RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER SYLLABUS FOR SCREENING TEST FOR THE POST OF LECTURER (PANCHKARMA) AYURVED AND INDIAN MEDICINE DEPARTMENT

PART-A

General Knowledge of Rajasthan

Culture & Heritage of Rajasthan:-

- 1. Dietary Practices of Rajasthan:
 - 1.1 Indigenous food- Cereal and millets, fruits and vegetables, food of various regions.
 - 1.2 Seasonal dietary practices, festivals and their Ayurvedic rationale.
 - 1.3 Tradition of fasting and Upvas.
- 2. Crops of Rajasthan:
 - 2.1 Evidence of Crop production in Pre-Historic sites of Rajasthan.
 - 2.2 Evidence of Crop production in Ancient and Medieval Rajasthan.
- 3. Minerals of Rajasthan- Evidence of knowledge of minerals in Ancient and Medieval Rajasthan.
- 4. Medicinal Herbs of Rajasthan.
- 5. Society of Rajasthan:
 - 5.1 Traditions, dress and ornaments, fairs & festivals.
 - 5.2 Folk and Tribal Society: Fairs and festival, social customs, social life and beliefs.
- 6. Making of Modern Rajasthan:
 - 6.1 Political and social awakening in 19^{th} century.
 - 6.2 Peasant movements, tribal movements and *Prajamandal* movements in 20th century. Integration of Rajasthan.

Geography of Rajasthan:-

Broad Physical Features: Mountains, Plateaus, Plains and Deserts; Major Rivers and Lakes; Climatic Characteristics; Major Soil types and their distribution; Vegetation types and their distribution; Agricultural types; Livestock; Demographic Characteristics.

Total Questions 30

PART-B

Fundamental of Panchakarma and examination of patient in context to Panchkama

- 1. Chikitsa and its classifications; antah-parimarjana and bahir-parimarjana chikitsa.
- 2. Principles of chikitsa, kriyakal, shadvidha and dvividha upakrama, Rogamarga, Dosha gamana from kostha to Shakha and vice-versa and their importance in Panchakarma.
- 3. Applied aspects of trividha, shadvidha, ashta vidha and dasha vidha pariksha.
- 4. Applied aspect of cortex, cranial and peripheral nerves. Methods of physical examinations of central nervous system: sensory system, motor examination-muscle power and tone, superficial and deep reflexes, difference of upper and lower motor neuron lesions. Tremors and coordination.
- 5. Functions of various single muscles and groups of muscles, applied aspect of musculoskeletal system and methods of examination of locomotor system.
- 6. Applied aspect of cardiovascular and respiratory systems, functions of capillaries and its permeability. Methods of examination of respiratory and cardiovascular system. Interpretation of spirometry and ECG findings.
- 7. Knowledge and method of examination of various skin lesions.
- 8. Applied aspect and examination of gastro-intestinal system.
- 9. Importance of Panchkarma in Ashtanga Ayurved, Trividha karma, Importance of panchakarma in health and disease and Significance of Shodhana.
- 10. Applied aspects of koshtha and agni in context to Panchakarma.
- 11. Ama dosha, Srotodusti and their significance in Panchakarma. Benefits of Shodhana, Samikshya Bhavas in Shodhana, indication and contra-indication for Shodhana.
- 12. Importance and methods of Deepana-Pachana prior to Snehana, drugs, duration, dose for Deepana- Pachana and samyak Lakshana of Pachana.

Snehana

- 1. Importance of purva karma in shodhana.
- 2. General considerations about Snehana.
- 3. Classifications of Sneha, Sneha-Yoni, detailed knowledge of four types main Sneha-Ghrita, Taila, Vasa and Majja with their characteristics, importance and utility, various aspects of Uttama Sneha.
- 4. Properties of Snehana Dravya and their interpretation.
- 5. Effects of Snehana.
- 6. Sneha Kalpana, various types of Sneha Paka with their utility.
- 7. Indications and contraindications of Snehana.
- 8. Classification of Snehana: Bahya and Abhyantara Snehana.
- 9. Bahya Snehana and Bahir-Parimarjana, utility and importance of Bahya Snehana.
- 10. Classification of Bahya Snehana- Methods, indications, contraindications, specific utility of the followings Abhyanga, Mardana, unmardana, Padaghta, Samvahana, Udvartana/Utsadana, Udgharshana, Avagaha, Pariseka, Lepa, Pralepa, updeha, Gandusha, Kavala; Karana and Nasa Purna, Akshi Tarpana; Murdhni Taila: Shiroabhyanga, Shirodhara, Siro Pichu and Siro Basti, Shiro Lepa (Talapotichil), Talam and Takradhara, etc.

- 11. Knowledge of digestion and metabolism of fat.
- 12. Karmukata of Abhyantara and Bahya Snehan.
- 13. Knowledge of different types of massage in Ayurvda and recent advances and techniques.
- 14. Abhyantra Snehana: Brimhnartha, Shamanartha and Shodhanartha, definition, method and utility of Brimhanartha and shamanrtha Snehana; difference between Shamanartha and Shodhanartha Snehana.
- 15. Methods of Abhyantar Snehana.
- 16. Shodhanartha Snehana: Acchapana and Vicharana, Utility and various methods of Sadyasnehana, Avapidaka Sneha.
- 17. Matra of Sneha: Hrasiyasi, Hrasva, Madhyama and Uttma Matra with their indications, specific utilty of Ghrita, taila, Vasa and majja; Anupana of Sneha.
- 18. Rukshana, types, drugs, properties and Samyak Rukshana Lakshana.
- 19. Shodhananga Snehana Vidhi and methods of fixation of dose.
- 20. Diet and Pathya during Snehana.
- 21. Observation of sneha Jiryamana, Jirna and Ajirna Lkashana.
- 22. Samyak, Asnigdha and Ati Yoga Lakshana of Snehana.
- 23. Snehs vyapta and their management.
- 24. Pariharya vishaya and Parihara Kala.

Svedana

- 1. General considerations about Svedana.
- 2. Properties of Svedan and Svedopaga Dravya.
- 3. Indications and contraindications of Svedana.
- 4. Various Classifications of Sveda and Svedana.
- 5. Detailed knowledge of four types of Sveda of Sushruta with their utility.
- 6. Hina, Mridu, Madhya and Mhana Sveda; Ekanga and Sarvanga sveda with their utility.
- 7. Utility and method of each of 13 types of Sagni and 10 types of Niragni Sveda.
- 8. Shodhannga and Samshamaniya Sveda.
- 9. Methods to protect the vital organs (varjya anga) during Svedan Procedure.
- 10. Detailed Knowledge about Utility of below mentioned Svedan procedures:- Patrapinda Sveda, Shashtika Shalipinda Sveda, Churna Pinda Sveda, Jambira Pinda Sveda, Dhanya Pinda Sveda, Kukkutanda Sveda, Anna lepa, Valuka Sveda, Ishtika Sveda, Nadi Sveda, Bashpa Sveda, Kshira bashpa Sveda, Avagaha Sveda, Parisheka Sveda, Pizichil, Dhanyamla Dhara, Kashaya Dhara, Kshira Dhara and Upanaha Sveda.
- 11. Avasthanusari Svedana in various disorders.
- 12. Samyak, Ayoga and Atiyoga Lakshana, Sveda Vyapat and their management.
- 13. Diet and regimens during and after Svedana.
- 14. Karmukata of Svedana.
- 15. Current sudation modalities like Sauna bath, Steam Bath, Jacuzzi bath, Infrared, etc.
- 16. Study of Snehana and Svedana related portions in classics with commentaries.
- 17. Recent advances and their importance in Snehana and Swedana karma.

Vamana Karma

- 1. Definition and general considerations of vamana.
- 2. Properties of Vamaka and Vamanopaga drugs.
- 3. Knowledge and utility of important Vamaka drugs and their preparations (Vamana Yoga).
- 4. Avasthanusara Vamana and its utility.
- 5. Indications of Vamana.
- 6. Contraindications of Vamana with reasons.
- 7. Abhyanga and Svedana as Purvakarma of Vamana.
- 8. Diet and management of gap day.
- 9. Need of Kapha utkleshana for proper Vamana, Kapha increasing diet.
- 10. Management of Patients on the morning of Vamana.
- 11. Administration of food articles prior to Vamana.
- 12. Drug, time, Anupana, Sahapana, dose and method of administration of Vamana and Vamanopaga preparations.
- 13. Method of Vamana Karma, waiting period for automatic Vamana Vega and manipulation in its absence.
- 14. Observations prior to beginning of Vamana such as sweat on forehead, horripilation, fullness of stomach and nausea.
- 15. Observation and assistance of the patient during Vamana.
- 16. Vega and Upavega of Vamaana and its counting, observations and preservation of vomitus matter and its weighing.
- 17. Samyak, Ayoga and Atiyoga of Vamana.
- 18. Laingiki, Vaigiki, Manaki and Antiki Shuddhi.
- 19. Hina, Madhya and Pravara Shuddhi and Samsarjana Krama accordingly.
- 20. Kavala and Dhumapana after vamana.
- 21. Management of Ayoga, Atiyog and Vyapat of Vamana with Ayurveda and modern drugs.
- 22. Parihara Vishaya and Kala for Vamana.
- 23. Vamana Karmukata with Pharmaco-dynamics of Vamana.

Virechana Karma

- 1. Definition and general considerations of Virechana.
- 2. Importance of Vamana and Virechana as shodhana.
- 3. Necessity of Vamana prior to Virechana.
- 4. Preparation of patients for Virechana after Vamana.
- 5. Preparation of patients directly for Virechana.
- 6. Properties of main Virechaka and Virechanopaga drugs, Classifications of Virechana drugs with definition, example and utility of each type.
- 7. Indications of Vamana Karma.
- 8. Contraindications of Virechana with reasons.
- 9. Utility of Virechana for the specific conditions and stages of the disease.
- 10. Internal Snehana for Virechana with diet.
- 11. Management of 3 gap day with diet and importance of low Kapha for proper Virechana.

- 12. Management of Patients on the morning of Virechana.
- 13. Virechana should be performed in empty stomach.
- 14. Drug, dose, time, Anupana, sahapana and method of administration of Virechana and Virechanopaga preparations.
- 15. Method of performing of Virechana Karma.
- 16. Observations during Virechana, Vega and Upavega of Virechana and its counting, observations and preservation of faeces and its weighing.
- 17. Samyak, Ayoga and Atiyoga of Virechana.
- 18. Laingiki, Vaigiki, Manaki and Antiki Shuddhi of Virechana.
- 19. Hina, Madhya and Pravara Shddhi and Samsarjana Krama accordingly.
- 20. Detail knowledge of methods of Samsarjana Krama and its importance, and Tarpana krama and its importance.
- 21. Management of Ayoga, Atiyog and Vyapat of Virechana with Ayurveda and modern drugs.
- 22. Parihara Vishaya and Kala for Virechana.
- 23. Virechana Karmukata with Pharmaco-dynamics of Virechana.
- 24. Applied anatomy and physiology of Gastrointestinal system related with Vamana and Virechana.
- 25. Study of Vamana and Virechana related portions in classics with commentaries.
- 26. Recent advances of researches on the effect of Vamana and Virechana.
- 27. Scope of research for Vamana and Virechana.
- 28. Role of Vamana and virechana in promotion of health prevention and treatment of diseases.

Basti Karma

- 1. Definition and general considerations of Basti.
- 2. Importance of Basti in Kayachikitsa and other branches of Ayurveda.
- 3. Classifications of Basti.
- 4. Drugs useful in Basti.
- 5. Indications of Basti, its role at the various stages of diseases.
- 6. Contraindications of Basti with reasons.
- 7. Description of Basti yantras, Basti netra and Basti putaka and their Doshas. Modified Basti Yantra, their merits and demerits.
- 8. Dose schedules of Niruha and Anuvasana basti.
- 9. Niruha basti synonyms, definition and classifications and sub-classifications of Niruha Basti and detailed knowledge of each type of Niruha Basti along with indications and contraindications and benefits, Contents of various types of Niruha Basti, their proportions, methods of mixing basti Dravya, Relation of Virechana, Shodhana, Anuvasana Basti with Niruha Basti Purvakarma for Niruha Basti; Pathya before, during and after Niruha Basti; all the aspects of administration of various Niruha Basti, Observations during and after Niruha Basti, Basti Pratyagamana, Samyakyoga, Ayoga and Atiyoga Lakshana and Various Vyapat of Niruha Basti and their management according to Ayurved and Modern Systems of Medicines Management during and after Niruha Basti Pariharya vishaya and pariharakala.

- 10. Anuvasana basti synonyms, definition and classifications of Anuvasana Basti and detailed knowledge of each type of Anuvasana Basti along with indications and contraindications and benefits, Various types of Ghrita and Taila useful in Anuvasana Basti; Anuvasana Basti with Vasa and Majja along with their merits and demerits, Relation of Virechana, Shodhana, Niruha Basti, Snehana with Anuvasana Basti, Purvakarma for Anuvasana Basti; Pathya before, during and after Anuvasana Basti; all the aspects of administration of Anuvasana Basti including Kala Observations during and after Anuvasana Basti Anuvasana Basti Pratyagamana, Samyakyoga, Ayoga and Atiyoga Lakshana and Various Vyapat of Anuvasana Basti and their management. Management during and after Anuvasana Basti Pariharya vishaya, Pathya and pariharakala for Anuvasana, Various combined basti schedules such as Karma, Kala, yoga Basti etc. Detailed knowledge of Matra Basti, Detailed Knowledge of different basti formulations like Piccha Basti, Kshira Basti, Yapana Bastis, Madhutailika Basti, Erandamuladi Niruha Basti, Panchaprasrutika Basti, Kshara Basti, Vaitarana Basti, Krimighna Basti, Lekhana Basti, Vrishya Bsti, Manjishtadi Niruha Basti, Dashamula Basti, Ardhamatrika Basti, Sarva roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti and Kaphaghna Basti etc, and their practical utility. Uttara basti.
- 11. Definition and Classification of Uttara Basti, its Netra and Putaka. Dose of Uttara Basti Sneha and Kashaya Basti. Different Uttara Basti Kalpanas in various diseases.
- 12. Detailed knowledge of Purvakarma and Administration of uttara Basti in male and female, precautions, aseptic measures, complications and thier management, Karmukata of Basti. Applied anatomy and physiology of colon, Pharmaco-dynamics of Basti.
- 13. Concept of 'Gut Brain' and its relevance to Basti Therapy.
- 14. Study of relevant portions of Basti in classics with commentaries.
- 15. Recent advances in Basti karma.

Nasya Karma

- 1. Synonyms, importance and definition of Nasya.
- 2. Nasya drugs according to various Samhita.
- 3. Classifications and sub-classifications of Nasya with detailed knowledge of each type of Nasya.
- 4. Indications and contraindications of each type of Nasya with reasons.
- 5. Drugs useful for Nasya with Dose and methods of preparations and their doses.
- 6. Nasya Kala and Pathya before, during and after Nasya; Duration of different Nasyas.
- 7. Purvakarma of each types of Nasya.
- 8. Detailed knowledge of administration of each type of Nasya with management during and after Nasya.
- 9. Detailed knowledge of common Nasya formulations such as Shadabindu Taila, Anu taila, Kshirabala Taila, Karpasastyadi Taila, Bramhi Ghrita.
- 10. Samyak yoga, Ayoga and Atiyoga of each types of Nasya, its Vyapat and their management.
- 11. Pashchata Karma; Role of Dhumapana, Kavala after Nasya.
- 12. Diet and Pathya before, during and after Nasya Karma.
- 13. Pariharya vishaya, Parihara Kala.

- 14. Nasya Karmukata, Applied anatomy and physiology related to Nasa hi Sirso Dvaram, blood and nerve supply to nose, Shringataka marma, olfactory nerve and centers, aroma therapy, trans nasal administration of drug, recent advances in nasal drug delivery.
- 15. Study of relevant portion in classics with commentaries.
- 16. Recent advances and their importance in Nasya karma.

Raktamokshana

- 1. Definition, importance, classifications and detailed knowledge of each type of Raktamokshana with their methods of performance.
- 2. General principles, indications, contraindications of Raktamokshana.
- 3. Detailed knowledge of Jalaukavacharana: Indications and contraindications of Jalaukavacharana, various tyoes of Jalauka with their beneficial and harmful effects.
- 4. Purvakarma and method of Jalaukavacharana, observations and Pathya before, during and after Jalaukavacharana.
- 5. Management during and after Jalaukavacharana.
- 6. Symptoms of Samyak, Ayoga and Atiyoga and Vyapat of of Raktamokshana and their management with Ayurveda and Modern medicines.
- 7. Pariharya vishaya and Parihara kala.
- 8. Karmukata of different types of Raktamokshana.
- 9. Advancement in leech therapy and their importance.

Paschata Karma-

Samsarjana krama. General knowledge of various aushadha and ahara kalpana used for panchakarma.

Clinical Physical Medicine

- 1. Terminology for Clinical Physical Medicine.
- 2. Biomechanics of human movements; Physiology of exercise.
- 3. Treatment modalities used in Physical Medicine- general properties and detailed clinical use of each.
 - a) Heat general physiological properties and mode of action as a treatment agent, Forms of heat therapy superficial and deep heating. General knowledge of Infrared, Paraffin Wax bath, short wave diathermy, electro magnetic therapy, ultra sound therapy, convection heating devices.
 - b) Cold as a therapeutic agent.
 - c) Prescription of physical modalities and their applications in medicine.
- 4. Clinical use of massage, manipulation, stretching.
- 5. Principles of occupational therapy, training in activities of daily living for rehabilitation, self-help devices (walking aids, wheelchairs, tricycles & modified vehicles), instrumental activities of daily living.
- 6. Physiotherapy exercises for Paralytical disorders, cervical spondylosis, frozen shoulder and slip disc.

Disease-wise Panchakarma-

Role of Panchakarma in Different Stages of the following Diseases: Jvara, Raktapitta, Madhumeha, Kushtha, Shvitra, Unmada, Apasmara, Shotha, Plihodara, Yakridaluodara, Jalodara, Arsha, Grahani, Kasa, Tamaka Shwasa, Vatarakta, Vatavyadhi, Amlapitta, Parinama Shula, Ardhavabhedaka, Ananta Vata, Amavata, Sheetapitta, Shleepada, Mutrakruchchra, Mutrashmari, Mutraghata, Hrudroga, Pinasa, Drushtimandya, Pandu, Kamala, Sthaulya, Krimi, Madatyaya, Moorchcha, Padadari, Mukhadushika, Khalitya, Palitya and other Vridhavasthajanya Anya roga. Use of Various panchakarma Procedures in the following disorders - Migraine, Parkinson's Diseasse, trigeminal neuralgia, Bell's palsy, cerebral palsy, Muscular dystrophy, hemiplegia, paraplegia, Lumbar Disc disorders, Spondylolisthesis, Ankylosing spondylosis, Carpel Tunnel Syndrome, Calcaneal Spur, Plantar fascitis, GB syndrome, Alzhiemer's disease, Irritable Bowel Syndrome, ulcerative colitis, psoriasis, hypothyroidism, hyperthyroidism, hypertension, allergic rhinitis, Eczema, diabetes mellitus, Chronic obstructive pulmonary Disease, Insomnia, Rheumatoid Arthritis, Gout, Osteoarthritis, multiple sclerosis, SLE, male & female infertility, cirrhosis of liver, Jaundice, General Anxiety Disorders.

Area of Research in Panchakarma -

- 1. Areas of research in Panchkarma.
- 2. Knowledge of Randomized clinical trial, blinding, allocation, CONSORT statement extension for herbal intervention. Observational and interventional studies, Descriptive & Analytical studies, Longitudinal & Retrospectives studies and their analysis.
- 3. Knowledge of equipments and instruments used in Panchakarma in ancient times and the possible modifications there in now.
- 4. Knowledge of quality standards of NABH (National Accreditation Board of Hospitals) for Ayurveda, guidelines for establishment and management of ecofriendly Panchkarma theatre including management of biomedical waste.
- 5. Panchakarma tourism, visiting places and spots in Rajasthan.

Total Questions 120

Pattern of Question Paper:

- 1. Objective Type Paper
- 2. Maximum Marks : 300
- 3. Number of Questions: 150
- 4. Duration of Paper: 2:30 Hours
- 5. All Questions carry equal marks
- 6. Medium of Screening Test: Bilingual in English & Hindi
- 7. There will be Negative Marking

(For every wrong answer, one-third of marks prescribed for that particular question will be deducted).