

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

1	Name of Course	Diploma Course in Panchakarma Therapy (W. E. F. 2015-16)								
2	Course Code	201419								
3	Max.No.of Students Per Batch	25 Students								
4	Duration	2 year								
5	Type	Full Time								
6	No.Of Days / Week	6 days								
7	No.Of Hours /Days	7 Hrs								
8	Space Required	Theory Class Room – 200 sqft, Lab Sub.– 500 sqft, Lab Elective - 400 sqft Total = 1100 Sq.ft.								
9	Minimum Entry Qualification	S.S.C. Pass								
10	Objective Of Course	-To create skilled Panchakarma Therapist -To Improve Health of Human Society. -To train and educate the society to lead and live a healthy life without fear about diseases. -To create awareness about Panchakarma, nature and culture .								
11	Employment opportunities	Ayurvedic Hospitals,Panchakarma Centres,Health SPA all over india and abroad								
12	Teachers Qualification	BAMS/ MD (Ayu.) / Diploma in Panchakarma with 2 yrs of experience								
13] Teaching Scheme –										
Ppr		Subject Code	Clock Hours / Week		Total					
			Theory	Practical						
1	English (Communication Skill)	90000001	2 Hrs	1 Hrs	3 Hrs					
2	Elective – I		2 Hrs	1 Hrs	3 Hrs					
3	Elective – II		2 Hrs	1 Hrs	3 Hrs					
4	Anatomy, physiology and pathology	20140004	3 Hrs	8 Hrs	11 Hrs					
5	Basics of Ayurveda	20140041	3 Hrs	8 Hrs	11 Hrs					
6	Panchakarma	20140042	3 Hrs	8 Hrs	11 Hrs					
Total					42 Hrs					
14	Internship	Two Month Summer Internship from 1st May to 30th June is Compulsory.								
15] Examination Scheme – Final Examination will be based on syllabus of both years.										
Ppr	Subject	Sub Code	Theory				Practical		Total	
			Dur	Max	Min	Duration	Max	Min	Max	Min
1	English (Communication Skill)	90000001	3 Hrs	70	25	3 Hrs	30	15	100	40
2	Elective – I		3 Hrs	70	25	3 Hrs	30	15	100	40
3	Elective – II		3 Hrs	70	25	3 Hrs	30	15	100	40
4	Anatomy, physiology and pathology	20140004	3 Hrs	100	35	3 Hrs	100	50	200	85
5	Basics of Ayurveda	20140041	3 Hrs	100	35	3 Hrs	100	50	200	85
6	Panchakarma	20140042	3 Hrs	100	35	3 Hrs	100	50	200	85
Total									900	375
16	Teachers – Three Teachers per batch for vocational component. For English, Elective-I & II guest faculty on clock hour basis.									
17	Student have to choose any one subject for Elective-I and Elective-II from below given subjects									
18	a) For Elective I – Student can choose any one subject Code Subject Name 90000011 Applied Mathematics 90000012 Business Economics 90000013 Physical Biology (Botany & Zoology) 90000014 Entrepreneurship 90000015 Psychology					b) For Elective II – Student can choose any one subject Code Subject Name 90000021 Applied Sciences(Physics & Chemistry) 90000022 Computer Application 90000023 Business Mathematics				

Theory - I - Anatomy, Physiology and Pathology – 1st year
(Subject Code – 20140004)

THEORY	PRATICAL
<p>A. ANATOMY-PHYSIOLOGY & PATHOLOGY OF HUMAN BODY SYSTEMS: -</p> <ol style="list-style-type: none"> 1. Introduction to the body as a whole 2. The cells, tissues & organisation of the body. 3. The Blood : Composition, Immunity types, Inflammation, Defence mechanisms 4. The Circulatory System 5. The Lymphatic system 6. The nervous system 7. The Endocrine system 8. The Respiratory System 9. Introduction to Bio-molecules 10. The digestive system 11. The excretory system 12. Musculoskeletal system 13. Reproductive system 14. The Special senses <p>B. Preventive & Social Medicine</p> <ol style="list-style-type: none"> 1. Definition of Hygiene, personal hygiene & social Hygiene 2. Definition of health & disease 3. International organisations:-WHO, UNICEFF, Health for All 4. Health programmes in India: National Anti-malaria, Programme, National Filariasis Control Programme, National Leprosy Eradication Programme, Revised National tuberculosis control Programme, National AIDS control programme. 5. Primary Health centre 6. Communicable & Non communicable diseases. 7. Food, water, air & Noise pollution, its control & prevention 	<p>ANATOMY-PHYSIOLOGY-PATHOLOGY</p> <p>1.Human Skeleton –</p> <ul style="list-style-type: none"> • Identification of Bones • Identification of Points • Surfaces • Skull, Scapula, Clavicle, Humerus, Radius, Ulna, Femur, Tibia, Fibula, Carpal & Tarsal bones, Ribs, Vertebrae, Sternum, etc. <p>2. Human organs - Brain, Stomach, Lungs, Heart, Kidney, Liver, Uterus, Spleen, Urinary bladder, etc.</p> <p>3. Introduction of slides :- Tissue –Epithelial Tissue connective Tissue Muscular Tissue Nervous Tissue Liver Kidney Spleen Pancreas Lymph nodes Skin Testis Ovary Uterus Tonsil Stomach T.S. Small Intestine T.S. Large Intestine T.S. Blood cells – RBC, WBC, Platelets</p> <p>4.Blood Pressure estimation</p> <p>5.Checking of : Body temp RR, Weight, height, chest girth, waist girth, abdominal girth, Hips girth, thigh girth & arm girth listening cardiac sounds with stethoscope</p>

Anatomy, Physiology and Pathology – 2nd year

THEORY	PRATICAL
<p>A. BIOCHEMISTRY & MICROBIOLOGY (Laboratory investigation report reading.)</p> <ol style="list-style-type: none"> Normal & abnormal composition of – <ul style="list-style-type: none"> Urine Routine Microscopy Stool Routine Microscopy Haematology & serology – <ul style="list-style-type: none"> CBC (Complete Blood Count) , Hb % ESR (Erythrocyte Sedimentation Rate) Lipid Profile RFT (Renal Function Test) LFT (Liver Function Test) Serum electrolytes → Na, K*, etc. Serum calcium, serum phosphorus Blood Glucose – Fasting , Post lunch RA – Factor Thyroid Test – T₃, T₄, TSH CPK – CPKMB LDH ASO – Titre Coagulation profile = PT, PC, BT, CT WIDAL TEST Sexually Transmitted Disease screening Test=HIV, VDRL, HbsAg Identification of blood groups & cross matching Alkaline phosphates, CA-125, CEA Serum vitamins – Vit – B₁₂, Vit-D, etc. Glycosulated Haemoglobin Serum prostate specific Antigen (PSA) Test for Tuberculosis (TB):- Sputum test, Montoux Test Histopathology & Cytology :- FNAC, Paps Smear, Endometrial Biopsy , Other Biopsy reports Cardiac investigation :- <ul style="list-style-type: none"> Echocardiography (ECG) 2-D-Eco-colour Doppler Stress Test CT – Angiography Coronary Angiography Angioplasty Bypass surgery Radiological investigations :- <ul style="list-style-type: none"> Plane X – Ray reading (Normal & Abnormal) – Chest, Joints, Skull, Spine, Para nasal sinuses, etc. Contrast – X – Ray reading :- Barium meal, Barium enema, NP, HFG, 	<ul style="list-style-type: none"> Reading of various pathological test reports of the patients & their Normal & Abnormal values Radiological –Ray report reading . Case study -History taking of patients . Iris Diagnosis charts reading & Disease management . Facial diagnosis & disease management . Practical demonstration of various First Aid Treatments . Examination of the body as a whole:- <ul style="list-style-type: none"> Examination of cardiovascular system. Examination of Nervous system . Examination of Special senses Examination of respiratory system . Examination of Digestive system . Examination of Locomotor system . Per abdominal examination in supine position. Examination of various diseased patients in the hospital & their treatment & care . Visit to pathological lab. Practical record book.

<p>Cholecystography, Angiogram, Bronchogram ,etc</p> <ul style="list-style-type: none"> • Ultrasound sonography of :- Abdomen –Pelvis, Obstetric, Scrotal, Thyroid, Musculoskeletal, Joints, etc. • Endoscopy • C.T. Scan • MRI <p>7. Breast Examination :- Mammography & Sonomammography</p> <p>8. Peripheral blood smear for malarial parasite (PBS)</p> <p>9. Urine culture Test :- Culture growing & culture sensitivity, culture media, culture methods & identification of bacteria.</p> <p>10. Bacteriology introduction</p> <p>11. Virology introduction</p> <p>12. Mycology introduction</p> <p>13. Parasitology</p> <p>14. Human blood groups</p> <p>B. DIAGNOSTIC METHODS :-</p> <p>1. Case study taking of patient</p> <ul style="list-style-type: none"> • Approach to patient • History taking & case sheet writing <p>2. Diagnostic methods in Naturopathy :-</p> <p>a. Iris Diagnosis :-</p> <ul style="list-style-type: none"> • History & definition of Iridology • Anatomy of Iris, Blood supply & Nerve supply of Iris. • Technique of Iris reading, Identification of Normal & Abnormal colours of Iris. • Iris chart of Right & Left Iris, Zone areas, sectoral divisions • Interpretation of Iris manifestations:- Toxic settlements, Nerve rings, Lymphatic rosary, Psora spots, Radial Solaris, Sodium ring, Drugs & chemicals appears in Iris. • The iris reveals the cause of disease. <p>b. Facial Diagnosis :-</p> <ul style="list-style-type: none"> • Introduction, definition & scope for science of facial diagnosis. • Characters of healthy body- a) Normal functions, b) Normal figure • Foreign matter theory:- i) Definition of Foreign matter. ii) Process of accumulation of foreign matter in the body. iii) Changes caused in the body due to accumulation of foreign matter. • Encumbrance & their types front encumbrance, Right side encumbrance, Left side encumbrance, Mixed encumbrance & Possible diseases in concerned encumbrance. 	
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C. FIRST AID:-

- Aims & Principles of first aid.
- What first aider should do during emergency.
- Resuscitation techniques.
- First aid for:-
Wounds, Haemorrhage, shock, dressings & bandages, fractures, dislocation, sprains.
- First aid for Medical emergencies:-
 - Drowning, Heart attacks, unconscious patient, diabetic emergencies, snake bite, scorpion bite, dog bite, nose bleed, frost bite, heat stroke, head injury, chest injury, burns & scalds, electrical injuries, glaucoma attack, convulsion in children, fainting, Epileptic fits, sun burn, honeybee bite, etc.

D. PHARMACOLOGY:-

- Introduction of Indian Pharmacopia, British Pharmacopia & American Pharmacopia.
- Adverse drug effect.
- Identification with drugs used in routine practice.
Eg. Painkillers, Antipyretic, Antiallergy, Hypoglycemic, Antihypertensive, Antirheumatoid drugs, Emergency drugs, etc.

Theory - II - BASICS OF AYURVEDA - 1st Year

(Subject Code – 20140041)

Definition - Ayurveda, History of Ayurveda, four goals of life origin of Ayurveda, The eight branches of ayurveda, The Brihatrayees and Laghutryees, Panchbhuta tattva, Tridosha- Vata, Pitta & Kapha- Qualities. Actions formation sthana (Place) in the body based on day & night, age. Dosh, Dhātu, Mala Siddhant, sapta dhatus Rasa Rakta Mamsa Medas, Asti Majja sukra & sronita their formation, functions.

Trimalas - Purisha, Mutra, Seda - Formation and Functions.

Agnis - Sapta dhatnagni, Panchabhutagni, Jataragni. Definition of health. Concept of Ama, Prakruti, Koshtha

Vegas (Urges)- 13 Types pf Vegas- Vegas to be controlled - Vegas to be not controlled.

Definition of diseases, Synonyms of Roga.

Classification of diseases- Sadhya, Asadhya.

Classification of diseases based on tridoshas, Vata - 80, Pitta- 40, Kapha- 20.

Basic principles of Yoga & Pranayam

Theory - II - BASICS OF AYURVEDA - 2nd Year

1) Introduction of doshas –

A) Vata dosha-Swaroop, guna, karma, Vriddhi kshaya lakshanas.

Applied aspect of Vata dosha in respect to panchakarma procedures like shehan, swedan, basti & raktamokshan etc.

B) Pitta dosha –Swaroop, guna, karma, vriddhi kshaya lakshanas .

Applied aspect of pitta dosha in relation to panchakarma procedures like snehan, swedan, virechan & raktamokshan etc.

C) Kapha dosha – swaroop, guna, karma, vriddhi kshaya lakshanas .

Applied aspect of kapha dosha in relation to panchakarma procedures like snehan, swedan, vaman, virechan, nasya, Raktamokshan, shirodhara etc.

2) Introduction of dhatus –functions & vriddhi kshaya lakshanas & their relation with panchakarma

3) Introduction of Malas- sites, functions, vriddhi kshaya lakshanas .

i) Purisha –sites, functions, vriddhi kshaya lakshanas. Applied aspect in relation to basti, virechan & upakalpanas of panchakarma

ii) Mutra –sites, functions, vriddhi kshaya lakshanas . Applied aspect in relation to uttarbasti and upakalpanas of panchakarma .

iii) Sweda- sites, functions, vriddhi kshaya lakshanas. Applied aspect in relation to snehan, swedan, udvartana

Realation of panchakarma to shodhana. Indication and contraindication of shodhana importance and application of poorvakarma in panchakarma

Definition of sharir kriya & its importance in panchakarma.

Shadkriyakalas, Rogi pareeksha - Trividha pareeksha- DARS'ana, Spars'ana & Pras'ana, Ashta sthana pareedsha

The diseases Causative factors, signs & synotoms, classifications, sadhya- asadhya- in a compact format.

Aknowledge on - Rasa, Guna karma virya vipaka and prabhava of herbs and other resources.

PRACTICAL - II - BASICS OF AYURVEDA (1st & 2nd Year)

(Marks – 100)

- Introduction with Purvakarma :-
 - Practical demonstration of Purvakarma Procedures.
 - Snehan – Sarvadehik snehan, Sthanik snehan (Each 25 patients)
 - Swedan – Kuti sweda, Nadi sweda, Avagaha sweda, Pottali sweda (Each 25 patients)
 - Akshitarpan (Each 15 patients)
 - Shirodhara (Each 20 patients)
 - Shirobasti (Each 10 patients)
 - Katibasti (Each 15 patients)
 - Janubasti (Each 20 patients)
 - Manyabasti (Each 15 patients)
 - Kavalldharan (Each 15 patients)
 - Gandush (Each 15 patients)
 - Dhumpan (Each 15 patients)
 - Preparation of vaman & Basti Dravyas
 - Preparation of manda, Peya, vilepi, Yusha, Mansrasa
 - Student should be very expert in giving Purvakarma treatments for patients.
 - Practical record book.

Theory - III - Panchakarma - 1st Year

(Subject Code – 20140042)

GENERAL INTRODUCTION TO CHIKITSA- a) Samsodhana. b) Samsamana

SIX TYPES OF CLASSICAL THERAPY (SHADUPAKRAMAS)-

1. Langhana, 2. Brimhana, 3. Rokshana, 4. Snehana, 5. Swedana, 6. Stambana

THE CLASSICAL AYURVEDIYA PANCHAKARMA - the stages of panchakarma treatment -

a) purva karma, b) pradhana karma and c) paschat karma.

Applied aspect of Kriya Sharir before & after panchakarma procedures like

Blood pressure

TPR recording

Agni Parikshan

Koshtha Parikshan etc.

Introduction to Bhaishajya Kalpana – Tail Nirman Vidhi, Kalka, Kwatha etc Nirman Vidhi

Related to panchakarma

Poorvakarma Pachan, deepan, snehana, swedana.

Role of poorva karma in Panchakarma

Pachan - Definition & Drugs.

Deepan,- - Definition & Drugs

Snehana: Definition ,types Indication and contraindication of snehana.. modern aspects of massage therapy and its pathophysiological action on human body.Different kind of massage therapy like swedish massage, stone massage etc.

Principle of massage therapy direction, pressure, speed, style etc.

- A. Different type of massage – age wise, prakriti wise, organ wise-head, face, body, joint etc.
- B. Abhyanga, Lepa, udvartan, mardan, padaghata, dhara .
- C. Identification of herbs used in snehana & swedana.

Modern aspects of massage therapy and its pathophysiological action on human body.Different kind of massage therapy like swedish massage, stone massage etc

Swedana:Definition ,Classification – sagni & Anagni, Indications, contra- indications, procedure of swedana, observations of the patient- a) Samyak sweda, b) Asamyak sweda, c) Ati sweda, post swedana regimen, mode of action of sweda.

Theory - III - Panchakarma - 2nd Year

Definition ,types of panchakarma,

Classification according to kaya chikitsa & shalya.

Indication and contraindication of vaman , Virechan. Method and knowledge about symptom of proper and improper applications.

Vaman karma:Introduction, pharmacodynamic properties of vamaka dravyas, indications, contra- indications, procedure of vamana, pathya – apathya, samyak vamana, asamyak vamana, ati vamana sam sarjana karma.

Virechan Karma: Introduction, Virechana drugs, indications of virch, Ana, contra- indications procedure of virechana, general precautions, samyak virechana, asamyak virechana, ati-virechana, virechana vyapada.

Basti karma:Introduction ,Definition and types of Basti, Indication and contraindication of Asthapana, Anuvasana Basti ,Method of Basti administration and instrument used . Method of preparation of Basti . Advantages and disadvantages of different Basti./ symptom of improper Basti ,Post basti regimen, Basti Vypad

Nasya karma:Definition of Nasya Indication and contraindication of Nasya karma . Its classification and practical Knowledge of application with instrument. Symptom of samyaka(Adequate) , Ayoga (Inadequate) and Atiyoga(excessive) of Nasya complication of Nasya .

Raktamokshan :Introduction Classification ,Definition of raktamokshan, Features of normal rakta, Functions of rakta, Indications of raktamokshana, Contra- mokshana, Jalauka avacharana, Sira- Vyadha.Indications contra – indications, Samyak, Sira- Vyadha, Asamyak sira- Vyadha, Ati sira- Vyadha, Rakta stambana, Post – Rakta mikshana regimen, Prachana, Alabu, Ghati- Yantra.

Keralian panchakarma procedures-

Its five components, Dhara, Kaya seka, Pinda- Sweda, Pizichil, Anna lepa, navrakizi ,Shirovasti, Shirodhara,Udvartanam, Siro lepa - Introduction, Comparison of classical Ayurveda panchakarma & Keraliya Panchakarma

Ahar –Aushadhi Kalpana

Principles & Practical knowledge of preparation of Ahar & Aushadhi kalpana , samsarjana karma, ahar kalpana like manda peya vilepi etc Aushadhi kalpana like swaras, kwath,him etc.

Practical - III - Panchakarma - (1st & 2nd Year)

- Spotting of Anatomical specimens & Models
- Identification of Ayurvedic plants (Dry & Wet)
- Experience of handling patients undergoing purvakarma,Pradhankarma,Paschatkarma procedures.Practical knowledge & experience of all karmas both classical & traditional techniques
- Practical involves working and acting on the body with pressure – structured, unstructured, stationary, or moving – tension, motion, or vibration, done manually or with mechanical aids.
- Application of Massage:It can be applied with the hands, fingers, elbows, knees, forearm, feet, or a massage device.
- The candidate will be asked for demonstration of any one type of Panchakarma procedure
- Introduction with Pradhankarma
 - Practical demonstration of Pradhankarma practicals.
- Vamana-(abhyantar snehapan for 5/7 days, Bahya snehan swedan purvak vaman in 10 patients)
 - Virechan-(abhyantar snehapan for 5/7 days, Bahya snehan swedan purvak virechan in 10 patients)
 - Basti – Bruhan basti,Lekhan basti, anuvasan basti, niruha basti in 20 patients
 - Nasya- marsha,pratimarsha,Avapidan nasya in 20 patients
 - Raktamokshan – 1. Sarvadehik 2.Sthanik raktamokshan
 - a) Siravedha
 - b) Jalaukavacharan 10 patients each
- Introduction with Paschatkarma :-
 - Importance of Paschatkarma.
 - Student should be very expert in giving Pradhankarma treatments for patients.
 - Practical record book.

Instruments And Equipments Required to be Available In Institute

Sr..No.	Name of Items	Required Quantity
1	Chair / desk	For 25 student
2	Chalks or white board marker and Duster.	As per requirement
3	Watch. Scale.	As per requirement
4	Subject Books or notes.	As per requirement
5	Table and chair for each class room.	As per requirement
6	Charts of concerned subjects.	As per requirement
7	Notice Board for information for the students.	As per requirement
8	Human Skeleton.	1
9	Panchakarma massage table measuring 6'x4'	2
10	Shirodhara Patra with stand	2
11	Swedan peti	2
12	Shirovasti belt	2
13	Janubasti & katibasti yantra	4
14	Vaman Patra	2
15	Nasya Applicator	10
16	Basti Pot with 60 ml syringe	10
17	Cup board.	3
18	Weight Machine.	1
19	Blood Pressure Machine	3
20	Arrangement for Drinking water.	As per requirement
21	Watch	2
22	Stethoscope	5
23	Toilet arrangement for students.	As per requirement

Reference books

- 1.Panchakarma vidnyan-Vd.Y.G.Joshi
- 2.Pratyakshik Panchakarma Chikitsa-Dr.Gopalkrishna Vyaghralkar
- 3.Gray's Anatomy
- 4.Anatomy, Physiology, health education- Dr. N. Murugesh.
- 5.Dr.Kasture
