

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR SCREENING TEST FOR THE POST OF LECTURER (SHALYA TANTRA) 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 19th 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

1. **Definition of Shalya, Shalya Tantra and its importance. Introduction to Shalya Tantra:** Historical background and progress made.

- **Target-** Fluency in textual reading and comprehension.
- **Preferable targets-** Know recent developments and controversies.

2. **Description of Yantra, Shastra, Anushastra: Definition, number, types, uses, Dosha, Guna, Karma. Relevant modern instruments.**

- **Target-** Basic understanding of the concepts of Yantra and Shastra. Acquaintance with commonly used surgical instruments. Knowledge of textual descriptions.
- **Preferable targets-** Knowledge about currently used surgical instruments, their specifications, procurement sources etc.

3. **Nirjantukarana / Sterilization: Methods, types and its role in surgical practice.**

- **Target-** Basic surgical discipline of maintaining asepsis.
- **Preferable targets-** Knowledge of recently developed chemicals, instruments for sterilization.

4. **Sangyahan / Anaesthesia: Definition and Types.**

i. Local anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications, and their Management.

ii. Regional and General anaesthesia- Drugs, Techniques, Indications, Contraindications, Complications, and their Management.

- **Target-** Basic knowledge of the drugs and instruments of anaesthesia. To observe the process of induction, monitoring and recovery.
- **Preferable targets-** Assisting and handling anaesthesia.

5. **Trividha Karma- Purva Karma, Pradhana Karma and Paschat Karma.**

- **Target-** Capability to identify conditions which can affect the outcome of surgery in pre, intra and post-operative period.
- **Preferable targets-** Experience of handling incidents.

6. **Ashtavidha Shastra Karma - Surgical procedures.**

- **Targets-** Appreciation and comprehension of concepts and indications of different procedures.
- **Preferable targets-** Hands on experience of surgical procedures.

7. **Yogya - Experimental Surgery.**

- **Target-** Appreciation and comprehension of concepts of Yogya. Idea of patient's safety in experimental training.
- **Preferable targets-** Hands on training on mannequins.

8. **Marma: Nirukti, types, description and importance.**

- **Target-** Clinical application of concepts of marma.
- **Preferable targets-** Study of relevance of marma in the light of current anatomical and surgical knowledge.

9. **Kshara and Kshara Karma:**

i. Nirukti, Pradhanyata, Guna, Dosha, Karma, Prakara, Yogya, Ayogya, Procedure, Upadrava and Chikitsa.

ii. Kshara nirmana vidhi, knowledge of Kshara Varti, Taila and Pichu.

iii. Kshara Sutra – Preparation, Indications, Contraindications and Method of application, Complications and their Management.

- Target – Capability to identify and practice the use of kshara, kshara sutra in common clinical conditions.
- Preferable targets – Broader knowledge of current trends and ongoing researches in kshara application.

10. Agnikarma: Mahatva, Upakarana, Vidhi, Akrti bheda, Yogya, Ayogya and Upadrava Chikitsa- Contemporary techniques and tools of Agnikarma.

- Target - Capability to appreciate the clinical indications and comprehend Agnikarma procedure.
- Preferable targets - Hands on experience of use of cautery in surgical practice.

11. Raktamokshana: Mahatva, Prakara - Siravyadha, Pracchanna, Shringa, Alabu, Jaloukavacharana – Yogya, Ayogya, Procedure, Upadrava and Chikitsa.

- Target- Capability to appreciate and comprehend clinical indications of Jaloukavacharana and other Raktamokshana procedures.
- Preferable targets - Uses of bloodletting in current therapy.

12. Bandha Vidhi – Prayojana, Dravya, Indications, Contraindications, Prakara, Upadrava, Pichu, Plota, Kavalika and Vikeshika.

- Target- Hands on experience of techniques of bandaging.
- Preferable targets - New generation of bandaging and splintage tools.

13. Pranasta Shalya and Nirharana Upaya.

- Target – Importance of concepts of Sushruta in the management of Shalya and concerns of patient safety. Identification and management of foreign bodies.
- Preferable targets - Current concepts and diagnostic tools of dealing with foreign bodies.

14. Fluid, Electrolyte, Acid Base Balance and Nutrition:

i. Introduction of physiology of fluids and electrolytes.

ii. Dehydration and over hydration.

iii. Specific electrolyte loss, Acidosis, Alkalosis, Symptomatology and Management.

iv. Electrolyte changes in specific diseases like pyloric stenosis, intestinal obstruction and anuria.

v. Various replacement fluids in surgery, mode of administration and complications.

vi. Nutrition.

- Target – Capability to identify and manage fluid and electrolyte imbalance. Ability to administer parenteral fluid.
- Preferable targets - Advanced techniques of fluid and electrolyte assessment and management.

15. Rakta Mahatwa, Raktasrava / Haemorrhage: Prakara and Lakshana.

i. Raktastambhana – Haemostasis.

ii. Blood Transfusion–Blood groups, Compatibility, Indications, Contraindications and Complications with Management.

iii. Component therapy.

- Target-Knowledge of achieving haemostasis in haemorrhage.
- Preferable targets - Detailed knowledge of blood bank techniques.

16. Antibiotics, analgesics, anti-inflammatory and emergency drugs in surgical practice.

- Target – Working knowledge of commonly used drugs.

- Preferable targets - Advanced pharmacological study of the above drugs.

17. Diagnostic techniques – X-ray, Imaging techniques, Ultrasonography, CAT Scan, MRI, Biopsy / Cytological study.

- Target- Knowledge of proper indications for optimum investigational tools and their interpretation.
- Preferable targets - Capability to work independently in the field of diagnostic techniques.

18. Shat Kriyakala in surgical practice.

- Target- Clinical utility of the concepts.
- Preferable targets - Applied aspects of Kriyakalas in the light of current concepts of pathogenesis.

19. Nirukti, Nidana, Samprapti, Prakara, Lakshana, Sadhya-asadhyata, Upadrava and Chikitsa of the following disorders.

- i. Vranashotha - Inflammation.
- ii. Vidhradi - Abscess.
- iii. Pidika - Boils.
- iv. Nadi Vrana - Sinus / Fistulae.
- v. Vrana Granthi - Keloid / Hypertrophic scar.
- vi. Marmagata - Shock.
- vii. Kotha – Gangrene and Principles of Amputation.
- viii. Granthi - Cyst.
- ix. Arbuda - Tumour.

- Target-Clinical application of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

20. Vrana – Nirukti and Prakara

- i. Nija Vrana – Nidana, Samprapti, Vrana Vasthu, Prakara, Lakshana, Vrana Pariksha – Sthana, Vrana Akrti, Srava, Gandha, Vedana. Vrana Avastha- Dustavrana, Shuddha Vrana, Ruhyamana Vrana, Samyak Roodha Vrana, Vrana Sadhya-asadhyatha and Vrana Upadrava.
- ii. Vrana Chikitsa – Pathya-apathya and Shashti Upakrama, Vranitagara and Rakshakarma.
- iii. Agantuja Vrana :
 - a. Sadyo Vrana - Traumatic wounds – Nidana, Prakara, Lakshana, Upadrava and Chikitsa.
 - b. Management of bites and stings.
 - iv. Dagdha Vrana – Burns and scalds.
 - v. Ulcer - Types and their management.
 - vi. Wound healing stages and their management.
 - vii. Pramehapidaka - Diabetic carbuncle and wounds.

- Target - Clinical application of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

21. Twak Vikara - Nidana, Samprapti, Lakshana and Chikitsa of Chippa – Paronychia, Kadara – Corn and Kshudra rogas.

- Target - Clinical application of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

22. Manya Vikara – Nidana, Samprapti, Lakshana and Chikitsa of Galaganda – Goitre, Gandamala, Apachi –Lymphadenitis, Pashanagardhabha – diseases of parotid gland.

- Target-Clinical application of the concepts.

- Preferable targets - Hands on experience of management of different conditions.
- 23. Sira Vikara - Venous disorders – Superficial and Deep venous thrombosis, Haemangioma, Varicose veins - Diagnosis and their Management.**
- Target - Clinical application of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 24. Dhamani Vikara - Arterial disorders – Nidana, Samprapti, Lakshana and Chikitsa of Aneurysm, Buerger’s disease, Atherosclerosis, Raynaud’s disease.**
- Target - Clinical application of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 25. Snayu Vikara - Diseases of tendons and ligaments – Tennis elbow, Ganglion and their Management.**
- Target - Clinical application of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 26. Surgical Care of AIDS - HIV and hepatitis infected patients.**
- Target - Knowledge of safety precautions.
- 27. Bhagna – Skeletal injuries: Prakara including pathological fracture, Samanya Lakshana, Upadrava and Chikitsa.** Description of fracture of following bones with Clinical features, Diagnosis, Complications and Management – scapula, clavicle, humerus, radius, ulna, femur, patella, tibia and pelvis bones. Sandimoksha - Dislocation: Dislocation of following joints with Clinical features, Diagnosis, Complications and Management of shoulder, elbow and hip.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 28. Diseases of bone:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Osteomyelitis, Cysts, Tumours and Tuberculosis.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 29. Cranio-cerebral injuries:** Mechanism, Pathology, Classification, Investigations, Complications and primary management.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 30. Diseases of Spine:** Mechanism, Pathology, Classification, Investigations, Complications and primary management of Tuberculosis, Ankylosing Spondylitis and Disc prolapse.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 31. Diseases of breast:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Sthana Vidradhi - Breast abscess and Sthana Arbuda - Breast tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 32. Diseases of chest:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Chest injury, Pleural effusion, Pleurisy and Tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.

- 33. Diseases of esophagus:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Oesophagitis, Varices, Ulcer and Tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 34. Gulma Roga** - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.
- 35. Shoola vyadhi** - Nidana, Prakara, Lakshana, Upadrava and Chikitsa.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of acute abdomen.
- 36. Udara Roga:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Jalodara - Ascites, Chidrodara – Perforation, Peritonitis and Badhagudodara- Intestinal obstruction.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 37. Diseases of stomach and duodenum:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pyloric Stenosis, Peptic Ulcer and Tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 38. Diseases of small intestine:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction and Perforation.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 39. Diseases of large intestine** - Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Tuberculosis, Obstruction, Perforation, Tumours, Appendicitis, Crohn's disease and Ulcerative Colitis.
- Target - Clinical utility of the concept.
 - Preferable targets - Hands on experience of management of different conditions.
- 40. Diseases of Rectum and Anal Canal-** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital disorders, Arshas- Haemorrhoids, Parikartika-Fissure-in-ano, Bhagandara- Fistula-in-ano, Guda Vidradi- Anorectal abscesses, Gudabhramsa- Rectal prolapse, Sanniruddaguda- Anal stricture, Incontinence, Rectal Polyp and Tumours.
- Target - Clinical utility of the concept.
 - Preferable targets - Hands on experience of management of different conditions.
- 41. Abdominal injuries and their management.**
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 42. Diseases of Liver:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Yakrit Vidhradi - Abscess, Neoplasia, Portal hypertension and Yakritdalyodar –Hepatomegaly.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.

- 43. Diseases of Gallbladder:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Cholecystitis, Cholelithiasis, Obstructive jaundice and Tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 44. Diseases of Pancreas:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pancreatitis, Cysts of Pancreas and Tumours.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 45. Diseases of Spleen –** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Pleehodara – Splenomegaly and Splenic rupture.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 46. Diseases of Kidney and Ureters -** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Polycystic kidney, Injuries, Perinephric abscess, Calculus and Neoplasms.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 47. Diseases of Urinary bladder –** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Injuries, Ashmari - Vesical Calculus, Cystitis and Neoplasms.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 48. Mutraghata and Mutrakrichra -** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management. Retention of urine.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 49. Diseases of Prostate -** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Prostatitis, Prostatic abscess, Benign Enlargement of Prostate and Carcinoma of Prostate.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 50. Diseases of Urethra –** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Urethritis, Stricture and Rupture.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 51. Diseases of Penis:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Congenital anomalies, Niruddhaprakasha -Phimosis, Parivartika - Paraphimosis, Avapatika - Prepuceal ulcer, Arbuda- Tumours and Lingarsha - Penile Warts.
- Target - Clinical utility of the concepts.
 - Preferable targets - Hands on experience of management of different conditions.
- 52. Diseases of Scrotum and Testis:** Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Epididymo-orchitis, Epididymal cyst, Scrotal filariasis,

Shukrashmari - Seminal calculus, Torsion of testis, Ectopic testis, Undescended testis and Tumours.

53. Vriddhi Roga: Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Mutravriddhi – Hydrocele.

- Target - Clinical utility of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

54. Antra Vriddhi – Aetiopathogenesis, Classification, Clinical features, Diagnosis, Complications and Management of Hernia - Inguinal, Femoral, Epigastric, Umbilical, Incisional and rare forms of Hernia.

- Target - Clinical utility of the concepts.
- Preferable targets - Hands on experience of management of different conditions.

55. Concept of Sandhana Karma- Plastic reconstructive and cosmetic surgery. Fundamentals of Sandhana Karma-

- i. Karna Sandhana- Auroplasty
- ii. Nasa Sandhana- Rhinoplasty
- iii. Ostasandhana- Cheiloplasty
- iv. Grafts and Flaps- Techniques and applications.
- v. Vascular anastomosis and grafts.

56. Recent development on Sushruta's surgical principles and practices.

Total Questions: 120

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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).