

ANNEXURE-I

Scheme and Syllabus for DMA-Telangana State Recruitment Examination conducted for the Post of
Veterinary Doctor on Outsourcing basis

SCHEME OF THE EXAMINATION (Veterinary Doctor)

Written Examination (Objective Type)	No. of Questions	Duration (Minutes)	Maximum Marks
General Studies	50	120	100
Technical (Core Subject)	50		

SYLLABUS (Veterinary Doctor)

I. General Studies

1. Current Affairs – Regional, National and International importance in Politics, Economy, Society, Science, Technology, Arts, Sports, Culture and Governance.
2. General Science and its applications to the day to day life
3. History, Economy, Geography and Polity of India
4. Basic English
5. Reasoning and Analytical Ability
6. Fundamentals of Computers

II. Technical

7. UNIT - I: GENERAL

Role of livestock and their products in Indian economy and human health, current livestock programmes and policies of State and Nation – Economics of dairy, sheep, goat, poultry, pig and rabbit farming; constraints to the livestock development programs, common offences against animals – SPCA, Animal Welfare Board of India, NGOs.

8. UNIT - II: VETERINARY ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Gross study of properties and structure of bones, joints, muscles of skeleton; organs of digestive, respiratory, circulatory, urinary, nervous and reproductive systems; Mechanism of respiration; General functions of blood and its constituents (blood cells, plasma & serum) coagulation, cardiac cycle, blood circulation, renal function; Environmental factors affecting animal production; Physiology of digestion and absorption in ruminants and non-ruminants. Biochemistry of carbohydrates, proteins, lipids, enzymes, co-factors and their role in metabolism; biochemistry of blood and body fluids.

9. UNIT-III: ANIMAL GENETICS AND BREEDING

Important breeds of livestock with special reference to economic traits of farm animals; Breeding of important species of zoo/wild animals. Breeding livestock for high performance and disease resistance; Principles of genetics; National and state livestock breeding policy; Importance of conservation of livestock and poultry germplasm. Nature of DNA and RNA-their models and functions; Applications of recombinant DNA technology, cloning and role of gene actions and cytogenetics.

10. UNIT-IV: LIVESTOCK AND POULTRY MANAGEMENT AND NUTRITION

Common terms used in animal husbandry; demography of livestock; housing, feeding and caring of different age groups of different species of animals including zoo/wild and lab animals; Judging of farm animals; Farms records. Economics of livestock and poultry farming; Dairy farming and clean milk production; Preparation of project reports of livestock and poultry farm; Feeding and management of animals under draught, flood and other natural calamities; Nutritional terms and definitions; Classification and composition of feeds and fodders; Anti nutritional factors and toxins in feeds and fodders; Feeding standards and nutrient requirements of different categories of livestock and computation of rations; Feed supplements and additives, Conservation and preservation of feeds and fodders; Economic utilization of agro-industrial by products. Wildlife nutrition. Role of minerals, trace elements and vitamins.

11. UNIT-V: LIVESTOCK PRODUCTS TECHNOLOGY

Layout and maintenance of milk, meat and egg processing units; Abattoir practices, Preparation, processing, preservation, packaging, storage, transportation, nutritional value, quality control and marketing of livestock products and by-products; Objectives of meat inspection & laws, ante-mortem, post-mortem inspection; Legal standards of quality control, toxicity/pesticide residues and adulterants in livestock products and by-products.

12. UNIT-VI: VETERINARY MICROBIOLOGY, PATHOLOGY, PARASITOLOGY AND PHARMACOLOGY & TOXICOLOGY

Aetiology, morphology, life cycle, transmission, pathogenesis, symptoms, lesions, diagnosis, treatment, control and prevention of bacterial, viral, fungal, Chlamydial, rickettsial diseases of domesticated animals, birds and zoo/wild animals; Immune system; Principles of vaccine production, Concept and causes of diseases in animals; general principles and procedures of necropsy; collection, preservation and dispatch of morbid materials for laboratory diagnosis, disease investigation; Veterolegal cases, writing of post-mortem report; exotic emerging and re-emerging diseases of livestock. Aetiology, morphology, life cycle, transmission, pathogenesis, symptoms, lesions, diagnosis, treatment, and strategic control of helminthic, protozoal and arthropod parasites affecting domesticated animals and poultry; Drug action/ Pharmacokinetics (absorption, distribution, biotransformation and excretion) Pharmacodynamics-local and general anaesthetics and antidotes; Antibiotics and chemotherapy -Toxicology- Ethno veterinary practices.

13. UNIT-VII: VETERINARY EPIDEMIOLOGY & PUBLIC HEALTH AND MEDICINE

Environmental hygiene; role of veterinarian in public health; zoonoses including food-borne diseases: concept, scope, objectives and uses. Monitoring and surveillance-epidemiological disciplines. Diagnosis and treatment of various clinical manifestations of animals and poultry; Animal welfare and ethics, common offences against animals; Laws relating to offences affecting public health.

14. UNIT-VIII: VETERINARY GYNAECOLOGY & OBSTETRICS AND VETERINARIAN SURGERY AND RADIOLOGY

Reproductive physiology; hormones and reproduction; artificial insemination; semen characteristics of different species of livestock and cryopreservation. Multiple ovulation and embryo transfer technology in livestock and zoo animals; Pregnancy diagnosis, Reproductive disorders and their management; General surgical principles, surgical equipment, operation theatre management, Pre and post-operative considerations, anaesthesia, asepsis and anti-sepsis and sterilization; scope, history and development of veterinary radiology; Imaging pathology of different parts of body-surgical emergencies – Intensive care – Physiotherapy – Diathermy.

15. UNIT-IX: VETERINARY EXTENSION AND ANIMAL HUSBANDRY

Concepts and principles of extension; Different methods of extension education; Evaluation of technology and its transfer to the livestock and poultry entrepreneur; farmers and industry; Livestock farming systems in rural India; Training programmes in rural and urban area. Involvement of unemployed women, marginal and small farmers in livestock and poultry production. Use of Audio-Visual aids and Information Technology in extension.

ANNEXURE-II

Scheme and Syllabus for DMA-Telangana State Recruitment Examination conducted for the Post of Para Medical Assistant on Outsourcing basis

SCHEME OF THE EXAMINATION (Para Medical Assistant)

Written Examination (Objective Type)	No. of Questions	Duration (Minutes)	Maximum Marks
General Studies	50	120	100
Technical (Core Subject)	50		

SYLLABUS (Para Medical Assistant)

I. General Studies

1. Current Affairs – Regional, National and International importance in Politics, Economy, Society, Science, Technology, Arts, Sports, Culture and Governance.
2. General Science and its applications to the day to day life
3. History, Economy, Geography and Polity of India
4. Basic English
5. Reasoning and Analytical Ability
6. Fundamentals of Computers

II. Technical

7. Basic anatomy of livestock with particular reference to the bones and joints.
8. Basic physiology of various systems of livestock, viz., digestive, respiratory, uro-genital, cardio-vascular, nervous system etc.
9. Livestock farm management; various livestock farms, management of newborn calf, kid etc., management of dairy cattle, their feeding and breeding.
10. Poultry and hatchery management
11. Livestock feeding; various pastures and grasses used for livestock feed. Nutritional requirements for livestock of different ages and different physiological states.
12. Management of meat animals such as, sheep, goat, swine etc., meat production and handling
13. Laboratory diagnosis; blood collection and examination for various hemoproteins, examination of different diagnostic samples viz., milk, urine, feces, serum, skin etc.
14. Collection and processing of infectious material and culturing techniques for different bacteria and fungi
15. Basics in pet and companion animal management
16. Various infectious diseases viz., bacterial, viral, fungal, parasitic diseases in livestock, their etiology, signs, diagnosis, management and control measures
17. Various non-infectious diseases viz., diseases of digestive, respiratory, urinary, genital, cardiovascular, integumentary and nervous systems in livestock, their causes, signs, diagnosis and management
18. Diseases of female reproductive system of cattle, artificial insemination technique
19. Basics of veterinary pharmacy; various pharmacological terms, routes of administration of drugs, classification of drugs used in veterinary practice.
20. Various vaccines used in livestock, vaccination schedule in livestock and poultry.
21. General fundamentals of veterinary surgery.

