGY

1. Scope of Anatomy and Physiology.
2. Definition of various terms used in Anatomy.
3. Structure of cell, function of its components with special reference to mitochondria and micomes.
4. Elementary tissues of the body i.e. epithelial tissue, muscular tissue, connective tissue and nervoustissue.
5. Structure and function of skeleton, classification of joints and their function, joint disorder.
6. Composition of blood, function of blood elements, blood group and coagulation of blood, brief information regarding disorder of blood.
7. Name and function of lymph glands.
8. Structure and function of various parts of the heart. Arterial and venous system with special reference to the names and positions of main arteries and veins. Blood pressure and its recording. Brief information about cardiovascular disorders.
9. Various parts of respiratory system and their functions. Physiology of respiration.
10. Various parts of urinary system and their functions, structure and function of kidney. Physiology of urine formation. Pathophysiology of renal disease and oedema.
11. Structure of skeletal muscle, physiology of muscle contraction. Names, position, attachments and function of various skeletal muscles. Physiology of neuromuscular junction.
12. Various parts of central nervous system, brain and its parts, function and reflex action, anatomy and physiology of autonomic nervous system
13. Elementary knowledge of structure and functions of organ of taste, smell, ear, eyes and skin. Physiology of pain.
14. Digestive system, names of the various parts of digestive system and their function. Structure and function of liver, physiology of digestion and absorption.
15. Endocrine glands and hormones. Location of the glands, their hormones and functions. Pituitary, thyripid, Adrenal and Pancreas.
16. Reproductive system- Physiology and Anatomy of Reproductive system.

HEALTH EDUCATION AND COMMUNITY PHARMACY

1. Concept of health – Definition of physical health, mental health, social health, spiritual health, determinants of health, indicator of health, concept of disease, natural history of diseases, the disease agents, concept of prevention of diseases.
2. Nutrition and health- Classification of food, requirements, diseases induced due to deficiency of proteins, vitamins and minerals- treatment and prevention.
3. Demography and family planning- Demography cycle, fertility, family planning, contraceptive methods, behavioural methods, natural family planning method, mechanical methods, hormonal contraceptives, population problem of India.
4. First aid- Emergency treatment in shock, snake bite, burns, poisoning, heart disease, fracture and resuscitation methods. Elements of minor surgery and dressing,
5. Environment and health- Sources of water supply, water pollution, purification of water, health air, noise, light, solid waste disposal and control- medical entomology, anthropod borne diseases and control, rodents, animal and diseases.
6. Fundamental principles of microbiology, classification of microbes, isolation, straining techniques of organisms of common diseases.
7. Communicable diseases- Causative agents, modes of transmission and prevention.
 - (a) Respiratory infections- Chicken pox, measles, Influenza, diphtheria, whooping cough and tuberculosis.
 - (b) Intestinal infections- Poliomyelitis, Hepatitis, Cholera, Typhoid, Food poisoning, Hook worm infection.
 - (c) Anthropod borne infection- Plague, Malaria, Filariasis.
 - (d) Surface infections- Rabies, Trachoma, Tetanus, Leprosy.
 - (e) Sexually transmitted diseases- Syphilis, Gonorrhoea, AIDS.
10. Non communicable diseases- Causative agents, prevention, care and control, cancer, diabetes, blindness, cardiovascular diseases.
11. Epidemiology- It's scope, methods, dynamics of disease transmission, immunity, immunization, Immunological products and their schedule, principle of disease control and prediction, hospital acquired infection, prevention and control, disinfection, types of disinfection, disinfection procedures for faeces, urine, sputum, dead bodies, instruments.

PHARMACOLOGY & TOXICOLOGY

1. Introduction to Pharmacology, scope of pharmacology.
2. Routes of administration of drugs, their advantages and disadvantages,
3. Various process of absorption of drug and factors affecting them, Metabolism, distribution and excretion of drugs.
4. General mechanism of drug action and the factors which modify drug action.
5. Pharmacological classification of drugs. The discussion of drug should emphasise following aspects-
 - (i) Drugs acting on central nervous system:
 - (a) General anaesthetics, adjunction to anaesthesia, intravenous anaesthetics,
 - (b) Analgesic antipyretics and non steroidal anti- inflammatory drugs, Narcotics analgesic, Antirheumatic and anti-gout remedies, Sedatives and Hypnotics, Psychopharmacological agents, Anti convulsants, analeptics.
 - (c) Centrally acting muscles relaxants and anti parkinsonism agents.
 - (ii) Local anaesthetics.
 - (ii) Drug acting on autonomic nervous system.
 - (a) Cholinergic drug, Anticholinergic drugs, anti cholinesterase drugs,
 - (b) Adrenergic drugs and adrenergic receptor blockers.
 - (c) Neurone blockers and ganglion blockers.
 - (d) Neuromuscular blockers, drugs used in myasthenia gravis.

- (iii) Drugs acting on eyes, mydriatics, drugs used in glaucoma.
 - (iv) Drugs acting on respiratory system- Respiratory stimulants, Bronchodilators, Nasal decongestants, Expectorants and Antitussive agents.
 - (v) Antacids, Physiological role of histamine and Anti histamines, Prostaglandins.
 - (vi) Cardio vascular drugs, Cardiotonics, Antiarrhythmic agents, Antianlginal Agents, Anti hypertensive agents, Peripheral Vasodilators and drugs used in arterosclerosis.
 - (vii) Drugs acting on the blood and blood forming organs, Haematinics, Coagulants and anti coagulants, Haemostatics, Blood substitutes and plasma expanders.
 - (viii) Drugs affecting renal function- Diuretics and anti diuretics.
 - (ix) Hormones and hormone antagonists- hypoglycemic agents, Anti thyroids drugs, sex hormones and oral contraceptives, Corticosteroids.
 - (x) Drugs acting on digestive system- Carminatives, digestants, Bitters, Antacids and drugs used in peptic ulcers, purgatives and laxatives, Anti diarrhoeals, Emetics, Anti emetics, Anti- spasmotic.
- (6) Chemotherapy of microbial diseases- Urinary antiseptic, Sulfonamides, Penicillin, Streptomycin, Tetracyclines and other antibiotics, Anti tubercular agents, Anti fungal agents, Anti viral drugs, Anti leprotic drugs.
- (7) Chemotherapy of protozoal diseases, Anti helminthic drug.
- (8) Chemotherapy of cancer.
- (9) Disinfectants and antiseptic.
- A detailed study of the action of drugs on each organ is not necessary.

PHARMACEUTICAL JURISPRUDENCE

1. Origin and nature of pharmaceutical legislation in India, its scope and objectives. Evolution of the " Concept of Pharmacy" as an integral part of Health care system.
2. Principles and professional ethics, Critical study of the code of Pharmaceutical Ethics drafted by Pharmacy Council of India.
3. Pharmacy Act, 1948- The general study of the Pharmacy Act with special reference to Education Regulations, working of State and Central Councils, Constitution of these Councils and functions, Registration procedure under the Act.
4. The drugs and cosmetics Act, 1940- General study of drugs and cosmetics Act and Rules there under. Definitions and salient features related to retail and wholesale distribution of drugs. The powers of Inspectors, the sample procedures and the procedure and formalities in obtaining license under the rules. Facilities to be provided for running a pharmacy effectively. General study of the schedules with special reference of schedules C, C1, F, G, J, H, P and X and salient features of labeling and storage condition of drugs.
5. The Drugs and Magic Remedies (Objectionable advertisements) Act, 1954- General study of the Act, Objectives, special reference to be laid on Advertisements. Magic remedies and objectionable and permitted Advertisements- diseases which can not be cured.
6. Narcotic drugs and Psychotropic Substances Act 1985-A, brief study of the Act with special reference to its objectives, offences and punishment.
7. Brief introduction to the study of the following acts-
 - (a) Latest Drug (Price Control) Order in force.
 - (b) Poison Act- 1919 (As amended to the date).
 - (c) Medicinal and Toilet Preparations (Excise Duties) Act, 1955 (as amended to date).
 - (d) Medical Termination of Pregnancy Act, 1971 .

DRUG STORE AND BUSINESS MANAGEMENT **Part 1- COMMERCE**

1. Introduction- Trade, Industry and Commercial functions and subdivision of Commerce, Introduction to Elements of Economics and Management.
2. Forms of business organizations.
3. Channels of distribution.
4. Drug house management- Selection of site, Space lay out and legal requirement. Importance and objectives of purchasing, selection of suppliers, credit information, tenders, contract and price determination and legal requirements there to. Codification, handling of drug stores and other hospital supplies.
5. Inventory control- Objectives and importance , modern techniques like ABC, VED analysis, the lead time, inventory carrying cost, safety stock, minimum and maximum stock level, economic order quantity, scrap and surplus disposal.
6. Sales Promotion, Market research, salesmanship, quality of salesman, Advertising and window display.
7. Recruitment, training, evaluation and compensation of the pharmacist.
8. Banking and Finance Service and functions of banks, Finance planning and source of finance.

Part-2 - ACCOUNTANCY

1. Introduction to accounting concepts and convention, double entry book keeping, different kinds of account.
2. Cash book.
3. General ledger and trial balance,
4. Profit and loss account, balance sheet.
5. Simple techniques of analyzing financial statements.
6. Introduction to budgeting.

HOSPITAL AND CLINICAL PHARMACY

Part 1- Hospital Pharmacy

1. Hospitals- Definition, Function, Classification based on various criteria, organization, management and Health delivery system in India.
2. Hospital pharmacy-
 - (a) Definition.
 - (b) Function and objectives of Hospital Pharmaceutical Service.
 - (c) Location, layout, flow chart of material and man.
 - (d) Personnel and facility requirement requirement including equipments based on individual and basic needs. Requirement and abilities required for Hospital pharmacist.
3. Drug distribution system in Hospitals:
 - (a) Out patient service.
 - (b) In patient services- (i) types of services, (ii) detailed discussion of Unit dose system, Floor ward stock system, satellite pharmacy services, Central Sterile services, Bed side pharmacy.
4. Manufacturing:
 - (a) Economical consideration, estimation of demand.
 - (b) Sterile manufacture- Large and small volume parenterals, facilities, requirements, layout, production planning, man power requirements.
 - (c) Non sterile manufacture- Liquid orals, externals- bulk concentrates.
 - (d) Procurement of stores and testing of raw material.
5. Nomenclature and uses of surgical instruments and Health Equipments and health accessories.
6. PTC (Pharmacy Therapeutic Committee), Hospital Formulary system and their organization, functioning, composition.
7. Drug Information service and drug Information bulletin.

8. Surgical dressing like cotton, gauze, bandage and adhesive tapes including their pharmacopocial test for quality. Other hospital supplies e.g. I V sets, Ryals tubes, Catheters, Syringes etc.
9. Application of Computer in maintenance of records, inventory control, medication monitoring, drug information and data storage and retrieval in hospital and retail pharmacy establishments.

Part-2 - Clinical Pharmacy

1. Introduction to Clinical Pharmacy Practice- definition, scope.
2. Modern dispensing aspects- Pharmacists and patient counseling and advice for the use of common drugs, medication history.
3. Common daily terminology used in practice of medicine.
4. Diseases, manifestation and pathophysiology including salient systems to understand the disease like Tuberculosis, Hepatitis, Rheumatoid Arthritis, Cardiovascular diseases, Epilepsy, Diabetes, Peptic Ulcer, Hypertension.
5. Physiological parameters with their significance.
6. Drug Interactions:
 - (a) Definition and introduction,
 - (b) Mechanism of drug interaction,
 - (c) Drugs- drug interaction, with reference to analgesics, diuretics, cardiovascular drugs, Gastrointestinal agents, Vitamins and Hypoglycemic agents.
 - (d) Drug- food interaction.
7. Adverse drug reactions: definition and significance. Drugs- induced diseases and Teratogenicity.
8. Drugs in clinical Toxicity- Introduction, general treatment in poisoning, systematic antidotes, Treatment of insecticide poisoning, heavy metal poison, Narcotic drugs, Barbiturates, Organo phosphorous poison.
9. Drug dependence, drug abuse, addictive drugs and their treatment, complication.
10. Bio- availability of drugs including factors affecting it.

Syllabus : Nurse Grade 'A'
ANATOMY AND PHYSIOLOGY

1. Introduction to anatomical terms.
2. Organization of body cells, tissues, organs, systems, membranes and glands.
3. Skeletal system-
 - Bones: Types, structure, function.
 - Axial Skeleton,
 - Appendicular Skeleton,
 - Joints: Classification, Structure and function.
4. Muscular System-
 - Types, structure and function,
 - Position and action of chief muscles of the body.
5. Cardio-vascular system-
 - Blood: Composition, clotting and blood group, cross matching, blood products and their use.
 - Heart: Position, Structure, conduction system, function and cardiac cycle.
 - Blood vessels: Structural differences and position of chief vessels.
 - Circulation of Blood: Systemic, Pulmonary and portal circulation.
 - Blood pressure and pulse.
 - Lymphatic system: Lymph vessels, glands, duct and lymph circulation, lymph tissues in the body, spleen.
6. Respiratory System-
 - Structure and function of respiratory organs.
 - Physiology of respiration.
 - Characteristics of normal respiration and it's deviations.
7. Digestive System-
 - Structure and function of organs of digestion and accessory organs.
 - Process of digestion and absorption.
 - Metabolism: meaning and metabolism of food constituents.
8. Excretory System-
 - Structure and function of organs of urinary system.
 - Structure and function of skin.
 - Regulation of body temperature.
 - Fluid and electrolyte balance.
9. Nervous System-
 - Types, structure and function of neurons.
 - Central nervous system : Structure and function.
 - Autonomic nervous system : Structure and function.
10. Endocrine System-
 - Structure and function of pituitary, pancreas, thyroid, parathyroid, thymus and supra renal glands.
 - Sense Organs-
 - Structure and function of eyes, ears, nose and tongue.
 - Physiology of vision, hearing and equilibrium.
11. Reproductive System-
 - Structure and function of reproductive and accessory organs.
 - Process of reproduction , menstrual cycle and menopause.
 - Reproductive health.
 - Structure and function of male reproductive system.

MICROBIOLOGY

1. Introduction-
 - Brief historical review of bacteriology and microbiology.
 - Scope and usefulness of microbiology in nursing.
2. Micro- Organism-
 - Classification, structure, size, method and rate of reproduction.
 - Factors influencing growth.
 - Pathogenic and non pathogenic organism.
 - Normal flora of the body.
 - Common diseases caused by different types of Micro organisms.
3. Infection and it's transmission-
 - Sources of infection.
 - Growth of microbes.
 - Portals of entry and exit of microbes.
 - Transmission of infection.
 - Collection of specimen.
4. Immunity-
 - Types of immunity.
 - Hyper sensitivity and autoimmunity.
 - Collection of specimen.
5. The control and destruction of micro- organism-
 - Principles and methods of microbial control.
 - Sterilization : dry heat, moist heat, chemicals and radiation.
 - Disinfection: Physical, natural, gases, chemicals used and preparation of lotion.
 - Chemotherapy and antibiotics.
 - Medical and surgical asepsis, cross infection.
 - Control of spread of infection.
 - Pasteurization.
 - Bio- safety and waste management.
6. Introduction to Laboratory techniques-
 - Microscope: Parts and uses. Handling and care of microscope.
 - Introduction of culture media.
 - Staining and examination of slides.
 - Preparation and examination of smears.

PSYCHOLOGY

1. Introduction-
 - Definition, scope of Psychology and it's importance in nursing profession.
2. Psychology of Human Behavior-
 - Dynamics of behavior, motivation and behavioral process of adjustment, adjustment and mal adjustments, unconscious behavior.
 - Frustration : source and nature of frustration, measures to overcome frustration.
 - Conflicts: Types, unconscious conflict, resolution, conflict and nursing.
 - Adjustment Mechanism: meaning, types and importance.
 - Attitudes: meaning, development, changes in attitude, attitude and nursing.
 - Emotions: in health and disease, emotional situations, control of emotions, effects of emotional reaction on health.
 - Habits: formation, type, effective habit formation, advantages and disadvantages of habit formation.
3. Learning-

- Nature of learning, laws and types of learning, factors promoting effective learning, memory and forgetfulness.
 - Thinking and reasoning.
 - Nature and type of thinking.
 - Problem solving and reasoning.
4. Observation-
 - Attention and perception, factors affecting attention and observation and errors in perception.
 5. Intelligence-
 - Definition, individual differences in intelligence.
 - Mental ability and nature of intelligence.
 - Measurement of intelligence.
 - Development of intelligent behavior.
 6. Personality-
 - Meaning, types, factors affecting development of personality.
 - Characteristics of various age group: child, adolescent, adult and aged.
 - Will and character.

SOCIOLOGY

1. Introduction-
 - Concept, scope, nature and importance of Sociology in Nursing.
 - Socio culture and economic aspects of the community and their effects in health and illness.
2. The Individual-
 - Brief review of human growth and development.
 - Effects of environment on childhood, adolescence, adulthood and old age.
 - The rights and responsibilities of the individual in democratic society.
3. The family-
 - Family as a social institution and basic unit for health service.
 - Basic needs of the family, it's structure and relationship.
 - Family life education: pre- marriage, marriage and parenthood.
4. The Society-
 - Concept.
 - Group: Types, Structure, inter- group relationship, group cycle, group behavior and group morale.
 - Social changes, Social control, social stratification.
 - Rural and urban society.
 - Social problems: Unmarried mothers, dowry system, prostitution, drug addiction, alcoholism, delinquency, handicapped, child abuse, women abuse.
 - Social agencies and remedial measyres.
5. The Community-
 - Definition, characteristics and culture.
6. Economy-
 - Resources of the country: natural, occupational, agricultural, industrial etc.
 - Social security.
 - Population explosion: It's effects on economy and need for population control.
 - Budgeting for a family, per capita income and it's impact on health and illness.

FUNDAMENTALS OF NURSING

1. Introduction to nursing-
 - Nursing: Definition, meaning, Nature, scope, principles and history of nursing.
 - Nurse: Definition and meaning, preparation of a nurse, qualities- personal, professional.

- Ethics in nursing, Role and responsibilities of a nurse.
 - Health care agencies: Hospital and community, Types of hospitals and their functions.
 - Holistic approach to nursing.
 - Comprehensive nursing care.
2. Nursing care of patient/ Client-
- Introduction to the sick and well.
 - Determinants of health status.
 - Patient/ Client : as an individual, member of the family, society, effects of illness and hospitalization on patient and his family.
 - Admission procedure, reception of patient, care of patient's belongings.
- Bed and bed making-
- Principles of bed making, factors to be considered in selecting and making bed, different types of beds and their uses.
- Maintenance of therapeutic environment-
- Temperature, light, noise and humidity.
- Psycho social environment-
- Meaning and it's importance, aesthetic consideration in the environment, color scheme, beauty and flower arrangements.
- Nursing process and nursing care plan
- Meaning, importance and steps in development.
- Recording and reporting
- Importance, types and nurses' responsibilities.
- Discharging a patient-
- Preparation of the patient physically and mentally, discharge procedure, hospital policies, preparation of the patient's relatives for discharge.
 - Follow up and Rehabilitation revisit, treatment of compliance and referral.
3. Basic nursing care and needs of the patient-
- Hygienic need and physical needs
- Importance of maintaining good personal and environmental hygiene in health and disease.
 - Nurse's role in maintaining good personal and environmental hygiene.
- Care of skin and Mucous membrane-
- Bed bath, care of hair, eyes, nose, ears, teeth, genitals, hands and feet.
- Nutritional needs
- Importance of diet in health and disease, factors affecting the normal nutrition in sickness, nurse's role in maintaining good nutrition, feeding helpless patients, maintenance of input and output record.
- Elimination needs
- Problems in sickness, constipation and diarrhea, retention and incontinence in urine.
 - Nurse's role in meeting elimination needs.
- Safety needs
- Environmental hazards, role of nurses in preventing health hazards.
- Communication needs.
- Interpersonal relationship, cultural/ spiritual/ religious needs.
- Activity and exercise-

- Importance of activity and exercise in health and sickness, active and passive exercise.

Physical comforts

- Comfort: meaning and its importance in health and disease, factors promoting and inhibiting physical comfort, comfort devices and their uses, body mechanics, position.

Moving, shifting and lifting of patient

- Care of pressure points, bed sores: causes, sign, symptoms, prevention and nursing care.
- Shifting of patient from one side to another, from bed to wheel chair and bed to stretcher.

4. Assessment of patient/ client

- Principles and importance of assessment, methods of assessment: observation, palpitation, auscultation, percussion, developing skill in observation.

Physical Assessment

- Height, weight, posture, speech.
- Physiological Assessment.
- Temperature, pulse, respiration and blood pressure.
- Characteristics of normal and abnormal (T.P.R. and B.P.) and factors influencing the variations.
- Urine, stool, vomit, normal and abnormal behavior and its deviation.

5. Therapeutic Nursing care and Procedures

Asepsis:

- Hand washing, hand scrubbing, use of mask, gown, gloves.
- Disinfection techniques, sterilization techniques.
- Autoclaving, boiling, flaming, ultra violet rays.

Care and sterilization of :

- Linens, bed, mattress, floor, walls, cupboard and other articles.
- Rubber goods, dressings, instruments, needles, syringes, enamel articles.
- Barrier nursing and isolation.

Care of Respiratory system

- Inhalation: dry inhalation, moist inhalation, jug, Nelson's inhaler, steam tent, electric inhalers, suction oro-nasal.
- Collection of sputum for examination.

Care of Gastro Intestinal Treatment-

- Preparation and giving of enema: Retention enema, evacuation enema, suppository, passing of flatus tube.

Care of Genito Urinary system

- Perineal care of terminally ill patients and patients with urinary catheter.
- Collection of specimens of urine and stool for routine and culture examination.

Care of skin and mucous membranes-

- Cold application : ice cap, cold packs, use of evaporating lotion.
- Hot application: Use of hot water bottle, dry fomentation, moist fomentation, medicated fomentation.

6. Basic needs and care in special conditions-

- Care of patient with fever, unconscious patient, patient with fluid imbalance, patient with dyspnoea.
- Care of terminally ill patient.
- Care of physically handicapped.

Dying patient-

- Signs and symptoms of approaching death, needs of the dying patient and his relatives, care of the dying, last offices, packing of dead bodies in non-communicable and communicable diseases.
7. Introduction to Pharmacology-
 - Concept of Pharmacology,
 - Classification of drugs,
 - Administration of drugs,
 - General action of drugs.
 - Nursing implication in application of drug.

FIRST AID

1. Introduction
 - Importance of first aid and rule of first aid.
 - Concept of emergency
2. First aid in Emergency situations
 - Fire, burns, fractures, accidents, poisoning, drowning, haemorrhages, insect bites, foreign bodies.
 - Transportation of injured.
 - Bandaging and splinting.
3. Community Emergencies and Resources

Community Emergencies

 - Fire, explosions, floods, earthquakes, famines.
 - Immediate and late roles of nurses.
 - Need for rehabilitation.

Community Resources

 - Police Assistance,
 - Voluntary agencies : Local, National and international agencies.
 - Ambulance services: Their functions in relation to emergencies.

PERSONAL HYGIENE

1. Introduction
 - Concept of health and it's relation to successful living.
2. Maintenance of Health
 - Determinants of health, building of good health habits, immunization, correction of defects, maintenance of health records.
3. Physical Health.
 - Care of skin, hair, teeth, eyes, ears, hands and feet, Rest and sleep, exercise, activity, recreation, posture, nutrition, elimination, menstrual hygiene,
4. Mental Health-
 - Characteristics of mentally healthy person,
 - Mental hygiene in intrauterine , infancy, childhood, Adolescence, adulthood and old age.

COMMUNITY HEALTH NURSING-I

1. Introduction to community health and community Health Nursing
 - Health and diseases.
 - Community, community health, community health nursing.
 - Dimensions of Health.
 - Health determinants.
 - Indicators of health.

- Levels of health care.
 - Primary health care. Elements and principles, Nurse's role in primary health care.
 - Health for all by 2000 AD.
 - Evolution and development of community health nursing in India and its present concept.
 - Differences between institutional and community health nursing.
 - Community health team functioning.
 - Philosophy, goals, objectives and community health nursing practice.
 - Qualities and functions of a community health nurse.
2. Community Health nursing Process
 - Concepts and definition.
 - Importance of community health nursing process.
 - Steps of the process: Community identification, population composition, health and allied resources, community assessment, planning and conducting community health nursing care services.
 3. Health Assessment-
 - Characteristics of healthy individuals.
 - Identification of deviation from normal health.
 4. Principles of Epidemiology and Epidemiological Methods.
 - Definition and aim of epidemiology.
 - Basic tools of measurement in epidemiology.
 - Uses of epidemiology.
 - Disease cycle.
 - Spectrum of disease.
 - Levels of prevention of disease.
 - Disease transmission- direct and indirect.
 - Immunity.
 - Immunizing agents and immunization schedule.
 - Control of infectious diseases.
 - Disinfection.
 5. Family Health Nursing Care.
 - Concept, goal, objectives, family as a unit of health, family health care services.
 - Family health and nursing care process- Family health assessment, family care plan.
 - Family health services- Maternal, child care and family welfare services.
 - Family health records.
 6. Family health care settings.
 - Home visiting
 - Purpose.
 - Principles.
 - Planning and evaluation.
 - Bag technique.
 - Clinic
 - Purpose.
 - Types of clinics and their functions.
 - Setting up of various clinics.
 - Functions of Health personnel in these clinics.

7. Referral System.
8. Records and reports-
 - Types of records.
 - Uses of records.
 - Essential requirements of records.
 - Cumulative records.
 - Design of cards/ records.
9. Minor ailments
 - Classification.
 - Early detection and management .
 - Standing instructions/ orders.

COMMUNITY HEALTH NURSING–II

1. Health system in India (Organizational Set up)
 - Central level.
 - State level.
 - District level.
 - Block and local level.
2. Health care services in India
 - Health care concepts and trends,
 - Health care delivery system,
 - Public Sector: Rural areas, urban areas, health insurance, scheme, other agencies (Defense, Railways etc.)
 - Voluntary health agencies.
 - Indigenous system of medicine.
 - Nurse's role in health care services.
3. Health planning in India
 - National Health Policy.
 - National Health Planning.
 - Five years plan
 - Health committees reports.
4. Specialized community health services and nurse's role-
 - R.C.H. (Reproductive health and child care).
 - School health services.
 - Industrial nursing.
 - Geriatric nursing.
 - Care of handicapped: Physically and mentally challenged.
 - Rehabilitation nursing.
5. Nurse's role in in National Health Program
 - Major health problems in India.
 - National control and development program.
 - National eradication programs.
 - Nurse's role in national health programs.
6. Demography and Family welfare.

Demography

 - Concept.
 - Trends in India and it's implications.
 - Concept of fertility and infertility.
 - Small family norms.

- Family welfare
- Concept.
 - Importance.
 - Aims and objectives.
 - Family planning methods.
 - Family welfare policy.
 - National program.
 - Nurse's role in family welfare program.
7. Health team
- Concepts.
 - Composition.
 - Function.
8. Role of nursing personnel at various level
- Multipurpose health worker: Male and Female.
 - Public health nurse.
 - Public health nurse supervisor.
 - District public health nursing officer.
9. Vital health statistics
- Concept,
 - Uses,
 - Sources,
 - Important rates and indices.
 - Vital health records and their utility.

ENVIRONMENTAL HYGIENE

1. Introduction
- Components of environment.
 - Importance of environmental health.
2. Environmental factors contributing to health
- Water
- Safe and wholesome water.
 - Uses of water.
 - Water pollution.
 - Water borne diseases.
 - Water purification.
- Air
- Air pollution.
 - Prevention pollution.
- Waste
- Refuse.
 - Excreta.
 - Sewage.
 - Health hazards of these wastes.
- Housing
- Site.
 - Basic amenities.
 - Types and standard of ventilation.
 - Requirement of good lighting.
 - Natural and artificial lighting.
- Noise
- Sources of noise.
 - Community noise levels.
 - Effects of noise.

- Noise control.
- Anthropods of Public Health Importance.
- Mosquitoes, housefly, sand fly, human louse, rat fleas etc.
 - Rodents.
 - Control measures for these anthropods.
3. Community Organization to promote Environmental Health
- Levels and types of agencies: National, State, Local, Government, Voluntary and Social agencies.

HEALTH EDUCATION AND COMMUNICATION SKILLS

1. Introduction
 - Concept, definition, aims and objectives of health education.
 - Process of change/ modification of health behavior.
 - Opportunities for health education in hospital and community.
 - Scope of health education.
 - Levels and approaches of health education.
 - Principles of health education.
 - Nurse's role as health educator.
2. Communication skills
 - Definition of communication
 - Purpose of communication.
 - Process of communication.
 - Barriers of communication.
 - Types of communication.
 - Importance and art of observing and listening in communication.
3. Methods and Media of health education.
 - Methods of health education.
 - Types of media (A.V. Aids)
 - Advantages and limitations of each.
 - Preparation and uses of simple aids.
4. Health Education Agencies.
 - National.
 - State.
 - District.
 - Local.

NUTRITION

1. Introduction
 - Changing concepts- food habits and customs.
 - Relationship of nutrition to health.
2. Classification of food
 - A. Classification by origin
 - Food of animal origin.
 - Food of vegetable origin.
 - B. Classification by chemical composition and sources.
 - Carbohydrates.
 - Proteins.
 - Fats.
 - Minerals.
 - Vitamins.
 - Water.
 - C. Classification by predominant functions

- Body building food
 - Energy giving food.
 - Protective food.
- D. Classification by nutritional value.
- Cereals and millets
 - Pulses (Legume)
 - Vegetables.
 - Fruits
 - Animal foods
 - Fats and oils
 - Sugar and Jaggery
 - Condiments and spices.
 - Miscellaneous food.
3. Normal dietary requirements and deficiencies of each of the constituents of the constituents of the food-
- The calorie.
 - Nutritive value of food items and their measures used.
 - Balanced diet.
 - Methods of calculating normal food requirements, influence of age, sex and activity.
 - Factors affecting selection and planning of meals.
 - Budgeting for food. Low cost menu.
 - Diseases caused by deficiency of proteins, fat, carbohydrates, minerals and vitamins.
4. Preparation, preservation and storage of food-
- Principles of cooking.
 - Methods of food preparation and their effects on food and food constituents., advantages and limitation of each.
 - Household methods of preserving and storing the food.
 - Commercially prepared food and its adulteration.
 - Precaution in selection, preparation and storage of food.
5. Introduction to diet therapy.
- Methods of modifying diet in relation to calorific value by increasing or decreasing of constituents.
 - Diet and the patients.
 - Environmental, psychological and cultural factors in acceptance of diet by the patient.
 - Serving of food.
 - Feeding of helpless patients.
 - Opportunities for teaching.
6. Community nutrition.
- Concept of community nutrition,
 - Nutritional needs for special groups: infants, children, pregnant women, lactating mothers, old people etc.
 - Nutrition education : needs and methods.
 - Substitute for non- vegetarian food.
 - Methods of improving an ill balanced diet.
 - Community nutrition program.
 - Food hygiene and laws related to food.
7. Common preparational practicals
- Beverages: Tea, coffee, barley water, fruit juice, shakes, lassi.
 - Egg preparation: Scrambled eggs, egg flip, omlette, poached egg.
 - Soups: Tomato, bone, vegetable(s), liver etc.

- Light diet: Gruel, khichri, daliya, kanji, boiled vegetables, salads, custards etc. (as per the regional preference.)

ENGLISH

1. Grammar
 - The sentence.
 - Different parts of speech in brief.
2. Composition
 - Analysis, transformation and synthesis of sentences.
 - Correct uses of sentences.
 - Reading comprehension- Exercise of prescribed answers.
3. Written Composition
 - Paragraph writing.
 - Story writing.
 - Comprehension.
 - Precise writing.
 - Essay writing.
4. Vocabulary
 - Conversation.
 - Speaking skills.

MEDICAL SURGICAL NURSING - I

1. Introduction.
 - Brief history of evolution of modern medicine and surgery and theory of illness and its causation.
 - Illness as human experience.
 - Nursing process and nursing care plan.
2. Nursing Assessment'
 - Health assessment.
 - Physical examination.
 - General Clinical investigations.
3. Patho Physiological Mechanism of Diseases.
 - Inflammation/.
 - Stress adaptation.
 - Defense against injury.
 - Nutritional consideration.
4. Altered Immune Response'
 - Review of normal Immunity.
 - Altered Immune Response.
 - Nursing management of Immuno therapy.
 - Auto Immune disease.
 - Graft versus host disease.
5. Clinical Pharmacology.
 - Terminology.
 - Drugs and laws.
 - Basic clinical pharmacology.
 - Sources of drugs, action, side effects, doses of drugs.
 - Different pharmacological preparations.
 - Administration of medicine to patient.
 - Nursing implication of administration of drugs.
6. Nurse's role in Management of Fluids, Electrolytes And Acid Base Balance.

- Water content of body.
 - Homeostasis.
 - Review mechanism of controlling fluid and electrolyte movement.
 - Review regulation of fluid and electrolyte.
 - Fluid and electrolyte imbalance and their therapeutic management.
7. Management of patient in pain.
- Concept.
 - Assessment.
 - Types, location.
 - Nursing management.
 - Analgesic drug.
 - Therapeutic approaches to pain.
8. Operation theatre technique
- Physical Environment
- Operation theatre: Cleaning of rooms, tables, trolley, lights and other equipments.
 - Pre operative holding area.
- Theatre Technique
- Scrubbing- hand washing.
 - Gowning.
 - Gloving.
 - Positioning of patient for various surgical procedures.
- Preparation of Theatre equipment & supplies
- Cleaning.
 - Packing.
 - Sterilization.
 - Needles, Sutures- types and their uses.
 - Role of a nurse in care of patient in the theatre.
9. Management of patient undergoing surgery.
- Assessment of pre- operative patient: physical, psychological and physiological aspects.
- Nursing management of pre- operative patient.
- Intra operative management.
- Surgical team.
 - Nurse's function in operation theatre.
 - Anesthesia: Classification, anesthetic agents and role of a nurse in anesthesia.
- Post- operative management- Immediate and routine.
- Transferring patient from Operation theatre.
 - Patient in recovery room.
 - Recovery from anesthesia.
 - Post- operative nursing management.
 - Administration of post operative order.
 - Post operative complications: Observation, prevention and management.
10. Nursing management of patients with impaired respiratory function and gaseous exchange.
- Assessment of respiratory function.
 - Management of patient with impaired respiratory function.
 - Respiratory intensive care.
 - Management of patient with disorders of upper respiratory tract.
 - Management of patient with disorder of upper respiratory tract.
 - Management of patient with disorder of the chest and lower respiratory tract.
11. Nursing management of patient with renal and urinary disorder.
- Assessment of renal and urinary function.

- Management of patients with urinary and renal disorder.
 - Renal failure and dialysis.
 - Renal transplant.
12. Nursing management of patient with digestive and gastro- intestinal disorders.
- Assessment of hepatic and biliary function.
 - Management in hepatic and biliary disorder.
 - Assessment of endocrine function.
 - Management of endocrine disorders.
13. Nursing management of patients with neurological disorder.
- Assessment of neurological function.
 - Management of patients with neurological dysfunction.
 - Management of patients with neurological disorder.
14. Nursing management of patients with disorders of connective tissues and collagen disorder.
- Assessment.
 - Management of patients with disorder of connective tissues and collagen.
15. Nursing management of elderly.
- Assessment of elderly.
 - Ageing process.
 - Helping in promoting wellness and self care.
 - Health problem in elderly.
16. Emergency management.
- Medical surgical emergencies.
 - Nurse's role in emergency conditions.

MEDICAL SURGICAL NURSING - II

- 1 Oncology/ Nursing
- Nursing management of patient with abnormal cell growth.
 - Assessment.
 - Problems and management.
 - Classification of Cancer.
 - Detection, prevention.
 - Treatment modalities.
- Nursing management of patient receiving:
- Chemotherapy.
 - Radiation.
 - Late effects of chemotherapy and radiation.
 - Nursing management of patient undergoing radical surgery Bone marrow transplant and its management.
 - Nursing management of terminally ill patient.
 - Rehabilitation of cancer patients..
2. Nursing Management of Patients with Diseases of male Genito-Urinary Tract
- Assessment of genito-urinary function

- Disorders of male genito-urinary tract and its management.
3. Nursing Management of Patients with Disorders of Breast
 - Assessment
 - Disorders of breast and breast cancer.
 - Management of patient undergoing surgery for cancer breast.
 4. Nursing Management of Patients with Diseases and Disorders of Integument System
 - Assessment of skin and its' functions.
 - Inflammatory and non-inflammatory disorders and diseases and its management.
 - Infestations, infectious and non-infectious diseases and their management
 - Skin cancer
 - Special dermatological therapy.
 - Burn and its management.
 5. Nursing Management of Patients with ophthalmic Disorders and Diseases
 - Assessment of function of eyes.
 - Diseases and disorders of eyes and their management.
 - Review national programmes on blindness and trachoma.

Hospital Cornea Retrieval

 - Grief counseling, eye collection in hospitals
 - Motivation for eye donation.
 - Obtaining consent for eye donation.
 - Transplantation of human organs bill and eye collection.
 - Eye banking in India
 6. Nursing Management of Patients with Disorders and diseases of ear, Nose and throat.
 - Assessment of the function of ear, nose and Throat.
 - Disorders and diseases of the ear, nose and throat.
 - Management of disorders and diseases of ear, nose and throat.
 7. Nursing Management of Patients with Cardio-Vascular, Circulatory and Hematological Disorders.
 - Assessment of cardio-vascular functions.
 - Management of patients with cardio-vascular diseases.
 - Management of patient in I.C.U. and C.C U.
 - Management of patient with cardio-vascular surgery
 - Assessment and management of circulatory, hematological disorders and problems of peripheral circulation.
 - Phlebotomy Procedure in blood donors.
 - Sample and request for blood transfusion.
 - Safety checks and records for blood transfusion.
 - Adverse transfusion reaction and their management.
 - Blood bank functioning- Hospital transfusion committee.
 - Blood donor care, post donation management counseling of blood donors.
 - Inventory of necessary requirement for the transfusions.
 8. Nursing Management of Patients with Communicable Diseases.
 - Assessment.
 - Review of infection, how it spreads and its control.
 - Preparation, care and administration of antisera and vaccines.
 - Isolation - review of epidemiology and control measures.
 - Management of various infectious diseases.
 - **Diseases caused by:**
Virus - Measles, Chicken pox, Influenza, Small pox, Mumps, Encephalitis, Infective Hepatitis, Poliomyelitis, Rabies, AIDS.

Bacteria - Diphtheria, Whooping Cough, Tetanus, Typhoid, Dysentery, Gastro-enteritis, Cholera, Meningococcal Meningitis, Tuberculosis.

Zoonosis - Kala-azar, Plague, Relapsing fever.

Mosquito - Malaria, Filariasis, Yellow fever, Dengue fever.

9. Management of Patients with Sexually transmitted diseases
 - Assessment.
 - Sex health and hygiene.
 - Gonorrhoea, Syphilis, Granuloma venerum, Chancroid, Granuloma inguinale and AIDS.
10. Nursing Management of Patients with Musculoskeletal Disorders and Diseases.
 - Assessment of musculo-skeletal functions.
 - Disorders and diseases of bone, muscle, cartilage, ligaments and their management.
 - Rehabilitation, physiotherapy and occupational therapy.
11. Emergency and Disaster Nursing.
 - Natural *calamities*.
 - Manmade disaster.
 - Community resources available to meet such calamities.
 - Nurse's role in disaster management.

MENTAL HEALTH / PSYCHIATRIC NURSING

1. Introduction
 - Meaning of mental health and mental illness
 - Definition of terms used in psychiatry.
 - Review of mental mechanisms (ego median ins).
 - Review of personality and types of personality.
2. History of Psychiatry
 - Contributors to psychiatry.
 - History of psychiatric nursing.
 - Trends in psychiatric nursing.
3. Mental Health Assessment
 - Psychiatric history taking
 - Interview technique and mental status examination
4. Community Mental Health
 - Concept, importance and scope.
 - Attitude and misconceptions towards mentally ill.
 - Prevention of mental illness (Preventive Psychiatry) during childhood, adolescence, adulthood and old age.
 - Community mental health services.
 - Role of nurses in community mental health services.
5. Psychiatric Nursing Management
 - Definition of psychiatric nursing.
 - Principles of psychiatric nursing.
 - Nursing process.
 - Role of nurses in providing psychiatric nursing care.
 - Therapeutic nurse-patient relationship.

- Communication skills.
6. Mental Disorders and Nursing Interventions.
- Etiology- various etiological theories (genetics; biochemical, psychological, etc.)
 - Classification of mental disorders.
 - Organic mental disorder-Acute brain syndrome.
 - Chronic brain syndrome.
 - Functional Mental Disorders.
 - o Prevalence, etiology, signs and symptoms, prognosis, medical and nursing management.
 - o Schizophrenic disorders.
 - o Mood (affective) disorders.
 - o Manic Depressive Psychosis.
 - o Anxiety states.
 - Definition, etiology, signs, symptoms, medical and nursing management of: Phobic disorders, obsessive compulsive disorders, depressive neurosis, conversion disorders, dissociative reaction, hypochondriasis. Psychoactive disorders, alcohol, drugs and other psychoactive substance abuse.
7. Bio-Phychosocial Therapies
- Psychopharmacology**
- Definition, classification of drugs, antipsychotic, antidepressant, antimanic antianxiety agents.
 - Role of nurses in psychopharmacology).
- Psychosocial therapies**
- Definition of psychosocial therapies.
 - Types of therapies: individual and group therapy, behavior therapy\ occupational therapy.
 - Role of nurse in these therapies.
- Somatic therapy**
- History, technique of electro-convulsive therapy (ECT), indications contraindications.
 - Role of nurses before, during and after electroconvulsive therapy.
8. Forensic Psychiatry / Legal Aspects.
- Legal responsibilities in care of mentally sick patients
 - Procedure for admission and discharge from mental hospital, leave c absence.
 - Indian Lunatic Act 1912
 - Mental Health Act 1987
 - Narcotic Drugs and Psychotropic Act 1985.
9. *Psychiatric Emergencies and Crisis Intervention*
- Over active patient
 - Destructive patient
 - Suicidal patient

COMPUTERS IN NURSING

1. Introduction to computers and disk-operating system.
2. Introduction to word processing.
3. Introduction to data base.
4. Lotus and graphics and use of statistical packages.
5. Windows application, word, excel, power point, multimedia.
6. Introduction to Internet and use of electronic mail.

7. Computer aided teaching and testing.

MIDWIFERY AND GYNAECOLOGICAL NURSING

1. Introduction
 - Definition: Midwifery, obstetrical nursing.
 - Scope
 - Historical review.
 - Development of maternity services in India.
2. Reproductive system.
 - Review of genito-urinary system of male and female organs structure, physiology.
 - Menstrual cycle
 - Internal and external organs of reproduction.
 - Female pelvis: structure, diameters and type.
3. Embryology and foetal development
 - Ovum, sperm, maturation, fertilization and implantation.
 - Development of fertilized ovum, morula, blastocyst, embryo.
 - Development of placenta: structure of full term placenta, functions and abnormalities, anatomical variations.
 - Formation of foetal sac, membranes, amnion and chorion and their functions.
 - Formation of liquor amni, its functions and abnormalities.
 - Development of umbilical cord: structure, functions and abnormalities.
 - Foetal skull: diameters, fontanelles, sutures and their importance.
 - Foetal circulation.
4. Nursing Management of Pregnant Women.
 - Reproductive -health.
 - Genetic counseling
 - Physiological changes in pregnancy.
 - Diagnosis of pregnancy: history, signs and symptoms and investigations.
 - Influence of hormones.
 - Prenatal care: objectives, history taking, calculation of expected date of delivery, routine examinations.
 - Health education: breast care, diet in pregnancy antenatal exercises.
 - Preparation for hospital /home delivery.
 - Immunisation.
 - Minor disorders of pregnancy and its management.
5. Nursing Management of women in Labour
 - Definition, stage and duration.
 - Causes of onset of labour.
 - True and false labour.
 - A. First stage of Labour
 - Signs of onset of labour
 - Physiological changes in first stage of labour.
 - Management -preparation of labour room.
 - Preparation of women in labour: Physical and psychological.
 - Equipments for normal delivery.
 - Care: physical, psychological, monitoring of maternal and foetal condition
 - Vaginal examination; indications, art les. technique.
 - B. Second stage of labour

- Signs of second stage.
 - Mechanism of labour
 - Monitoring of maternal and foetal condition.
 - Physical and psychological care.
 - Procedure for conduct of normal delivery
 - Prevention of perineal tear.
 - Episiotomy, suturing and care.
- C. Third Stage of labour.
- Signs, physiological changes.
 - Management : immediate baby care, technique of placental expulsive monitoring maternal condition examination of placements and membranes, blood loss.
 - Immediate postnatal care/ fourth stage of labour.
- D. Conduct of home delivery
6. Nursing Management of Baby at birth
- Assessment
 - Review of physiology of new born
 - Apgar scoring, examination for defects (head to foot Examination)
 - Infant feeding :breast feeding, artificial feeding.
 - Care of skin, eyes, cord buttocks.
 - Psychology and perception of new born.
 - Minor disorders of new born: birth marks, rashes, skin infections, s buttocks, infections of eyes.
 - Jaundice of new born.
 - Major disorders: birth asphyxia, resuscitation measures, haemolytic disease (RH factor).
 - Infections and birth injuries.
7. Nursing management of Mother during puerperium
- *Definition*, objectives of care.
 - Immediate postnatal care (care during 4th stage of labour)
 - Physiological changes during puerperium Psychosocial aspects of care.
 - Diet during puerperium
 - Establishment of lactation and breast care.
 - Perineal care.
 - Postnatal exercises.
 - Postnatal examination, followup family welfare
 - Minor ailments and its management.
8. Complications of Pregnancy and its management
- Bleeding in early pregnancy.
 - Bleeding in late pregnancy.
 - Pregnancy induced hypertension, pre-eclampsia, eclampsia.
 - Hydramnios, oligohydramnios.
 - Hydatidiform mole.
 - Pelvic inflammatory diseases.
 - Intrauterine growth retardation intrauterine death.
 - Post maturity
9. High Risk Pregnancy and its management
- Concept, factors.
 - Anaemia, Jaundice, Viral infections.

- Urinary tract infections, Heart Diseases, Diabetes Mellitus, Osteomalacia, Sexually Transmitted Diseases, AIDS.
 - Teenage pregnancy, Elderly primigravida, Multipara.
 - Multiple pregnancy.
10. High Risk Labour and its management
- Malpositions, Malpresentations: occipitoposterior position face, brow, shoulder and breech presentation.
 - Contracted pelvis: definition, causes, diagnosis, management and trial of labour.
 - Abnormal uterine action; hypotonic and hypertonic action, bandl's ring, contraction ring, precipitate labour
 - Cervical dystocia.
 - Early rupture of membranes, prolonged labour, Induction of labour.
 - Obstructed labour rupture of uterus.
 - Obstetrical emergencies; cord presentation, cord prolapse, amniotic fluid embolism, obstetric shock.
 - Complications of third stage; post partum haemorrhage, atonic uterus, retained placenta and membranes, inversion of uterus.
11. Complications of Puerperium and its management
- Puerperal pyrexia, Puerperal sepsis, Thrombophlebitis, Embolism, Puerperal psychosis.
 - Mastitis, *Breast abscess*
12. Obstetric operations
- Manual removal of placenta.
 - Version; internal, external.
 - Forceps delivery
 - Vacuum extraction.
 - Caesarean section.
 - Medical termination of pregnancy.
 - Laproscopic sterilization.
 - Embryotomy.
13. Drugs used in obstetrics
14. Ethical and legal aspects related to Midwifery and Gym ecological Nursing.

GYNAECOLOGICAL NURSING

1. Introduction
- Definition related to gynecological nursing.
 - Sexuality
 - Gynecological history taking, examination and investigations
2. *Puberty*
- Definition development of sex organs in females.
 - Menstrual cycle.
 - Disorders of menstruation; amenorrhoea, dysmenorrhoea,
 - cryptomenorrhoea
 - Dysmenorrhoea, cryptomenorrhoea Dysfunctional uterine bleeding.
3. Fertility and Infertility
- Definition development of sex organs in females.

- Menstrual cycle.
 - Disorders of menstruation: amenorrhoea, dysmenorrhoea,
 - cryptomenorrhoea.
 - Dysfunctional uterine bleeding.
4. Pelvic Infertility
- Vulva: vulvitis, bartholinitis.
 - Vagina: vaginitis, trichomonas vaginalis, moniliasis
 - Metritis, Salpingitis, oophoritis, pelvic abscess.
 - Chronic infections, cervical erosion.
5. Uterine Displacement and Descent
- Retroversion, retroflexion.
 - Descent of the uterus: first degree, second degree, complete procedentia.
6. Sexually transmitted diseases and their prevention
- Syphilis, gonorrhoea, warts.
 - Acquired Immuno Deficiency syndrome (AIDS)/H1V Unit
7. *Breast Disorders*
- Mastitis
 - Breast abscess.
 - Tumours.
 - Malignancy.
8. Benign and Malignant Neoplasms of Reproductive organs
- Uterine polyps, uterine fibroids.
 - Cancer: cervix, uterus
 - Ovarian cyst: benign, malignant.
 - Cancer: chemotherapy, radiotherapy.
 - Palliative care

PAEDIATRIC NURSING

1. Introduction
- Concept in child health care.
 - Trends in paediatric nursing
 - Role of paediatric nurse in child care.
 - Child care in India.
 - Emerging challenges, nursing process related to paediatric nursing.
 - Concept of preventive paediatrics.
 - Vital statistics.
2. The Newborn
- A. Characteristics of New Born and Physiologic status of the new born.
- Assessment of the new born: head to toe assessment (physical assessment), neurological assessment.
 - Nursing care of the normal/healthy new born including home care.
 - Breast feeding-concept of Baby Friendly Hospital Initiative.
- B. Common health problems- medical and nursing management of:
- Hyperbilirubinaemia, haemolytic disorder, neonatal hypoglycaemia, neonatal sepsis, oral thrush, impetigo, erythema toxicum, hypothermia, neonatal convulsions.

- Birth injuries of muscles and peripheral nerves, injuries of bones, soft tissue injury and injury of nervous system.
- C. High Risk New born
- Definition: small for dates, Low birth weight
 - Common health problems of preterm, post term and low birth weight infants and their nursing management.
 - High risk to new born of HIV +ve mother, diabetic mother, its medical and nursing care.
3. The Healthy Child
- Growth and development: Definition, principles, factors affecting growth and development, techniques of assessment of growth and development, importance of learning about growth and development.
 - The Infant
 - Growth and development during Infancy. *
 - Health Promotion during infancy :
 - Nutrition counseling and weaning, immunization.
 - Safety and security including prevention of accidents, play and toys.
 - The Toddler
 - Growth and development of Toddler.
 - Health promotion during toddler hood, nutrition counseling, toilet training, immunization, safety and prevention of accidents, guidance to parent on toddler's care, play and toys.
 - The Pre-Schooler
 - Growth and development during pre-school years.
 - Health promotion during pre-school years, nutritional guidance, safety and security, day care centres/nursery school, play, role of parents in sex education of child.
 - The School ager
 - Physical, psychological and moral development during school age years.
 - Health promotion during school years, nutritional guidance, sleep and rest, physical exercise and activity, dental health, sex education, play, role of parents in reproductive child health.
 - The Adolescent
 - Physical changes, physiological and reproductive changes, reaction of adolescents to puberty.
 - Health promotion during adolescence.
 - Nutritional guidance, personal care, reproductive health/ sex education, Role of parents in health promotion of adolescents
4. The Sick Child
- Child's reaction to hospitalization.
 - Effects of hospitalization on the family of the child.
 - Role of nurse in helping child and family in coping with stress of hospitalization and illness.
 - Nursing interventions and adaptations in nursing care of sick child.
 - Examination, principles of safety observed in paediatric techniques.
 - Preparation of child for diagnostic tests, collection of specimens.
 - Calculation and administration of oral and parenteral medications.
 - Procedures related to feeding: formula preparation, gavage, gastrostomy feeding.
 - Procedures related to elimination: enema, colostomy irrigation.
 - Use of play as nursing intervention
 - Care of child in incubator.
 - Administration and analysis of Oxygen concentration.
 - Surgical dressing
 - Steam tent inhalation.
 - Immobilised child

- Phototherapy.
5. Behavioural Disorders and common Health Problems during Childhood, their Prevention, Medical and Nursing Management.
- Infancy
 - Nutritional disturbances, allergies, dermatitis, vomiting/ diarrhea, failure to thrive, resistance to feeding, colic, *anxiety*.
 - Early Childhood
 - Communicable diseases, poisoning, tonsillitis, otitis, media, urinary tract infections, diarrhea, child abuse, breath holding spells, bed wetting, thumb sucking, nail biting, temper tantrums, masturbation.
 - Middle Childhood
 - Helminthic infestations, common skin infections, animal and insect- bites, stuttering, pica, tics, antisocial behavior, enuresis.
 - Later Childhood
 - Problems of pubertal development: precocious puberty, tall stature, gynaecomastia, acne, amenorrhoea, dysmenorrhoea, sexually transmitted diseases, accidents, sports injuries, Juvenile delinquency, anorexia nervosa, obesity.
6. Children with congenital Defects/Mal formations
- Etiology, signs, symptoms, complications, medical, surgical and nursing management of:
 - Malformations, of the central nervous system-cranial deformities, defects of spinabifida, meningocele, hydrocephalus, cerebral palsy, neural tube closure.
 - Skeletal defects-cleft lip and palate.
 - Defects of Gastro-intestinal tract- Oesophageal atresia and distula, anorectal malformations, hernia, congenital hypertrophied pyloric stenosis.
 - Defects of Genitourinary tract- Hpospadiasis, epispadiasis, extrophy or bladder, phimosis, cryptorchidism, polycystic kidney.
 - Sexual abnormalities - ambiguous genitalia, hermaphroditism.
 - Defects of cardio-vascular system- Congenital heart diseases, major acyanotic and cyanotic defects.
 - Orthopaedic Abnormalities - Club foot, developmental abnormalities of extremities.
7. Children with various disorders and diseases.
- Etiology, signs, symptoms, complications, prevention, medical, surgical and nursing management of:
 - Disturbances of fluid and electrolyte balance : imbalance, burns, disturbance of renal function, acute and chronic glomerulonephritis, acute and chronic renal failure.
 - Disturbed respiratory functions: Acute infections of upper and lower respiratory tract, acute inflammation of lungs.
 - Gastro-intestinal disorders: Malabsorption syndromes (celiac diseases) and obstructive disorders (Intestinal obstruction, Hirschsprung's disease) inflammatory conditions (appendicitis, Meckel's diverticulum, ulcerative colitis), worm infestation
 - Problems related to production and circulation of blood: Acquired heart diseases, congestive cardiac failure, infective endocarditis, rheumatic fever.
 - Problems related to the elements of blood: Anaemias, sickle cell anaemia, thalassemia, defects of haemostasis, haemophilia, Immune deficiency diseases, HIV infection (AIDS), leukemias, thrombocytopaenia, purpura.
 - Disturbances of regulatory mechanism: disturbances of cerebral functions- altered state of consciousness, craniocerebral trauma.

- Intracranial infections: Meningitis, encephalitis, convulsive disorders.
- Endocrine dysfunctions: Disorder of pituitary functions, disorders of thyroid and parathyroid function, disorders of adrenal cortex, disorders of pancreatic hormone secretion.
- Problems that interfere with locomotion: Poliomyelitis, osteomyelitis, kyphosis, lordosis and scoliosis, rheumatoid arthritis.
- Children with developmental problems: Handicapped children, multiple handicapped children, mental retardation.
- Communication disorders- hearing, vision impairment, deaf and blind children.

8. Welfare of Children

- Child welfare services, agencies, balwarie, anganwarie, day care centres, midday meal programme.
- Welfare of delinquent and destitute children
- Programme and policies for welfare of working children.
- National child labour policy
- Child Act, Juvenile Justice Act.
- Internationally accepted rights of the child.