13. RASAYANA&VAJIKARANA

PAPER - 1 CONCEPT & PRACTICE OF RASAYANA

1. Basic fundamentals and concepts of Rasayana

- Derivation, definition and synonyms of Rasayana
- Classification of Rasayana
- Understanding rasayana in perspective of:
 - Neutriceutical action
 - **Immunomodulation**
 - Oxygen free radicals & Antioxidant activity
 - Adaptogenesis
 - Cell proliferative activity
 - Cell regenerative activity
 - Genoprotectiveactivity
 - Micronutrients
 - Anabolic activity
- Interpretation of different types of Rasayana
- Prakruti-Guna/character wise Rasayana
- Sara wise rasayana
- Dhatu specific rasayana
- Indriyanusararasayana like netryya, hridya, tvacchya etc.
- Srotas wise rasayana
- Occupation wise rasayana
- Season wise rasayana
- Molecular biology concerned to rasayana
 - Human genome project
 - Genetics and Gene therapy
 - Stem cell theories
- Introduction to Bioinformatics
- Concept of Bala, types of bala, vriddhikshayahetu.
- Knowledge of measures to improve bala
- Concept of ojas. Types of ojas. Ojo-vriddhi-kshaya-karabhava.
- Ojodustiprakara, hetu, samprapti and their management
- Immunology
 - Immune system & components
 - Knowledge of immune mechanisms
 - Immune disorders
 - Rasayana as immunomodulator
 - Rasayana immune specific/immunoglobulin specific
 - Rasayana in Immune compromised disease like, HIV/AIDS, tuberculosis, Cancer, liver cirrohosis etc.
- 2. Concept of jara (geriatrics) and ageing (gerontology)
- 3. Concept of svabhavabalapravrittavyadhi with special reference to Jara its classification (kalaja&akalaja), etiopathogenesis and management
- 4. Organ wise, system wise Common geriatric disorders and their management
- 5. Yogya, ayogya, vidhi and prayojana of:
 - Kutipraveshikarasayana
 - Dronipraveshikarasayana WWW.ayurved.360.11

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- Indraproktarasayana
- Vaatatapikarasayana
- 6. Concept & practice of Achararasayana
- 7. Knowledge & application of svasthavritta measures
- 8. Swasthyanuvartakarasayana
- 9. Rasayana as nutrient supplement
- 10. Panchakarma and its role in rasayana
- 11. Application of Kamyarasayanato achieve Smriti, Medha, Bala, Prabha, Varna, Svara
- 12. Knowledge of Vayasthaapana/Ayushyarasayana
- 13. Naimittikarasayana Vyadhiharaandyyadhiapunarbhayarasayana

PAPER - 2 CONCEPTS OF APATYA&SUSANTAANA

- 1. Etym<mark>ology, derivation, definition, synonyms of vandhya, vandhyaa, apatya, santaankara, susantaana</mark>
- 2. Importance of fertility
- 3. Essentials of fertility
- 4. Knowledge of Garbhasambhavasamagri
- 5. Knowledge of Garbhaadanaparicharya
- 6. Knowledge of Garbhotpatti
- 7. Knowledge of Shukravriddhi, kshayahetu, lakshana and chikitsa
- 8. Knowledge of Shukrapradoshajavyadhi and its management
- 9. Knowledge of Shukradustihetu, prakara, lakshana, diagnosis and management
- 10. Knowledge of Retodustiprakara, hetu, lakshana and chikitsa
- 11. Knowledge of Sukravahasrotodustikarana, lakshana, diagnosis and management
- 12. Knowledge of Disorders of spermatogenesis (etio-pathogenesis, diagnosis and management)
 - a. Oligozoospermia, asthenozoospermia, teratozoospermia, azoospermia, aspermia, pyospermia, necrozoospermia, OAT syndrome, sertoli cell only syndrome, klinefelters syndrome, kallaman's syndrome. Dal-castele's syndrome etc.
- 13. Obstructive azoos<mark>prmia-diagnosis, medical management an</mark>d knowledge of surgical procedures
- 14. Retrograde ejaculation and other ejaculatory disturbances in respect to fertility knowledge, diagnosis and management.
- 15. Reproductive endocrinal disorders and management
- 16. Immunological infertility knowledge of various components involved in immunological infertility, mechanism, diagnosis and management
- 17. Sperm function tests, semen and cervical mucus interaction, post coital test
- 18. Knowledge of karyotyping and interpretation
- 19. Knowledge of chromosomal, genetic disorders pertaining to fertility and management
- 20. Knowledge and practice of Genetic counseling
- 21. Knowledge of Normal and abnormal sexual differentiation
- 22. Applied aspects of panchakarmain rasayana and vajikarana
- 23. Applied aspects of uttarbasti
- 24. Knowledge of Susantaana (epigenetics): preconceptional measures
- 25. Knowledge and technique of Pumsavanakarma for healthy progeny
- 26. Introduction to MART (Medically Assisted Reproductive Technologies): IUI, IVF-ET, ICSI, cloning etc.
- 27. Testicular biopsy indications, surgical procedure, interpretation of HPE results
- 28. Knowledge of cystoscopy diagnostic, interventional
- 29. Scrotal scan & Doppler
- 30. Knowledge of Varicocele: diagnosis, medical and surgical management
- 31. Knowledge of disorders of accessory sex glands and their management

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PAPER - 3 CONCEPTS AND PRACTICE OF VAJIKARANA

- 1. Etymology, derivation, definition, scope and understanding of word vajikarana and its application in present scenario
- 2. Physiology of sexual act including mechanism of erection, ejaculation and orgasm
- 3. Knowledge of hypothalamo-pituitary-testicular axis
- 4. Knowledge of Psycho-neuro-endocrino-vasculogenic mechanism of sexual activity
- 5. Knowledge of Haemodynamicsand different stages of erection
- 6. Psychological aspects of sexual function
- 7. Sukrottejakabhava. Factors influencing sexual function
- 8. Knowledge of Sukrasrutikarabhava
- 9. Knowledge of erogenous zones and lunar relationship
- 10. Maithunavidhi –asthangamaithuan, rules and regulations to have intercourse as per ritu, kala, gotra, kula etc.
- 11. Concept of Brahmacharya& its application in the present context
- 12. Sexual ethics
- 13. Myths &misconcepts regarding sex & sexuality
- 14. Sex education& counseling including pre- marital counseling
- 15. Knowledge of contraception and contraceptives
- 16. Knowledge of sukragatavata/sukrasthavatasukravritavata,
- 17. Klaibya definition, nidana, prakara, spamprapti, and chikitsa
- 18. Male Sexual dysfunctions (etio-pathogenesis, diagnosis & management)
 - a. Disorders of sexual desire (increased libido, decreased libido, no desire etc.)
 - b. Erectile dysfunction(psychological, endocrinological, neurological &vasculogenic)
 - c. Ejaculatory disturbances (early, delayed, anejaculation, retrograde ejacualtion)
 - d. Orgasmic disorders (anorgasmia)
- 19. Female sexual disorders, causes, diagnosis and management
- 20. Knowledge of various sexual postures and advantages
- 21. Napumsaka, sha<mark>nda, trinaputrika, vaarta, hermaphroditis</mark>m definition, classification, samprapti, clinical manifestation, diagnosis and management
- 22. Knowledge of paraphilia, abnormal sexual behavior, perversions and management
- 23. Knowledge of diagnostic aids pertaining to sexual disorders
 - a. ICIVAD (Intra Cavernosal Injection of Vaso Active Drugs)
 - b. Vacuum erection devices
 - c. Penile vibrators
 - d. Rigi scan NPT (Nocturnal Penile Tumescence)/snap gauge test
 - e. Penile biothesiometer
 - f. Penile Doppler
- 24. Knowledge of Dhat syndrome, night emissions
- 25. Mutrasukra, shukrashmari, sukrameha
- 26. Aharsha&apraharshabhava
- 27. Knowledge of Sexual performance assessment scales: MSP, GRISS, GRIMS, HARDS, Libido score, IIEF-5 scoring system for ED, Androgen deficiency score
- 28. Knowledge of Priapism and its management
- 29. Knowledge of theories of andropause and management

PAPER - IV PHARMACO-THERAPEUTICS OF RASAYANA&VAJIKARANA

- 1. Definition, derivation, etimology, synonyms of vajikara, vrishya
- 2. Pharmacology and pharmacodynamics of rasayana and vajikarana drugs
- 3. Definition, scope and understanding of
 - a. Rasayana
 - i. Vyadhibalavirodhi

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- ii. Vyadyutpadakapratibandhak
- iii. Vayasthapan
- b. Sukrajanaka/sukrala
- c. Sukrapravarthaka/rechaka
- d. Shukrashodhana
- e. Shukrastambhaka
- f. Sukrashoshaka, vyavayi/vikashi
- g. Kamoddeepana/kamottejaka etc.
- 4. Pharmacology of drugs belonging to:
 - a. Sukrajanaka/sukrala
 - b. Sukrapravarthaka/rechaka
 - c. Shukrashodhana
 - d. Shukrastabhaka
 - e. Sukrashoshaka, vyavayi/vikashi
 - f. Kamoddeepana/kamottejaka etc.
- 5. Pathya and apathya in relation to shukradhatu
- 6. Formulation, indications & uses of: Vrishyabasti, Vajikaranaabasti, Yapanabasti
- 7. Pharmacology of:
 - a. Akarakarabha,
 - b. Amalaki,
 - c. Aswagandha,
 - d. Bhallataka,
 - e. Bhanga,
 - f. Bhrihati,
 - g. Gokshura,
 - h. Guduchi,
 - i. Haritaki,
 - j. Ikshu,
 - k. Jatiphala,
 - I. Jivanti,
 - m. Kapikacchu,
 - n. Kokilaksha,
 - o. Ksheeravidari,
 - p. Mandukaparni,
 - g. Masha,
 - r. Punarnava,
 - s. Shatavari,
 - t. SvetaMusali,
 - u. Yastimadhu etc.
 - v. Indraproktharasayanaa
- 8. Pharmacology of following Rasaushadhis:
 - a. Abhraka,
 - b. KukkutandaTvakBhasma,
 - c. Naga,
 - d. Rajata,
 - e. Shilajit,
 - f. Svarna,
 - g. Svarnamakshika,
 - h. Vanga,
 - i. Yashada etc.
- 9. Ingredients, properties, indications and phalasruti of:
 - Agasthyarasayanaa,
 - Ajamamsarasayanaa
 - Akarakarabhadivati,
 - Amrita PrashaGritha,
 - AswagandhaGritha,





- AvalgujaRasayanaa
- BalaswagandhaTaila,
- Bhallathakarasayana,
- Brahmarasayana,
- Brihatcchagalladyagritha
- Chandraprabhavati,
- Chyavanaprasha,
- GokshuradiGuggulu,
- HaritakyadiRasayana,
- JatiphaladiVati,
- Kaminividravana Rasa,
- KhadiraRasayana,
- KushmandaRasayanaa
- Lasunarasayana,
- MahamashaTaila,
- Makaradhwaja,
- NagabalaRasayana,
- NarasimhaRasayanaa,
- PippaliVardhamanaRasayanaa,
- Pippalirasayana,
- PurnachadrodayaMakaradhwaja,
- ShatavariGrita,
- Shilajathurasayana,
- Siddha Makaradhwaja,
- SrigopalaTaila,
- VanariGutika
- Vasantakusumakara,
- VeeryastambhaVati,
- VidangaRasayana,
- VidaryadiGritha,
- VrishyaGritha
- 10. Pharmacology & Pharmacodynamics of various vajikara, vrishya and rasayanabasties
- 11. Neuro-psycho pharmacology of rasayana, vajikarn drugs
- 12. Endocrinological aspects of rasayana, vajikarana drugs
- 13. Recent advances i<mark>n rasaya</mark>na an<mark>d vajikarana</mark> drugs, formulations and therapeutic techniques

PRACTICALS

- 1. Assessment of Prakriti
- 2. Assessment of saara
- 3. Assessment of manasaprakriti
- 4. History taking & clinical examination of geriatric patients
- 5. Examination of male genito-urinary system
- 6. Semen analysis- Retopariksha
- 7. Post coital test, semen & cervical mucus interaction test
- 8. Technique of ICIVAD
- 9. Uttarbasti
- 10. Technique of psychosexual counseling
- 11. Applicatory knowledge of assessment scales pertaining to vajikaranaa/sexual functions
- 12. Technique of genetic counseling
- 13. Practical aspects of Panchakarma pertaining to rasayana&vajikarana
- 14. Technique of measuring penile BP
