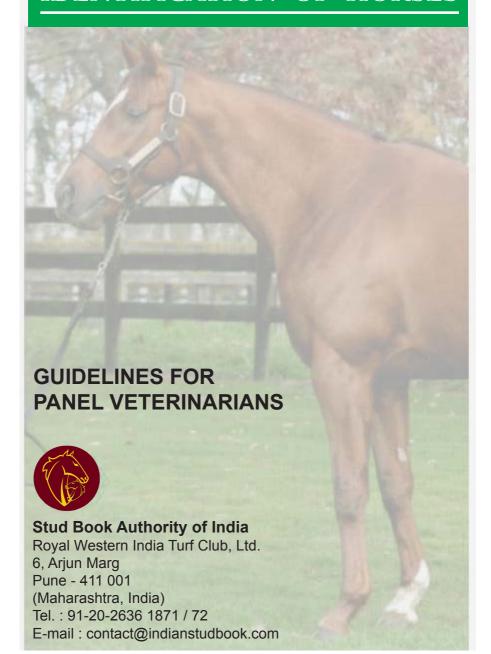
# **IDENTIFICATION OF HORSES**



#### Foreword

The Stud Book Authority of India (SBAI) is duly recognised by the International Stud Book Committee (ISBC) and is one of the approved Stud Books in the world. At the ISBC, the SBAI represents Asia as one of the two Asian Zone representatives along with Japan.

The SBAI is abreast with latest international technologies in identification of racehorses and it is the authoritative institution in India to certify that all horses recorded and registered by it are correctly identified by diagrammatic, written description and are duly parentage validated.

Passports of all Indian-bred horses are prepared with officially recorded colours and markings (including brands) and the passport remains the primary source of identification for all horses in India.

With effect from the foal-crop of 2004, all Indian-bred horses, registered for Racing under the aegis of a Turf Authority in India have been microchipped with an ISO 11784/11785 compliant transponder.

The Members of the Veterinary Profession are experts in their field and might prefer to use scientific anatomical nomenclature in Certificates of Identity. However, keeping in mind widespread movement of horses, identification is required many times, by lay persons, non-veterinary professionals and other bodies within the equine industry, the identifying veterinarians are requested to keep the diagrammatic and written markings simple and precise for easy understanding.

A set of Guidelines have been circulated by SBAI on various occasions in the past. With over three years having elapsed since the last publication was released and more Veterinarians being empanelled by the Ministry of Agriculture, Government of India, this compilation is considered necessary.

It is hoped that this would be of immense help and serve as a ready reckoner to the veterinarians undertaking identifying duties. As always, suggestions if any, for improvement are welcome.

Lastly, we would like to express our gratitude to Equine Nutrients for having volunteered to sponsor the cost of printing this compilation.

Place: Pune

Date: 01 Dec 2021

Satish R. lyer Keeper & Registrar Indian Stud Book

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#### PROCESS OF FOAL REGISTRATION IN INDIA

(Effective from foal-crop of 2020)

A Certificate of Identity (COI) is issued by a Panel Veterinarian or an Authorised Veterinarian by the end of one year of age. The observations noticed in the Certificates of Identity can be of two categories and are classified are as under:-

- (a) Discrepancies between the diagram and the description in COI.
- (b) Discrepancies within the description itself.

After these discrepancies are reconciled, the COI is registered.

In the meantime, hair samples of yearlings are collected and the parentage validation is done with DNA analysis.

(This completes the registration of the foal and thereafter a passport is prepared by SBAI for the yearling based on all the above collated data)

# EXAMPLES OF BODY COLOURS

BAY



BROWN



CHESTNUT



GREY



#### **BODY COLOURS**

#### General

- 1. The following list of body colours and markings is recommended as sufficient internationally. No other description is acceptable.
- 2. The principal body colours found in the horses are bay, brown, chestnut and grey. There can be certain horses described as cremello or buckskin, etc. However, these colours are not known to exist in India till date. However, if such colours are noticed, the identifying Veterinarians are requested to bring the cases to our attention before issuing a COI.

#### Bay

3. There is a reasonably clearly defined colour line between the black lower part of the legs and the general tan/brown colour of the upper legs and body. Mane and tail are black.

#### Chestnut

4. The coat is reddish or yellowish brown. The mane and tail are chestnut and may be lighter or darker than the body colour.

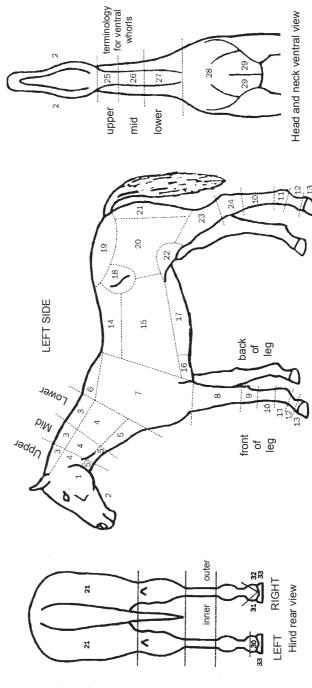
#### Grey

- 5. The body coat is a mixture of black and white hair, with the skin black. With increasing age, the coat grows lighter in colour. As there are variations according to age and season, all of them should be described by the general term 'grey'.
- 6. A majority of grey horses are not grey as young foals. Such foals should be described with their predominant coat colour (*bay or chestnut*, *as the case may be*) in the Certificate of Identity. However, any white hair on the body must be mentioned in the narration. Veterinarians can mention "may turn grey" for such horses.
- 7. It must be noted that a grey foal **must** have at least one grey parent and this must be verified by the identifying Veterinarian.

# COAT COLOUR AND GENETIC LAWS OF HEREDITY IN THOROUGHBRED HORSES

- 8. The internationally accepted coat colour principles are well-known to Veterinarians and are being reproduced below:-
  - (a) a chestnut sire and a chestnut dam must produce a chestnut foal, and
  - (b) a grey foal must have atleast one grey parent.

# POINTS OF HORSE



# BODY

cheek

<u>a</u>

point of hip (or hip)

croup

- stifle or stifle fold hindquarter buttock 20. 21. crest (upper, mid, lower) neck (upper, mid, lower)
  - jugular furrow (upper, mid, lower)
  - shoulder withers 4. 7. 0. 7. 8
    - forearm
      - knee <u>ග</u>
- cannon fetlock 10
  - pastern
    - coronet <u>რ</u>
    - - back 4.

inner bulb heel outer bulb heel

hoof

- girth

Outside (lateral) (medial) Inside Outside (lateral)

MUZZLE

HEAD

# HEAD

- base of forelock
  - orehead

upper eye level

lower eye level eye level

Ö.

Left

Right

- bridge of nose ø. ь Б
- muzzle or nose face

throat or upper windpipe

thigh hock

23. 24. lower windpipe

25. 26. 27. 28.

pectoral

heel

chest

mid windpipe

- upper lip ower lip
  - midline
- -- midline р <sub>Ф</sub>

Front

Back

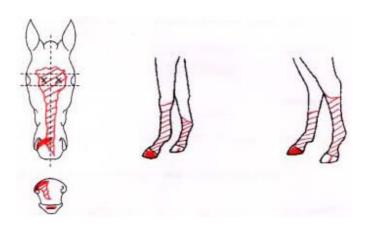
#### **MARKINGS**

#### **Variations**

- 9. The variations in markings of horses are infinite and cannot be accurately described by a limited number of terms without certain arbitrary groupings. In some cases, a combination of recommended terms (see further pages) needs to be employed. It is stressed that all COI should, in conformity with later remarks, consist of a narration, accompanied by a sketch on which the markings are indicated accurately. All marks of identification should be recorded.
- 10. **Whole coloured horses**. When a horse does not have any white markings, a minimum of five **natural** identification marks must be described. These **must not** include acquired marks such as brands, tattoos, microchips, etc. Grey horses or horses which are in the process of turning grey must be considered as whole-coloured horses.
- 11. Whorls below the forelock and stifle whorls should not be counted in the five natural markings. In cases where a minimum of five natural markings cannot be located, an appropriate remark must be endorsed in the "Remarks" column as "Only ...... natural markings noticed".

#### White Markings

12. Any white marking on the horse must be outlined in the sketch in red, using a ball point pen and lightly hatched in with diagonal lines so that any whorl contained therein is not wiped out. A few white hair lacking a distinct outline are indicated by a few short lines.



#### White Markings (continued)

Mixed. To be used to describe a white marking which contains varying amounts of hair of the general body colour. Described as mixed in the narration and drawn as any other white mark:

Bordered. To be used where any marking is circumscribed by a mixed border, e.g., 'bordered star', 'bordered stripe'. Drawn as:

Flesh Marks. Patches where the pigment of the skin is absent should be described as 'flesh marks'. Drawn as:

Bordered If a flesh mark is circumscribed by a mixed border it should be Flesh Marks. described as a 'bordered flesh mark'. Drawn as: \_\_\_\_\_

#### **HEAD MARKINGS**

13. STAR. Any white mark on the forehead is defined as a star. A star is described or denoted by its size, shape and position.

Size. The acceptable terminology is large, medium and small.

Shape. To describe the shape, a **geometric** (*triangular, ovalish, roundish etc.*) shape is preferred to a descriptive (*pear shaped, crown shaped, funnel shaped, top shaped, leaf shaped etc*). If geometric description is not possible, it should be described as "**irregular**".

Position. With respect to eye level. e.g. above / below or at eye level.

If the markings on the forehead consist only of few white hair, it should be so described and NOT as a star.

#### Head Markings (continued)

14. STRIPE. A stripe is a narrow white marking below the forehead running down the bridge of the nose in most cases and is defined by its size, whether connected to the star or not, its extent and description.

Size. The acceptable terminology is 'broad', 'medium' and 'thin'.

Connected / Not Connected / Conjoint / Not Conjoined. If the stripe is connected to a star, it must be so mentioned, if it is not connected then, the starting point of the stripe must be mentioned.

Extent. The point at which the stripe terminates must be mentioned.

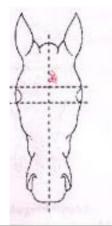
Description. Descriptive points must include finer aspects to indicate bordered, fleshy, slanting. In case of bay/black or chestnut spots are noticed within the stripe, they must be described.

An interrupted stripe is one which is broken within its length. When a stripe is separated from a star or there is no star present, it should not be described as an interrupted stripe and the starting and ending point of this stripe must be defined.

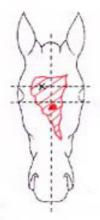
- 15. Blaze. A white marking covering almost the whole of the forehead between the eyes and extending beyond the width of the bridge of the nose on to the face and usually to the muzzle. Any variations in the direction and termination should be stated.
- 16. Snip. An isolated white marking situated between or in the region of the nostrils. Its size, position and intensity should be specified.
- 17. Lip Markings. Should be accurately described, whether embracing the whole or a portion of either lip.
- 18. Muzzle Markings. Where the white embraces both lips and extends to the region of the nostrils.

#### **EXAMPLES OF MARKINGS**

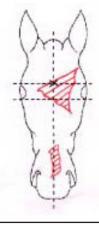
#### **HEAD**



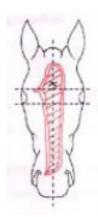
FEW HAIR TO THE LEFT OF MIDLINE ABOVE UPPER EYE LEVEL.



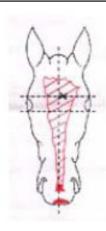
A MEDIUM-SIZED IRREGULAR STAR WITH A CONNECTED STRIPE ENDING IN MID-NASAL BRIDGE. A WHORL TO THE RIGHT OF MIDLINE AT UPPER EYE LEVEL. A SMALL FLESH MARK JUST BELOW LOWER EYE LEVEL.



A MEDIUM-SIZED IRREGULAR STAR ENCLOSING A MIDLINE WHORL AT UPPER EYE LEVEL. A DISCONNECTED STRIPE COMMENCING IN MID-NASAL BRIDGE AND ENDING BETWEEN BOTH NOSTRILS.



A MEDIUM-SIZED IRREGULAR BORDERED STAR WITH A CONNECTED BORDERED STRIPE SLANTING SLIGHTLY TO THE RIGHT AND ENDING JUST ABOVE BOTH THE NOSTRILS. A MIDLINE WHORL ABOVE UPPER EYE LEVEL.



A MEDIUM-SIZED IRREGULAR STAR WITH A CONNECTED BROAD STRIPE NARROWING AND ENDING BETWEEN BOTH THE NOSTRILS ENCLOSING A FLESH MARK. UPPER LIP PARTLY FLESH MARKED. A WHORL TO THE LEFT OF MIDLINE AT UPPER EYE LEVEL.



A MEDIUM-SIZED IRREGULAR STAR WITH A CONNECTED BROAD STRIPE NARROWING FROM MID-NASAL BRIDGE, BROADENING BETWEEN NOSTRILS ENCLOSING A BORDERED FLESH MARK AND ENDING BELOW. A MIDLINE WHORL AT LOWER EYE LEVEL.

#### **WHORLS**

#### General

19. Whorls are formed by changes in direction of the flow of hair. They may appear at different parts of a horse and may be classified as linear and feathered. However, with a view to have simple terminology, the following are the categories under which they should be grouped:-

Linear. Two opposing sweeps of hair meet from opposite directions along a line, with or without forming a crest. The term 'linear whorl' is used in the narration to define such whorls and is denoted by '-----' in the diagram.

**Feathered**. Two sweeps of hair diverge along a line but the direction of flow of each sweep is at an angle to the other so that together they form a feathered pattern. The term 'feathered whorl' is used in the narration to define such whorls and is denoted by 'x ----' in the diagram.

- 20. Head Whorls. The position of head whorls should be clearly specified with reference to midline and eye level, to white markings and to each other if two or more occur in close proximity.
- 21. Neck Whorls. The crest of the neck is divided into three parts upper, mid and lower. Any reference to the position of whorls should be described as such and by their location. When whorls on the neck are described as being on either side in the same segment, its inter se position must be mentioned. If there is no whorl on either side of the crest, this must be specifically mentioned, since this is not normal.
- 22. Whorls in the front (trachea/jugular furrow). In describing the position of the whorls on the trachea/jugular furrow, the neck should be divided into three segments i.e. "upper", "middle" and "lower". Whorls on the neck and at the throat latch should be described in the column "Body" and **not** in the column "Head". Throat whorls must be marked only on the Ventral diagram.

Whorls on the jugular furrow are usually visible only from the side and as such, they should be marked only in the side view diagrams and not on ventral view diagrams.

It is noticed that markings on ventral side of the neck are being missed out despite a Ventral View diagram having been provided. Panel Veterinarians must mark this diagram.

There is plenty of confusion in marking and describing whorls in the ventral view i.e. left and right is often interchanged. Identifying Veterinarians are advised to be careful.

#### Whorls (continued)

23. Whorls found in any part of the body must be described in the narration and also be drawn appropriately in the diagrams.

#### Whorls on the stifle, forelock.

24. Whorls on stifle folds and forelock are visible on almost all horses and as such, should not be taken into account as natural markings, even if there are no white markings found.

Fleeked	
25	

#### LIMB MARKINGS

#### Whorls on the limbs.

26. Whorls, if any, on the limbs should be described in the appropriate limb column and not in the column "Body".

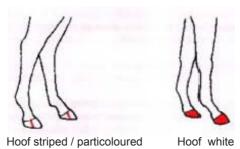
#### White markings on limbs.

27. White markings on the limbs should be accurately described by reference to the figure "Points of Horse" and the extent precisely stated, e.g. white to half pastern, etc.

In describing the white markings and whorls on the limbs, use of simple terminology like inside, outside, in front, at the back, etc. is required.

#### Hooves.

28. The hoof colour must be mentioned if it is anything other than black. When mentioned, it should also be marked accordingly on the diagram. Acceptable method of showing it in the diagram in red, is as under:-



1.5

#### OTHER MARKINGS

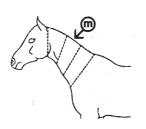
- 29. The 'Prophet's Thumb Mark. This is a muscular depression seen usually in the neck, but sometimes in the shoulders and occasionally in the hindquarters. It should be indicated on the sketch by a triangular mark ' $\triangle$ ' and described in the narration.
- 30. Wall-eye. This term should be used exclusively where there is a lack of pigmentation in the iris, either partial or complete.

#### **Acquired Markings.**

31. Brand marks, tattoo marks, saddle marks, bridle marks, girth marks, permanent bandage marks, surgical scars, opacity of the eye, etc fall into this category. Whenever, such markings are noticed they should be described in the narration and also drawn appropriately in the diagram.

#### Microchipping

- 32. As mentioned earlier, microchipping of horses is an added identification tool, which is becoming increasingly popular. Most of the recently imported horses, carry a microchip.
- 33. In India, microchipping is a mandatory requirement for registration of foals. With effect from the foal-crop of 2012, microchipping is being carried out by Panel Veterinarians at Breeding Establishments.
- 34. However, it is ESSENTIAL at any age for horses being exported, the Sr. Veterinary Officers of the Turf Authorities of India are also authorised to carry out microchipping for racehorses
- 35. Microchips are usually found in the middle-third segment of the left crest. Universal readers, capable of reading ISO 11784/5 chips are available in the market and sooner or later, usage of microchip and readers will become necessary. When a microchip has been located and read by a reader, it should be indicated as shown below. All Certificates of Identity for an imported horse must have their microchip numbers mentioned on the form.

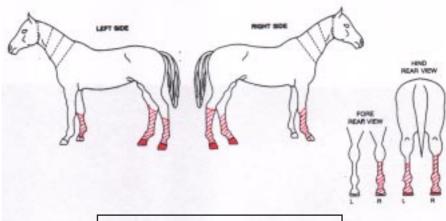


#### Recap

- 36. Description should be kept short and in simple language. Do not over describe or fill in factual information not supported by documentary evidence.
- 37. Avoid the use of abbreviations and numerals to denote fractions in the limbs.
- 38. Commonly mis-spelt words include canon (for cannon), hairs (for hair), crecentric (for crescent shaped), pole (for poll), stripped (for striped), etc. Sufficient caution may please be exercised.
- 39. Ensure speedy reply to queries raised by the SBAI so that the process of registration is not held up.
- 40. Ensure that the postal address and contact details are correctly mentioned on the Certificates of Identity.

## **EXAMPLES OF MARKINGS**

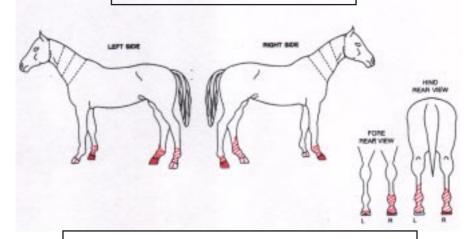
### **LIMBS**



R.F.: CANNON WHITE UPTO KNEE. HOOF PARTICOLOURED.

L.H.: TWO-THIRD CANNON WHITE. HOOF WHITE.

R.H.: CANNON WHITE UPTO HOCK. HOOF WHITE.



L.F.: BOTH BULBS OF HEEL WHITE. HOOF PARTICOLOURED.

R.F.: FETLOCK WHITE. HOOF WHITE.

L.H.: ONE-THIRD CANNON WHITE, EXTENDING UPTO TWO-THIRD CANNON INSIDE AND AT

THE BACK, HOOF PARTICOLOURED.

R.H.: PASTERN WHITE, EXTENDING TO FETLOCK INSIDE AND AT THE BACK. HOOF WHITE.

## **EXAMPLE OF CERTIFICATE OF IDENTITY**



#### Stud Book Authority of India

#### **Certificate of Identity**



## STUD BOOK AUTHORITY OF INDIA

CERTIFICATE OF IDENTITY

ROYAL WESTERN INDIA TURF CLUB, LTD.

and diagram tally

Ensure written description | White markings to be | Mark whorls by an "X" shown in RED

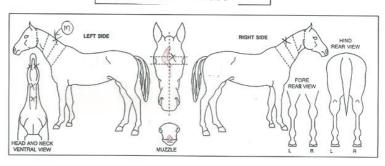
IMPORTANT

and describe in detail

Colour	Sex	Date of Birth	Sire	Dam
BAY	COLT	18/04/2018	WIN LEGEND [JPN]	OUR MONA[USA]

Microchipped on Left Crest:

982000378031365



#### DISTINCTIVE MARKINGS

HEAD: A WHORL TO THE LEFT OF MIDLINE AT UPPER EYE LEVEL. A MEDIUM-SIZED IRREGULAR STAR TO THE RIGHT SIDE OF THE WHORL. A CONNECTED FAINT STRIPE ENDS IN UPPER THIRD NASAL BRIDGE. A SMALL SNIP IN THE MIDDLE OF UPPER LIP. A WHORL ON EITHER

SIDE OF THE MANDIBLE.

#### LIMBS:

L.F. -NO WHITE MARKINGS.

R.F. -NO WHITE MARKINGS.

NO WHITE MARKINGS. L.H. -

R.H. -NO WHITE MARKINGS.

BODY: A WHORL ON EITHER SIDE IN MID THIRD CREST, BOTH AT THE SAME LEVEL, A WHORL AT

THE THROAT. AWHORL IN MID THIRD TRACHEA.

#### **EXAMPLE OF CERTIFICATE OF IDENTITY**



#### Stud Book Authority of India

#### **Certificate of Identity**



#### STUD BOOK AUTHORITY OF INDIA

CERTIFICATE OF IDENTITY

ROYAL WESTERN INDIA TURF CLUB, LTD.

IMPORTANT

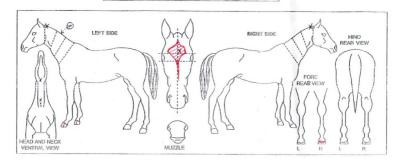
Ensure written description | White markings to be | Mark whorls by an "X" shown in RED and describe in detail

İ	Colour	Sex	Date of Birth	Sire	Dam
	CHESTNUT	COLT	31-03-2018	DAVID LIVINGSTON [IRE]	POLTAPENNY [USA]

and diagram tally

Microchipped on Left Crest:

982000378031713



#### DISTINCTIVE MARKINGS

A WHORL TO THE LEFT OF MIDLINE ABOVE UPPER EYE LEVEL ENCLOSED IN A LARGE HEAD: IRREGULAR STAR. A CONNECTED VERY THIN STRIPE ENDING IN MID-NASAL BRIDGE.

#### LIMBS:

L.F. -HOOF PARTICOLOURED.

RF-FEW SCATTERED GREY HAIR ON BOTH BULBS OF HEEL. HOOF PARTICOLOURED.

L.H. -NO WHITE MARKINGS.

R.H. -NO WHITE MARKINGS.

BODY: A WHORL ON EITHER SIDE OF CREST IN ANTERIOR THIRD NECK, AT THE SAME LEVEL. A WHORL ON THROAT LATCH. A LINEAR WHORL IN LOWER TRACHEA.

REMARKS: BOTH HIND HOOVES ARE NOT PARTICOLOURED AS SHOWN IN THE NOTIFICATION OF BIRTH

#### ALPHABETICAL LIST OF PANEL VETERINARIANS IN INDIA

1.	Dr Jeyentra T. Balaji
	Dr S Balasubramanian

3. Dr (Maj Gen) R K R Balsubramanian, AVSM

Dr S P Banerjee
 Dr (Major) R S Bansal

6. Dr S Jeya Bharath

7. Dr (Lt Col) Vinod Krishna Bhatnagar, VSM

8. Dr S M Bhoot

9. Dr Dattatray Shrirang Bhosale

10. Dr C K Bhuvanakumar

11. Dr K S Chandel12. Dr N Ravi Chandran

13. Dr (Col) V P S Chaudhary

14. Dr S V Chinmulgund15. Dr Dilip Kumar Das

16. Dr S C Datt

17. Dr (Lt Col) H S Dawra18. Dr Abhay Malhar Desai

19. Dr A V Deshpande

20. Dr N M Dinesh21. Dr M W Gadewar

22. Dr (Col) R P Garg

23. Dr (Col) K George

24. Dr (Col) S K Gupta

25. Dr S M Jayadevappa26. Dr Dinesh Jhamb

27. Dr J C Juvekar28. Dr V S Kannadkar

29. Dr (Col) V N Kapre

30. Dr S. Kar

31. Dr S M Karthikeyan32. Dr Vijay Govind Kashid

33. Dr Ranjit Kharb

34. Dr (Maj Gen) R M Kharb, AVSM

35. Dr Anubhav Khattar36. Dr S K Kulkarni

37. Dr Nitin M Kulkarni38. Dr NaveenKumar

Dr R Senthil Kumar
 Dr Surender Kumar

41. Dr Jaswinder Kumar

42. Dr Rajender Kumar

43. Dr Vijender Kumar 44. Dr D Kumaran

45. Dr R R Kunchur 46. Dr H S Mahesha

47. Dr (Col) O P Maheshwari

48. Dr P Malarvannan

49. Dr S Veer Vikram Malhotra

50. Dr (Lt Col) S C Malik

51. Dr (Brig) V P Manchanda

52. Dr (Lt Col) Mathai Babu Mazhuvanchery

53. Dr Hasneyn Mirza

54. Dr (Major) Mitesh Mittal

55. Dr C V Niranjan

56. Dr (Capt) Surender Pal

57 Dr M Parthiban

58. Dr Amit A Patil

59. Dr R N Phaugat

Dr Ashok R Prabhu
 Dr Sunil S Pund

62. Dr Rajneesh

63. Dr (Col) Tej Ram

64. Dr P Krishna Rao

65. Dr (Col) G S C Ranga Rao

66. Dr Adapala Koteshwar Rao

67. Dr S S Rathore

68. Dr K Venugopal Reddy

69. Dr Ravinder Reddy

70. Dr (Capt) Shalabh Kumar Sahu

71. Dr C Satish

72. Dr K S J M Shankar

73. Dr M M Sharma

74. Dr (Maj Gen) Shrikant Sharma

75. Dr (Lt Col) B R Shetty76. Dr (Brig) Tej Singh77. Dr (Maj Gen) Mehar Singh

78. Dr Amrik Singh

79. Dr (Brig) Jagvinder Singh

80. Dr Ompal Singh81. Dr S C Singh82. Dr Virender Singh

83. Dr Allen Singh84. Dr Gurditta Singh

85. Dr Sukhdev Singh

86. Dr (Lt Col) Virender Singh 87. Dr (Brig) N M Singhvi

88. Dr Prem Kumar Singla 89. Dr Ratan Singh Solanki

90. Dr B Sridhar

91. Dr (Maj Gen) S N Srivastava92. Dr Naveed Ahmed Syed

93. Dr Sadique Ali Syed 94. Dr (Col) K K Uppal

95. Dr P K Uppal

# **NOTES**