

PUNJAB PUBLIC SERVICE COMMISSION BARADARI GARDEN, PATIALA- 147001

GENERAL INFORMATION REGARDING RECRUITMENT TO 353 POSTS OF VETERINARY OFFICER

IN THE DEPARTMENT OF ANIMAL HUSBANDRY, FISHERIES AND DAIRY DEVELOPMENT, GOVERNMENT OF PUNJAB

TABLE OF CONTENTS

GENER	AL INFORMATION FOR THE CANDIDATES	3
1.	INTRODUCTION	3
2.	RESERVATION OF THE POSTS: -	3
3.	PAY SCALE: 47600/- INITIAL PAY.	4
4.	ESSENTIAL QUALIFICATIONS:-	4
5.	AGE	5
6.	PATTERN AND SCHEME OF COMPETITIVE EXAMINATION FOR SELEC	CTION 5
6.1	PROCEDURE FOR SELECTION	5
6.2	PATTERN OF THE WRITTEN COMPETITIVE EXAMINATION	5
6.3	DURATION OF TEST	6
6.4	SYLLABUS OF THE WRITTEN TEST	6
6.5	MODE OF EXAMINATION	6
6.6	INFORMATION ABOUT EXAM CENTRE	6
6.7	ELIGIBILITY AND SCRUTINY OF APPLICATION FORMS AND TESTIMONIALS	6
6.8	INTERVIEW	7
6.9	FINAL RESULT	7
7.	NATIONALITY:	7
8.	SUBMISSION OF APPLICATION FORM	8
9.	APPLICATION AND EXAMINATION FEE	9
10.	CONDITIONS WHICH MAY RENDER A CANDIDATE INELIGIBLE	10
11.	SELECTION OF CATEGORIES	11
12.	DEFINITIONS OF CATEGORIES	12
12.1	EX-SERVICEMEN (PUNJAB)	12
Defii	nition of War Hero	13
12.2	SON/DAUGHTER/GRAND SON/GRAND DAUGHTER OF FREEDOM FIGHTERS (PUNJAB)	14
12.3	SPORTS PERSON (PUNJAB)	
12.4	WIDOWS AND CERTAIN OTHER CATEGORIES OF WOMEN	
12.5	PERSONS WITH DISABILITIES, (PUNJAB)	15
12.6	SCHEDULED CASTES, (PUNJAB)/ SCHEDULED TRIBES	16
12.7	BACKWARD CLASSES (PUNJAB)	17
12.8	GENERAL ECONOMICALLY WEAKER SECTIONS (EWS)	17
ANNE	XURE (I) – Reservation of Posts for Women	19
ANNE	XURE (II)- The Schedule for Specified Disability	20
ANNE	XURE (III)- Performa For Scribe	22
ANNE	XURE (IV) - Certificate regarding Physical limitation in an examinee to write	23
ANNE	XURE (V)- Affidavit by Candidate for Scribe	24
	XURE (VI)- Self Declaration From BC Candidates	
ANNE	XURE (VII)- Syllabus	26



PUNJAB PUBLIC SERVICE COMMISSION BARADARIGARDEN, PATIALA- 147001 WEBSITE: http://ppsc.gov.in

Add. No.

GENERAL INFORMATION FOR THE CANDIDATES

RECRUITMENT TO 353 POSTS OF VETERINARY OFFICERS IN THE DEPARTMENT OF ANIMAL HUSBANDRY, FISHERIES AND DAIRY DEVELOPMENT, GOVERNMENT OF PUNJAB.

INTRODUCTION.

The Punjab Public Service Commission (PPSC) has been established under Article 315 of the Constitution of India, with the basic purpose of recruiting officials in various departments of the Government as per the requisitions sent by the Government in this regard from time to time.

The Punjab Public Service Commission invites <u>Online Application Forms</u> from eligible candidates for recruitment to 353 posts of Veterinary Officers in the Department of Animal Husbandry, Fisheries and Dairy Development, Government of Punjab.

Note: This Advertisement is being published as per the requisition received from the Department of Animal Husbandry, Fisheries and Dairy Development Government of Punjab vide letter No. 1/9/2021-PP-1/(9)/2166 dated 21/05/2021 and No. 1/9/2021-PP-1/(9)/2496 dated 18/06/2021.

2. RESERVATION OF THE POSTS: -

Category Code	Category	Total No. of Posts	Posts reserved for Women Out of total No. of Posts
71	General	137	39
72/73	Ex-Serviceman/LDESM, Punjab	25	14
74	Wards of Freedom Fighter, Punjab	03	01
75	Sports Persons, Punjab	07	04
76	Person with Disability Punjab Blind and Low Vision -76-A	05	02
	Deaf and Hard of Hearing-76-B	05	02
	Locomotive Disability - 76-C	03	01
	(including Cerebral palsy, Leprosy cured, Dwarfism, Acid attack victims and Muscular dystrophy)		
	Intellectual Disability – 76-D (Including Autism, and Specific learning disability) and Mental illness OR	03	01
	Multiple disabilities specified in Serial No. 1 to 4 above, including deaf blindness		
77	Scheduled Castes (Others), Punjab	35	14
78/79	S.C (Others)ESM/LDESM Punjab	06	-

80	SC (Others) Sports Persons, Punjab	02	-
81	Balmiki/Mazbhi Sikhs, Punjab	36	15
82/83	Balmiki/Mazbhi Sikhs ESM/LDESM	07	-
	Punjab		
84	Balmiki/Mazbhi Sikhs Sports Persons	02	-
	Punjab		
85	Backward Classes Punjab	35	14
86/87	Backward Classes Ex-	07	-
	Serviceman/LDESM Punjab		
92	Economically Weaker Section, Punjab	35	11
	Total	353	118

- **Note 1** The number of posts may be increased or decreased by the Government at any time before the selection process is complete without giving any prior notice to the candidates.
- Note 2 The Punjab Civil Services (Reservation of posts for women) Rules 2020 issued by the Department of Social Security and Women & Child Development that provides for 33% reservation for women is attached as **Annexure-I** with General Information for candidates

3. PAY SCALE: 47600/- INITIAL PAY.

The minimum pay admissible for the ibid posts shall be as per Notification No. 7/204/2012-4FP1/66, Dated 15/01/2015 Government of Punjab, Department of Finance (Finance Personnel-I Branch) Chandigarh, and Notification No. 1/62016-4P.P.1/834680/1 dated 07/09/2016 Government of Punjab Department of Personnel PP-I Branch Chandigarh, fixed emolument equal to Minimum Pay without any allowance will be paid during the probation period of 3 years.

4. ESSENTIAL QUALIFICATIONS:-

- 4.1 Should possess Bachelor's Degree in Veterinary Science and Animal Husbandry from a University recognized by the Veterinary Council of India; and
- 4.2 Should be registered with the Punjab Veterinary Council.
- 4.3 Punjabi of Matric or its equivalent Standard is essential.

Provided further that where a ward of Defence Service Personnel, who is a bonafide resident of Punjab State, is appointed by direct appointment, he shall have to pass an examination of Punjabi Language equivalent to Matriculation Standard, or he shall have to qualify a test conducted by the Language Wing of the Department of Education of Punjab Government within a period of two years from the date of his appointment. Provided further that where a War Hero, who has been discharged from defence services or paramilitary forces on account of disability suffered by him and his widow or dependent member of his family, is appointed under the instructions issued in this behalf by the Government, the person so appointed will not be required to possess aforesaid knowledge of Punjabi language:

IMPORTANT NOTE: The candidates MUST possess the requisite qualification before or by 10/12/2021.

5. **AGE**

- 5.1 Candidates should not be below 18 years and above 37 years of age as on 01-01-2021.
- 5.2 The upper age limit may be relaxed up to 45 years for Punjab Government and its Board/Corporation/Commission and Authorities employees, all States/ Central Government employees.
- 5.3 The Upper age limit is relaxed up to 42 years for Scheduled Castes and Backward Classes of Punjab.
- 5.4 Ex-servicemen of Punjab Domicile shall be allowed to deduct the period of his service in the Armed Forces of Union from his actual age and if the resultant age does not exceed the maximum age limit prescribed for direct appointment to such a vacancy in the Service Rules concerned by more than three years, he shall be deemed to satisfy the condition regarding age limit.
- 5.5 The upper age limit is also relaxed up to 42 years for Widows, Divorcees and certain other Categories of Women.
- 5.6 The upper age limit is also relaxed up to 47 years for Persons with Disability of Punjab.

6. PATTERN AND SCHEME OF COMPETITIVE EXAMINATION FOR SELECTION

6.1 PROCEDURE FOR SELECTION

The procedure for selection of candidates for the post of veterinary officers in the Department of Animal Husbandry, Fisheries and Dairy Development, Government of Punjab will consist of written examination and interview as per the following details:

Subject Matter	No. of	Total
	Questions	Marks
Written Competitive Examination	120	480
Interview	-	60
Total Marks	-	540

The written competitive examination for the post will be scheduled tentatively in April, 2022. The exact date of exam will be decided and intimated later keeping in view the public health safety issues.

6.2 PATTERN OF THE WRITTEN COMPETITIVE EXAMINATION

The pattern for written competitive examination comprising of 120 questions (@ 4 marks for each question) is as follows:

S.No.	Topic	No. of	Marks (Each	Type of
		Questions	Question carries	Questions
			4 marks)	
1.	Questions from the Subject	100	400	MCQs
2.	Questions from Logical Reasoning, Mental ability and General Knowledge	20	80	(Multiple Choice Questions)
Total		120	480	

The important points to note:

I. Each question carries 4 marks and, for each correct answer candidate will get 4 marks.

- II. For each incorrect answer, 1 mark will be deducted from the total score.
- III. To answer a question, the candidate has to find, for each question, the correct answer/best option.
- IV. Answer key will be uploaded on the PPSC website (after written examination), and the candidates will be permitted to raise objections (if any). Candidates will be given four days to deliberate before putting up the objections.
- V. Unanswered/Unattempted questions will be given no marks. In case, a question is withdrawn, all candidates will be given four (04) marks irrespective of the fact whether the question has been attempted or not attempted by the candidate.

6.3 DURATION OF TEST

The test would be of two (02) hours duration.

6.4 SYLLABUS OF THE WRITTEN TEST

The Question Paper will be based on the given syllabus from the subject and from Logical Reasoning, Mental ability and General Knowledge (Annexure-VI)

6.5 MODE OF EXAMINATION

The Examination is a Pen & Paper-based Test, to be answered on the specially designed madie gradable OMR sheet using Ball Point Pen.

6.6 INFORMATION ABOUT EXAM CENTRE

Information about the examination center(s) shall be mentioned on Admit Cards of all candidates. The Public Notice to download the Admit cards shall be given shortly on the website of the Commission.

6.7 ELIGIBILITY AND SCRUTINY OF APPLICATION FORMS AND TESTIMONIALS

- **6.7.1** All candidates who apply for ibid posts will be treated "provisionally eligible" for appearing in the competitive exam. Acceptance of applications at this stage and allotment of Roll Numbers by PPSC does not indicate acceptance of candidature by the PPSC, since there is no scrutiny of documents before the written test.
- **6.7.2** The scrutiny of application forms shall be done after the conduct of the examination. During the process of scrutiny, the application forms and other relevant documents, certificates, etc. of the candidates shall be examined to determine their eligibility **as on closing/last date of advertisement.** Candidates not meeting the eligibility criteria will be rejected after the scrutiny process or any time thereafter if found ineligible.
- **6.7.3** The candidates applying for the Competitive Examination should ensure that they fulfill all the eligibility conditions for admission to the examination. Their admission at all the stages of examination for which they are admitted by the Commission viz. Competitive Examination and Interview will be purely provisional, subject to their satisfying the

prescribed eligibility conditions. If on checking at any time before or after the Competitive Examination/ Interview, it is found that they do not fulfill any of the eligibility conditions their candidature for the examination will be cancelled by the Commission. If any of their claims is found to be incorrect, they may render themselves liable to disciplinary action by the Commission or the civil court. Any attempt on the part of a candidate to obtain support for his candidature by any unfair means will render him/ her liable for disqualification and disciplinary action.

6.8 INTERVIEW

- 6.8.1 Candidates not more than two times the number of posts (in their order of merit of written examination) who have scored a minimum of 45 percent marks in written examination (40% for candidates of Scheduled Castes of Punjab and Backward Classes Punjab) shall be short-listed for appearing in the interview. However, this number shall be subject to variation if two or more candidates at the bottom of this list (the number at the end) get equal marks. In such case, then all of them shall be considered for appearing in the Interview (subject to eligibility), warranting the corresponding increase in the stipulated ratio.
- 6.8.2 No candidate shall be eligible to be shortlisted for interview unless he/she obtains 45% marks in the competitive examination (read 40% for the candidates belonging to Schedules Caste of Punjab and Backward Classes of Punjab) and no candidate shall be eligible to be appointed unless he/she obtains at least 45% marks in the aggregate i.e., competitive examination including interview (read 40% for the candidates belonging to Schedules Castes of Punjab and Backward Classes of Punjab).
- **6.8.3** The aim of the Interview is to assess the candidate's suitability for the job in terms of his personal qualities by a Panel Interview.

6.9 FINAL RESULT

- **6.9.1** Final result shall be prepared on the basis of the grand total of the marks obtained by the candidates in the Written Competitive Examination and the Interview.
- **6.9.2** The marks of written competitive examination obtained by the candidates or cut off marks for interview will not be disclosed at the time of short listing the candidates for interview, to avoid the same influencing the interview panel. However, the complete details of written marks and interview marks will be available on the website of Commission after compiling the final result.

7. NATIONALITY:

A candidate shall be a:

- (i) Citizen of India; or
- (ii) Citizen of Nepal; or
- (iii) Subject of Bhutan; or
- (iv) Tibetan refugee who came over to India before the Ist January 1962, with the intention of permanently settling in India; or.

(v) A person of Indian origin who has migrated from Pakistan, Burma, Sri Lanka and East African countries of Kenya, Uganda and United Republic of Tanzania (formerly Tanganyika and Zanzibar) Zambia, Malawi, Zaire, Ethiopia and Vietnam with the intention of permanently settling in India;

Provided that a candidate belonging to categories (ii), (iii), (iv) and (v) shall be a person in whose favour a certificate of eligibility has been issued by the Government of Punjab in the Department of Home Affairs and Justice.

8. SUBMISSION OF APPLICATION FORM

8.1 The candidates can ONLY apply by filling Online Application Form, a link of which is available on the website of the Commission http://ppsc.gov.in. No other mode of application will be accepted.

Process	Step	Last Date
To make new registration for applying for the post.	(Step-1)	10/12/2021
		By 11:59:00 PM
To deposit the Application fees by system generated	(Step-2)	20/12/2021
Bank Challan Form.		[During Banking
		<u>Hours]</u>

- 8.2 Candidates are advised to fill their details in the online application form carefully e.g., Name, Father's Name, Date of Birth, Category, Aadhar Card number, Qualification, Experience, Photo & Signature, fee etc. After final submission of online application form by the candidate, no change will be allowed, and candidate will be responsible for any mistake in the data filled in the online application form.
- 8.3 <u>Submission Of Printed Copy of The Application Form:</u> The candidates are NOT REQUIRED to send the Hard Copy of the Online Application Form to the Office of Punjab Public Service Commission. However, the candidates are advised/directed to take copy in soft form/print out of the Application Form at the time of applying, otherwise he/she will not be able to take out the copy at the later stage. He/she must retain the hard/soft copy of online application form along with all eligibility documents ready to be sent at a short notice to PPSC whenever required by PPSC during short listing of candidates for the interview or earlier.
- 8.4 However, candidates applying under the Sports Category will send a Hard Copy of 'Online Application Form' along with Sports Gradation Certificate and other certificates related to sports to establish his eligibility under the sports category at the Reception Counter of PPSC by hand by 31/01/2022.
- 8.5 Also, persons with disabilities must submit the hardcopies of Online Application Form alongwith Disability Certificate and request for scribe, if any and other eligibility documents at the reception counter of PPSC by hand by 31/01/2022. For any assistance

Persons with disabilities may contact Superintendent Examination: 0175-5014831, 0175-5014825.

- **8.6** The following SELF ATTESTED CERTIFICATES shall be submitted by candidates alongwith printout of online application form when asked at short notice:
 - i) Proof of Date of Birth: Certificate of Matriculation/Higher Secondary
 - ii) Proof of having passed Punjabi Language
 - iii) Relevant Degree and DMC Certificate
 - iv) Reserve Category Certificate issued by the Competent Authority (If Applicable)
 - v) Experience certificate issued by Competent Authority
 - vi) If ESM, certificates/documents mentioning the following:
 - a) Date of Enrolment
 - b) Date of Release/Discharge
 - c) Reason of Release/ Discharge
 - vii) Certificate as proof of age relaxation claim (If Applicable)
 - viii) Certificate as proof of fee concession (If Applicable)
 - ix) Proof of being Government Employee
 - x) Copy of Bank Challan (PPSC Copy only)

The Candidates SHALL sign the declaration on the last page of the printout of Online Application Form before submitting the same.

9. APPLICATION AND EXAMINATION FEE

9.1 The candidates are required to pay the Application fee as per Government Letter No. PERS-PP-3020/2/2021-3PP3 dated 22-04-2021 as mentioned below: -

Name of Category	Online Application charges	Examination Fee	Total
Scheduled Castes/ Scheduled Tribes of all States and Backward Classes of Punjab State only.		Rs. 250/-	750/-
Ex-Serviceman of Punjab state only	Rs. 500/-	No Fee to be paid	500/-
Economically Weaker Sections (EWS), Persons with Disabilities (PWD) and Lineal Descendants of Ex-Serviceman (LDESM) Punjab	Rs 500/-	No Fee to be paid	500/-
All Other Categories i.e., General, Sports Persons of Punjab and Wards of Freedom Fighters, Punjab.		Rs. 1000/-	1500/-

9.2 The candidates entitled to fee concession/exemption MUST submit with their Application Form, a self-attested copy of the certificate certifying their claim for fee concession/exemption. Candidates who do not submit such a certificate shall not be entitled to fee concession/exemption under any circumstances.

9.3 Application fee MUST be submitted through any Branch of State Bank of India only. Candidate should carefully fill the details in the Online Application Form and click on the "SUBMIT" button at the end of the Online Application Format. Before pressing the "SUBMIT" button, candidates are advised to verify every detail filled in the application. After submitting the online application form, the candidate should take a printout of the system generated Bank challan. No Change/Edit will be allowed after submitting the Application Form. The application fee is non-refundable.

10. CONDITIONS WHICH MAY RENDER A CANDIDATE INELIGIBLE

- **10.1** The following conditions, among others, may render the candidates ineligible:
 - a) Insufficient fee.
 - b) Application fee deposited by means other than a Bank Challan through any branch of State Bank of India.
 - c) Late receipt of print out of Online Application Form.
 - d) Wrong/incomplete information given in the application form.
 - e) Candidates debarred by the PPSC/other Public Service Commissions.
 - f) Non-fulfillment of any of the eligibility conditions, including those of age and educational qualifications.
- Only Scheduled Castes, Backward Classes, Ex-Servicemen/LDESM, Persons with Disability, Freedom Fighter & Sports Persons of Punjab domicile are eligible for the benefit of reservation.
- A candidate should indicate the specific category for which he/she wants to be considered and category once opted cannot be changed under any circumstances. A candidate will be eligible to get the benefits of community reservation in case the particular caste to which the candidates belong is included in the list of reservation communities issued by the Punjab Government. If a candidate indicates in his/her application form that he/she belongs to a particular category but subsequently writes to the commission to change his/her category, such request shall not be entertained by the Commission and shall be filed without any intimation.
- 10.4 SC/ST Candidates belonging to other States are required to fill their Post Category as General Category (Code 71). They are entitled only to fee concession but not entitled to avail reservation/age relaxation.
- 10.5 Ex-servicemen/Lineal Descendent of Ex-Servicemen (LDESM)/Grandchildren of Gallantry Award Winners who have domicile of Punjab are eligible for reservation under the Ex-Servicemen category. LDESM/Grandchildren of Gallantry Award Winners shall be considered against the vacancies for Ex-servicemen ONLY IF no Ex-servicemen are available. In case sufficient numbers of Ex-servicemen are available, then LDESM shall be treated in his/her basic category.

11. SELECTION OF CATEGORIES

Candidates should select their categories carefully, because candidates belonging to categories other than category 71 (General), are entitled to fee concession/exemption, age relaxation and job reservation. The category once selected by a candidate will not be changed under any circumstances. Candidates shall submit certificates issued by the Competent Authority in support of their claim to a particular category.

11.1 CATEGORIES AND CATEGORY CODE

Code No.	Category Name
71	General Category
72	ESM, Punjab
73	LDESM, Punjab
74	Freedom Fighter, Punjab
75	Sports Person, Punjab
76	Persons with Disability, Punjab:
	A: Blind and Low VisionB: Deaf and Hard of HearingC: Locomotive Disability
	D: Intellectual Disability
77	SC Others, Punjab
78	SC Others ESM, Punjab
79	SC Others LDESM, Punjab
80	SC Others Sports Person, Punjab
81	Balmiki/ Mazhbi Sikh, Punjab
82	Balmiki/ Mazhbi Sikh ESM, Punjab
83	Balmiki/ Mazhbi Sikh LDESM, Punjab
84	Bairiki/ Mazhbi Sikh Sports Person, Punjab
85	BC, Punjab
86	BC ESM, Punjab
87	BC LDESM, Punjab
92	Economically Weaker Sections.

11.2 CODE FOR AGE RELAXATION (IF CLAIMED)

Code No	Category Name
91	State Government/Central Government Employees.
92	SC Punjab only
93	Balmiki/Mazhbi Sikh Punjab Only
94	Widows & certain other categories of women of Punjab.
95	B.C., Punjab Only
96	ESM, Punjab Only
97	Persons with Disability, Punjab Only
98	SC Punjab only+ State Government/Central Government Employees.
99	SC Punjab only + ESM, Punjab.

100	SC Punjab only + Persons with Disability, Punjab.
101	Balmiki/Mazhbi Sikh Punjab only+ State Government/Central Government Employees.
102	Balmiki/Mazhbi Sikh Punjab only + ESM, Punjab.
103	Balmiki/Mazhbi Sikh Punjab only + Persons with Disability, Punjab.
104	B.C., Punjab. + State Government/Central Government Employees.
105	B.C., Punjab. + ESM, Punjab
106	B.C., Punjab. + Persons with Disability, Punjab.

12. DEFINITIONS OF CATEGORIES

12.1 EX-SERVICEMEN (PUNJAB)

- **12.1.1** As per the Punjab Recruitment of Ex-Servicemen Rules, 1982 "Ex-serviceman" means a person who has served in any rank, whether as a combatant or a non combatant, in the Naval, Military and Air Forces of the Union of India (here-in-after referred to as the Armed forces of the Union of India), and who has:
 - **a.** retired or released from such service at his or her own request after earning his or her pension; or
 - **b.** has been released from such service on medical grounds attributable to military service or circumstances beyond his control and awarded medical or other disability pension; or
 - **c.** been released otherwise than on his own request from such service as a result of reduction in establishment; or
 - d. been released from such service after completing the specific period of engagement otherwise than at his own request or by way of dismissal or discharge on account of misconduct or inefficiency, and has been given a gratuity;
 But does not include a person who has served in the Defence Security Corps, the General Reserve Engineering Force, the Lok Sahayak Sena and the Para Military Forces, but includes personnel of the Lok Sahayak Sena of the following categories, namely: -
 - i. pension holders for continuous embodied service.
 - ii. persons with disability attributable to military service; and
 - iii. gallantry award winners.
- **Explanation:** The persons serving in the Armed Forces of the Union, who on retirement from service would come under the category of 'Ex-servicemen' may be permitted to apply for re-employment one year before the completion of specified terms of engagement and avail themselves of all concessions available to Ex-servicemen but shall not be permitted to leave the uniform until they complete the specified terms of engagement in the Armed Forces of the Union.
- 12.1.2 As per Punjab Government letter No.15/25/2001-4DW/1591 dated 21/5/2002, an Ex-serviceman is allowed the benefit of Reservation for the second time and even thereafter in subsequent recruitment in accordance with the provisions of these Rules.

- **12.1.3** Provided that where an Ex-serviceman is not available for recruitment against a reserved category, such a vacancy shall be reserved to be filled in by recruitment of either the wife or one descendent child of an Ex-serviceman.
- **12.1.4** Provided further that the wife or the Lineal Descendent child of the Ex-serviceman shall be recruited against the reserved vacancy subject to the conditions that:
 - a) he or she possesses the prescribed qualifications and is within the prescribed age limit,
 - b) he or she is not already in service;
 - c) he or she will be eligible to avail the benefit only once in life.

Provided further that one grandchild of the Gallantry Award Winner shall be recruited against the reserved vacancy, in case the benefit or reservation has not been availed of by any of the children or dependents of such winner or by the winner himself subject to the conditions specified in the second proviso.

- **Explanation:** For the purpose of this proviso Gallantry Award Winner includes the winner of the Paramvir Chakra, the Mahavir Chakra, the Vir Chakra, the Sena or Nao Sena or Vayu Sena Medal and Mention-in-Despatches.
- **12.1.5** As per Punjab Government notification No. GSR9/Const./ Art. 309, 234 and 318/Amd(5)/2003 dated 06/11/2002 and letter No. 1/28/92-3ET/2805 dated 14/05/2003;
 - a) "Lineal Descendent" means sons/daughters (married/un-married/ widowed/legally divorced) of the re-employed/unemployed Ex-Serviceman.
 - b) "Wife" shall include the widow of an Ex-serviceman, provided she has not remarried up to the date of the issue of the appointment letter."
 - c) In any case, including the case where the Ex-Serviceman has died, his sons/daughters shall be treated as "Lineal descendent" only if a certificate to this effect has been issued by the authority appointed by the Government.
 - 12.1.6 Ex-servicemen should be of Punjab domicile and they should submit a Punjab Resident Certificate from the competent authority, failing which would result in of their candidature would be cancelled.

Definition of War Hero

- (i) "War hero" means a defence services personnel or a para-military forces personnel, who is a bona fide resident of Punjab State and has been killed or discharged from service on account of disability suffered by him on or after 1st January, 1999, while fighting in a war declared so by Government of India, in operations in Kargil or any other sector in J & K in the ongoing conflict with Pakistan or in any other operations which may be notified by the State Government to have been undertaken for preserving the unity and integrity of the Country; or
- (ii) A defence services personnel or a para-military forces personnel who was a *bona fide* resident of Punjab State and was posthumously decorated with Parmvir Chakra, Mahavir Chakra or Vir Chakra: provided that,-

- (a) In exceptional instances, the cases of such War Heroes may also be covered, with the prior approval of the Department of Personnel who though not *bona fide* residents of Punjab State are yet closely connected to the State of Punjab;
- (b) In the case of War Heroes, falling in the category (ii) above, the benefits to be given by the State Government will be restricted only to first generation dependent member/next of the kin.

Note.- The Government reserves the right to include any other category of Awardees for the purpose of providing employment to the category of War Heroes, as may be notified.

12.2 SON/DAUGHTER/GRAND SON/GRAND DAUGHTER OF FREEDOM FIGHTERS (PUNJAB)

- i) Candidates claiming to be son/daughter/grandson/granddaughter of Freedom Fighters are required to submit a certificate issued by the competent authority (i.e., Deputy Commissioner of the district concerned) as per Punjab Government Instructions No. 9(13)-3PII-84/5822 dated 4/4/1985, No. 7(135)-8P-II-83/10120 dated 19/6/1991 and No. 4-13-8PII-97/10112 dated 22/8/1997.
- **ii)** Only those Freedom Fighters and their son/daughter/grand-son/grand-daughter are eligible for consideration for reservation under this category who:
 - a) belong to the State of Punjab; and
 - **b**) have either been granted a Freedom Fighter pension by the Punjab Government or have been awarded Tamra Patra by the Government of India; or
 - c) are otherwise eligible for the grant of Freedom Fighter pension and Tamra Patra but for any reason whatsoever did not apply for Freedom Fighter pension and Tamra Patra but can obtain Freedom Fighter/ son/daughter/grand-son/grand-daughter of Freedom Fighter certificate from the General Administration (Political wing) of the Punjab Government.

12.3 SPORTS PERSON (PUNJAB)

12.3.1 A candidate can claim reservation under the Sports Person category only if:

- a) He/ She belongs to the State of Punjab; and
- b) that he/ She has won Gold, Silver or Bronze Medal in Senior National Championship or National Games in team or individual events while representing the State of Punjab in such sports events as have been conducted by such respective National Sports federations as are affiliated or recognized to the Indian Olympic Association;

OR

c) He/ She has won first, second or third position in team or individual events and/or he/she has won Gold or Silver or Bronze Medal, at International Sports meets, conducted by Sports Federation affiliated or recognized by the International Olympic Committee or by the International Olympic Committee itself.

- 12.3.2 If candidate belongs to Sports Person, Punjab Category, an attested copy of Gradation Certificate strictly in accordance with the Punjab Sportsman Rules, 1988 amended as per Government of Punjab, Department of Personnel (Personnel Policies-I Branch) Notification No. GSR 40/Const./ Art.309/Amd. (2)/2020 dated 20/07/2020 issued by the competent authority should be attached with the application form.
- **12.3.3** Director Sports, Punjab is the competent authority to issue Sports Gradation Certificate and any other Sports Certificate issued by any other authority will not be accepted a valid Certificate for claim of reservation under the Sports Person, Punjab Category.
- **12.3.4** Applicants claiming reservation under Sports Person, Punjab Category must submit Punjab Resident Certificate from the competent authority, failing which would result in cancellation of their candidature.

12.4 WIDOWS AND CERTAIN OTHER CATEGORIES OF WOMEN

The definitions as per Government Instructions issued vide letter No. 1/50/83-5PP (1368)/3454 dated 23-4-1984 as amended from time to time the widows and certain other categories of women for reservation in employment is as under:

- (a) Widows;
- (b) Women who are legally separated from their husbands or have been divorced;
- (c) Women whose husbands have been ordered by Civil or Criminal Courts to pay maintenance to them:
- (d) Women whose husbands have remarried; and
- (e) Wives of serving military personnel or those who are disabled while in military service.

12.5 PERSONS WITH DISABILITIES, (PUNJAB)

As per the Instructions of Government of Punjab, Department of Social Security and Women and Child Development issued vide letter No. 1/1/2017-3DC/1588894/1 dated 03-10-2019, the reservation for disabled persons under Section 34 of the Right of Persons with Disabilities Act, 2016 is as under:

Sr. No	Type of Disability	Percentage
1	Blindness and Low – Vision;	1%
2	Deaf and Hard of hearing;	1%
3	Locomotor Disability (including Cerebral palsy, Leprosy cured, Dwarfism, Acid attack victims and Muscular dystrophy);	1%
4	Intellectual disability (including Autism and Specific learning disability), and Mental illness; OR Multiple disabilities specified in Serial No. 1 to 4 above, including deaf blindness.	1%

For Definition of the above-mentioned categories, please refer the Schedule appended to the Right of Persons with Disabilities Act 2016 attached as Annexure-II.

a) For persons with disability compensatory time of 20 minutes per hours is allowed.

- **b)** Persons with disability (with 40% or more disability) who apply for scribe in a prescribed format attached as **Annexure-III**, compensatory time of 20 minutes per hours is allowed.
- c) The facility of Scribe would be allowed to any person with benchmark disability as defined under section 2(r) of the RPwD Act, 2016 and has limitation in writing including that of speed if so desired by him/her.

In case of person with benchmark disabilities in the category of blindness, locomotor disability (both arm affected BA) and cerebral palsy, the facility of scribe shall be given, if so desired by the person.

In case of other category of persons with benchmark disabilities, the provision of scribe can be allowed on production of a certificate to the effect that the person concerned has physical limitation to write, and scribe is essential to write examination on his behalf, from the Chief Medical Officer/Civil Surgeon/Medical Superintendent of a Government health care institution as per proforma at **Annexure-IV**.

d) Punjab Public Service Commission has framed a panel of scribes having qualification matriculation & above. The eligible candidates may request the PPSC for scribe, if needed alongwith submission of hardcopies of Online Application Form by 31/01/2022 in the office of PPSC. On receipt of request from the candidates, the candidate will be allotted scribe by PPSC, and he/she will be allowed to meet scribe 02 days before the examination. However, if the candidate wants to bring his/her own scribe, the qualification of scribe should be one step below the minimum prescribed qualification for the post. The candidate opting for his/her own scribe should submit an affidavit annexed as Annexure-V.

Persons with disabilities must submit the hardcopies of Online Application Form alongwith Disability Certificate and request for scribe, if any and other eligibility documents at the reception counter of PPSC by 31/01/2022.

12.6 SCHEDULED CASTES, (PUNJAB)/ SCHEDULED TRIBES

The competent authorities for issuing Scheduled Castes/Scheduled Tribes certificates are:

- (a) District Magistrate/Additional District Magistrate/ Collector/Deputy Commissioner/
 Additional Deputy Commissioner/ Deputy Collector/ Ist Class Stipen Dairy Magistrate/
 City Magistrate/ Sub Divisional Magistrate/ Taluka Magistrate/ Executive
 Magistrate/Extra Assistant Commissioner (Not below the rank of Ist Class Stipen Dairy
 Magistrate);
- (b) Chief Presidency Magistrate/Additional Chief Presidency Magistrate/ Presidency Magistrate;
- (c) Revenue Officer not below the rank of Tehsildar;
- (d) Sub Divisional Officer (C) of the area where the candidate and or his family formally resides;
- (e) Administrator/Secretary to Administrator/Development Officer Lakshadweep Islands;

(f) As per para-3 of Punjab Government Instructions No. 1/8/2007-RC-1/815, dated 10thJuly, 2008, Head of Department or Head of Offices are competent to issue Scheduled Castes Certificates to those applicants whose parents are serving or residing in Chandigarh/Mohali on the basis of their parents service record.

12.7 BACKWARD CLASSES (PUNJAB)

- **12.7.1** The candidates desiring to be considered for the Backward Classes category are required to submit a certificate as per Punjab Government letter No.1/41/93-RC-I/459 dated 17/1/1994, No. 1/41/93-RC-1/1597, dated 17-8-2005, No.1/41/93 RC-I/209, dated 24/2/2009 and No.1/41/93-RC-I/609 dated 24/10/2013 in the Section of prescribed proforma.
- 12.7.2 The BC Certificate in proforma other than the prescribed proforma will not be accepted. The candidates belonging to Backward Classes are required to attach a declaration (as per Annexure-VI) along with Backward Class certificate that no change occurred in their status and they do not fall in the section of creamy-layer as per Government letter No. 10/9/2009-RCI/62 Dated 08/1/2010.
- **12.7.3** The Competent Authorities to issue the necessary certificate are:
 - a) Deputy Commissioner
 - b) Additional Deputy Commissioner
 - c) Sub-Divisional Magistrate
 - d) Executive Magistrate (PCS Officers only)
 - e) Tehsildar

12.8 ECONOMICALLY WEAKER SECTIONS (EWS)

- **12.8.1** Residents of Punjab belonging to Economically Weaker Sections (whose family income is less than Rs. 8.00 lacs per annum) who are not covered under the existing scheme of reservation for Scheduled Castes and Backward Classes.
- **12.8.2** The reservation will be provided in respect of all Direct Recruitment vacancies in all the Departments/ Boards/Corporations/ Local Bodies of the State of Punjab.
- **12.8.3** "Family" for this purpose will include the person who seeks benefit of reservation, his/her parents, siblings below the age of 18 years, as also his/her spouse and children below the age of 18 years.
- **12.8.4** "Income" will include all sources for the financial year prior to the year of application. Further, a person will be excluded whose family owns/possesses any of the following assets:
 - a) 5 acres of Agricultural Land and above;
 - **b)** Residential flat of 1000 sq.ft. and above;
 - c) Residential plot of 100 sq. yards and above in notified municipalities/nagar panchayats;
 - **d**) Residential plot of 200 sq. yards and above in other than the notified municipalities/nagar panchayats.

NOTE-Recruitment of EWS category will be governed as per the notification of Government of Punjab issued vide letter No 1/3/2019-RCI/196 dated 18/03/2021.

- **Note:** (1) For any General query, candidates may contact the Commission's Office on telephone number 0175-5014825, 5014829 & 5014831 or by sending email with subject as "GENERAL QUERY REGARDING THE POST OF VETERINARY OFFICER" vo2021.ppsc@gmail.com.
- **Note: (2)** Candidates are advised in their own interest to apply using Online Application Form much before the closing date and not to wait till the last date to avoid congestion on the web server on account of heavy load on Internet/Website.
- **Note: (3)** Candidates are advised to go through the 'General Information for the candidates' and 'Instructions for filling Online Application Form' carefully before filling up Online Application Form. The Commission will not be responsible for any consequence arising out of incorrect filling up of Application.

Sd/-**Secretary (Examinations) Punjab Public Service Commission Patiala**

Dated: 18/11/2021

ANNEXURE (I) - Reservation of Posts for Women

ਨੈ. 11/5/2017-1ਸਸ(ਤਸਸ)/ 25 ੧५ ਪੰਜਾਬ ਸਰਕਾਰ ਸਮਾਜਿਕ ਸੁਰੱਖਿਆ ਅਤੇ ਇਸਤਰੀ ਤੇ ਬਾਲ ਵਿਕਾਸ ਵਿਭਾਗ (ਸਮਾਜਿਕ ਸੁਰੱਖਿਆ ਸ਼ਾਖਾ)

मेरा रिधे.

ਪੰਜਾਬ ਦੇ ਸਮੂਹ ਵਿਭਾਗਾਂ ਦੇ ਮੁੱਖੀ, ਰਜਿਸਟਰਾਰ, ਪੰਜਾਬ ਅਤੇ ਹਰਿਆਣਾ ਹਾਈ ਕੋਰਟ, ਡਵੀਜ਼ਨਾਂ ਦੇ ਕਮਿਸ਼ਨਰ, ਡਿਪਟੀ ਕਮਿਸ਼ਨਰਜ਼ ਅਤੇ ਜਿਸ੍ਵਿਆਂ ਦੇ ਸੈਸ਼ਨ ਜੋਜ। ਮਿਤੀ, ਚੰਡੀਗੜ੍ਹ 3- ਨੈ: 10 - 2-29

विस

The Punjab Civil Services (Reservation of Posts for Women) Rules, 2020.

ਸ਼੍ਰੀਮਾਨ ਜੀ,

ਮੈਨੂੰ ਹਦਾਇਤ ਹੋਈ ਹੈ ਕਿ ਮੈਂ Notification No. G.S.R.87/Const./Arts.309 and 15/2020, dated the 21st October,2020, containing the Punjab Chill Services (Reservation of Posts for Women) Rules. 2020 ਦੀ ਕਾਪੀ (ਨਾਲ ਨੰਘੀ) ਆਪ ਜੀ ਨੂੰ ਅਗਲੇਗੇ ਲੇਤੀਦੀ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜੀ।

ਵਿਸ਼ਵਾਸਪਤਰ ਮੀਡੀ 2.12 <u>ਨੇ</u> (ਨਰਿੰਦਰ ਕੈਰ) ਅੱਕਿ ਅ ਅਧੀਨ ਸਕੱਤਰ ਸਮਾਜਿਕ ਸੁਰੱਖਿਆ 188

ਇਸ ਦਾ ਇੱਕ ਉਤਾਰਾ ਹੇਠ ਲਿੱਖਿਆਂ ਨੂੰ (ਸਮੇਤ ਉਕਤ ਰੂਨਜ਼ ਦੀ ਕਾਪੀ) ਸੂਚਨਾ ਅਤੇ ਅਗਲੇਗੇ ਲੇਤੀਦੀ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ-

- ਸਕੱਤਰ/ਮੁੱਖ ਸਕੱਤਰ, ਪੰਜਾਬ ਸਰਕਾਰ।
- ਸਪੈਸ਼ਲ ਸਕੱਤਰ/ਮੁੱਖ ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ, ਮੁੱਖ ਮੰਤਰੀ, ਪੰਜਾਬ।
- ਸਮੂਹ ਵਧੀਕ ਮੁੱਖ ਸਕੱਤਰ/ਵਿੱਤੀ ਕਮਿਸ਼ਨਰਜ਼/ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ ਅਤੇ ਪ੍ਰਬੰਧਕੀ ਸਕੱਤਰ, ਪੰਜਾਬ ਸਰਕਾਰ।

भगीत मर्बुउच मर्भातिब मुर्विषय

ANNEXURE (II)- The Schedule for Specified Disability

THE SCHEDULE [See clause (zc) of section 2] SPECIFIED DISABILITY

1. Physical disability. —

- A. Locomotor disability (a person's inability to execute distinctive activities associated with movement of self and objects resulting from affliction of musculoskeletal or nervous system or both), including—
- (a) "leprosy cured person" means a person who has been cured of leprosy but is suffering from—
- (i) loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;
- (ii) manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
- (iii) extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall construed accordingly;
- (b) "cerebral palsy" means a Group of non-progressive neurological condition affecting body movements and muscle coordination, caused by damage to one or more specific areas of the brain, usually occurring before, during or shortly after birth;
- (c) "dwarfism" means a medical or genetic condition resulting in an adult height of 4 feet 10 inches (147 centimeters) or less;
- (d) "muscular dystrophy" means a group of hereditary genetic muscle disease that weakens the muscles that move the human body and persons with multiple dystrophy have incorrect and missing information in their genes, which prevents them from making the proteins they need for healthy muscles. It is characterised by progressive skeletal muscle weakness, defects in muscle proteins, and the death of muscle cells and tissue;
- (e) "acid attack victims" means a person disfigured due to violent assaults by throwing of acid or similar corrosive substance.

B. Visual impairment—

- (a) "blindness" means a condition where a person has any of the following conditions, after best correction—
 - (i) total absence of sight; or
- (ii) visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction; or
 - (iii) limitation of the field of vision subtending an angle of less than 10 degree.
- (b) "low-vision" means a condition where a person has any of the following conditions, namely:—
- (i) visual acuity not exceeding 6/18 or less than 20/60 upto 3/60 or upto 10/200 (Snellen) in the better eye with best possible corrections; or
- (ii) limitation of the field of vision subtending an angle of less than 40 degree up to 10 degree.

C. Hearing impairment —

- (a) "deaf" means persons having 70 DB hearing loss in speech frequencies in both ears;
- (b) "hard of hearing" means person having 60 DB to 70 DB hearing loss in speech frequencies in both ears;
- D. "speech and language disability" means a permanent disability arising out of conditions such as laryngectomy or aphasia affecting one or more components of speech and language due to organic or neurological causes.
- 2. Intellectual disability, a condition characterised by significant limitation both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behaviour which covers a range of every day, social and practical skills, including—

- (a) "specific learning disabilities" means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia and developmental aphasia;
- (b) "autism spectrum disorder" means a neuro-developmental condition typically appearing in the first three years of life that significantly affects a person's ability to communicate, understand relationships and relate to others, and is frequently associated with unusual or stereotypical rituals or behaviours.
- 3. Mental behaviour,—
 - "mental illness" means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviour, capacity to recognise reality or ability to meet the ordinary demands of life, but does not include retardation which is a condition of arrested or incomplete development of mind of a person, specially characterised by subnormality of intelligence.
- 4. Disability caused due to—
 - (a) chronic neurological conditions, such as—
 - (i) "multiple sclerosis" means an inflammatory, nervous system disease in which the myelin sheaths around the axons of nerve cells of the brain and spinal cord are damaged, leading to demyelination and affecting the ability of nerve cells in the brain and spinal cord to communicate with each other;
 - (ii) "parkinson's disease" means a progressive disease of the nervous system marked by tremor, muscular rigidity, and slow, imprecise movement, chiefly affecting middle-aged and elderly people associated with degeneration of the basal ganglia of the brain and a deficiency of the neurotransmitter dopamine.
 - (b) Blood disorder—
 - (i) "haemophilia" means an inheritable disease, usually affecting only male but transmitted by women to their male children, characterised by loss or impairment of the normal clotting ability of blood so that a minor would may result in fatal bleeding;
 - (ii) "thalassemia" means a group of inherited disorders characterised by reduced or absent amounts of haemoglobin.
 - (iii) "sickle cell disease" means a hemolytic disorder characterised by chronic anemia, painful events, and various complications due to associated tissue and organ damage; "hemolytic" refers to the destruction of the cell membrane of red blood cells resulting in the release of hemoglobin.
 - 5. Multiple Disabilities (more than one of the above specified disabilities) including deaf blindness which means a condition in which a person may have combination of hearing and visual impairments causing severe communication, developmental, and educational problems.
 - 6. Any other category as may be notified by the Central Government.

DR. G. NARAYANA RAJU, Secretary to the Government of India.

ANNEXURE (III)- Performa For Scribe

PUNJAB PUBLIC SERVICE COMMISSION, PATIALA

Recruitment of Post/Posts of in the
department of Government of Punjab.
SCRIBE
/alid for
Examination Centre Name:
Name: Photo
Scribe for Roll No:
The above-mentioned scribe has been allowed by Punjab Public Service Commission Patiala for the Candidate& bearing Roll No
Superintendent (Examinations)

ANNEXURE (IV) - Certificate regarding Physical limitation in an examinee to write

This	is	to	certify	that,	I	have	ex	amir	ned M	1r/Ms/	Mrs
						(name	of t	he c	andid	ates	with
disabil	ity),	a pe	rson with						_ (na	ature	and
percen	tage	of	disability	as	mei	ntioned	in	the	certi	ficate	of
disabil	ity),	S/o	/D/o					а	resi	ident	of
							(Vi	llage	/Distr	rict/St	ate)
and to	stat	e tha	t he/she	has p	hy	sical lin	nitat	ion v	vhich	hamp	ers
his/her	writi	ing ca	apabilities	owin	g to	o his/he	r dis	abilit	ty.		

Signature

Chief Medical Officer/Civil Surgeon/ Medical Superintendent of a government health care institution

Name and Designation

Name of Government Hospital/Health care centre with seal

Place:

Date:

Note: Certificate should be given by a specialist of the relevant stream/disability (e.g., Visual impairment - Ophthalmologist, Locomotor disability - Orthopaedic specialist/PMR).

ANNEXURE (V)- Affidavit by Candidate for Scribe

AFFIDAVIT

	I						a	candida	ate	with
_		(name	of	the	disal	oility)	app	pearing	for	the
_					_ (nam	e of th	e exa	aminatio	n) bea	aring
R	Roll. No	a	t					(na	ame o	f the
С	entre) in the	district							_ (nan	ne of
th	ne	State).			My			qualification		
is	S									
	I do here	by state t	hat _					(n	ame c	of
th	ne scribe) will	provide th	ne se	rvice	of scril	be for	the u	ındersig	ned fo	or
ta	aking the afor	esaid exa	mina	tion.						
	I do here	eby undert	ake	that h	is qual	ificatio	on is_			
Ir	n case, sub	sequently	it is	found	that h	nis/hei	r qua	lification	n is no	ot as
d	declared by the undersigned and is beyond my qualification. I shall									
fc	forfeit my right to the post and claims relating thereto.									
	, ,	·				J				
									I	
	Photograph of s	the				Phot	tograp Candi	h of the idate		
									ı	
Signa	ture of Scribe))		(Sign	ature	of	the	candic	late	with
Disa	ability)									
ace:										
ate:										

ANNEXURE (VI)- Self Declaration From BC Candidates

ਭਰਤੀ/ਦਾਖਲੇ ਸਮੇਂ ਲਏ ਜਾਣਵਾਲੇ ਪੱਛੜੀ ਸ੍ਰੇਣੀ ਨਾਲ ਸਬੰਧਤ ਵਿਅਕਤੀ ਤੋਂ ਲਏ ਜਾਣ ਵਾਲੇ ਸਵੈ ਘੋਸ਼ਣਾ ਪੱਤਰ ਦਾ ਪਰਫਾਰਮਾ

1. ਮੈਂਵਾਸੀਵਾਸੀ
ਪਿੰਡ /ਕਸਬਾ/ਸ਼ਹਿਰਜ਼ਿਲ੍ਹਾਘੋਸ਼ਣਾ ਕਰਦਾ/ਕਰਦੀ ਹਾਂ ਕਿ
ਮੈਂ ਜਾਤੀ ਨਾਲ ਸਬੰਧ ਰੱਖਦਾ/ਰੱਖਦੀ ਹਾਂ ਤੇ ਇਹ ਜਾਤੀ ਪੰਜਾਬ ਸਰਕਾਰ ਵੱਲੋਂ ਪੱਤਰ
ਨੰ:ਸਿਤੀਰਾਹੀਂ ਪੱਛੜੀ ਸ੍ਰੇਣੀ ਕਰਾਰ ਦਿੱਤੀ ਗਈ ਹੈ।
2. ਮੈਂ ਇਹ ਵੀ ਘੋਸ਼ਣਾ ਕਰਦਾ ਹਾਂ ਕਿ ਮੈਂ ਪੰਜਾਬ ਸਰਕਾਰ ਵੱਲੋਂ ਜਾਰੀ ਹਦਾਇਤਾਂ ਨੰ:1/41/ 93-ਰਸ1/459,ਮਿਤੀ
17-01-1994,ਜਿਸ ਨੂੰ ਬਾਅਦ ਵਿੱਚ ਪੱਤਰ ਮਿਤੀ 1/41/93-ਰਸ1/1597ਮਿਤੀ 17-08-2005 ਨੰਬਰ
4/41/93-ਰਸ1/209,ਮਿਤੀ 4-02-2009 ਅਤੇ ਪੱਤਰ ਨੰ:1/41/93-ਰਸ1/609 ਮਿਤੀ 24-10-2013 ਨਾਲ ਸੋਧਿਆ
ਗਿਆ ਹੈ, ਦੀ ਅਨੁਸੂਚਿਤ ਵਿੱਚ ਦਰਜ ਕਾਲਮ 3 ਦੇ ਅਧੀਨ ਨਹੀਂ ਆਉਂਦਾ।
ਘੋਸ਼ਨਾਕਰਤਾ
ਸਥਾਨ: ਮਿਤੀ :
ਵੈਰੀਫਿਕੇਸ਼ਨ :-
ਮੈਂ ਇਥੇ ਇਹ ਘੋਸ਼ਣਾ ਕਰਦਾ ਹਾਂ ਕਿ ਉਪਰੋਕਤ ਦਿੱਤੀ ਗਈ ਜਾਣਕਾਰੀ ਮੇਰੀ ਸਮਝ ਅਨੁਸਾਰ ਸਹੀਵਾ ਦਰੁਸਤ ਹੈ ਅਤੇ ਇਸ ਵਿੱਚ ਕੁੱਝ ਵੀ ਛੁਪਾਇਆ ਨਹੀਂ ਗਿਆ ਹੈ। ਮੈਂ ਇਨ੍ਹਾਂ ਤੱਥਾਂ ਤੋਂ ਜਾਣੂ ਹਾਂ ਕਿ ਜੇਕਰ ਮੇਰੀ ਕੋਈ ਵੀ ਦਿੱਤੀ ਸੂਚਨਾਂ ਗਲਤ ਨਿਕਲਦੀ ਹੈ ਤਾਂ ਮੈਂ ਕਾਨੂੰਨ ਵਿੱਚ ਦਰਜ ਸਜ਼ਾ ਦਾ/ਦੀ ਹੱਕਦਾਰ ਹੋਵਾਂਗਾ/ਹੋਵਾਂਗੀ ਅਤੇ ਪ੍ਰਾਰਥੀ ਨੂੰ ਇਸ ਸੂਚਨਾਂ ਦੇ ਆਧਾਰ ਤੇ ਦਿੱਤੇ ਗਏ ਲਾਭ ਵਾਪਿਸ ਲੈ ਲਏ ਜਾਣਗੇ।
ਅੋਸ਼ਨਾਕਰਤਾ ਸਥਾਨ: ਮਿਤੀ :

ANNEXURE (VII)- Syllabus

(A) Subject Syllabus

1.1 ANIMAL BREEDING AND GENETICS

Aids to selection. Methods of selection. Sire index. Classification of mating systems. Breeding methods. Inbreeding and outbreeding - types, merits, demerits, genetics consequences and their application in animal improvement. Importance of breeding records in farm animals and their standardization. Analysis of breeding records of different livestock and poultry farms and their maintenance. Current livestock and poultry breeding policies and programs in the state, methods of conservation- livestock and poultry conservation in state and country, classification of dog and cat breeds. Herd registration. Use of computer in handling and presenting veterinary and livestock data.

1.2 ANIMAL NUTRITION

Importance of grasslands and fodders in livestock production. Various types of fodder crops utilized in the state. Preparation and conservation of green-fodders. Rations for scarcity periods. Anti-nutritional components of feeds and fodders. Feed additives, feed processing. Requirements and recommended allowances of protein, energy and minerals for maintenance, production and reproduction and feeding schedule for cattle, buffalo, sheep, goat, pig, poultry and dog. Formulation of rations. Balanced and total mixed rations. Therapeutic nutrition.

1.3 LIVESTOCK PRODUCTION AND MANAGEMENT

Role of dairying in India. Dairy development schemes in the country. Common animal husbandry terms. Body conformation and methods of identification. Breeds and economic traits of cattle, buffalo, horse, pig, and camel. Colour and markings (as per RWTCI) of horses. Common vices in horse, poultry, and dogs; their prevention and care. Dentition and ageing of animals. Feeding, care and management of new born, young stock, dry, pregnant and milking cattle, buffalo, horse and pig. Calving, foaling, farrowing and whelping. Castration and dehorning of cattle and buffaloes. Routine dairy farm operations. Dairy farm accounts and records. Rules and regulations regarding transport of livestock by rail, road, air and on foot. Management of animals during transport by different means. Preparation of animals and birds for show. General principles affecting the design and construction of building for housing livestock. Various types of animal houses. Different systems of ventilations, drainages, sewerage disposal techniques, waste diversion for liquid manure, compost, cow dung, gas unit, etc. Importance of sheep and goat production in national and state economy. Different indigenous and exotic breeds of sheep and goats. Feeding, management and breeding of sheep and goat. Ram and buck management. Care of sheep and goat in pregnancy and parturition. Rearing of lambs and kids. Weaning, fattening. Sheep and goat housing. Wool grading. Different breeds and varieties of chicken. Formation, structure and nutritive value of egg. Culling

of poultry and effect of culling on egg production. Incubation and hatching of eggs, selection of hatching eggs, handling and care of hatching eggs. Natural and artificial brooding. Different systems of housing of poultry. Floor space requirements, constructional details of poultry houses. Care and Management of chicks, pullets, layers and broilers. Feeds and feeding of broilers and layers. Poultry farm records. Commercial hatcheries and its role in poultry development. Disinfection of farm equipment and poultry houses. Care and breeding, egg and spawn management. Handling and management of laboratory animals-rabbit, rat and mice.

1.4 LIVESTOCK PRODUCTS TECHNOLOGY

Composition of milk. Factors affecting yield and quality of milk. Physical and chemical of milk. Principles involved in pasteurization, homogenization and properties dehydration. Preparation of various concentrated and dehydrated milk products. Preparation of butter, ghee, khoa, lassi, curd, ice-cream and cheese. Legal and ISI standard of milk and milk products. Detection of adulterants and preservatives in milk and milk products through various tests. Estimation of efficiency of pasteurization through different tests. Bacteriological examination of milk and products for their wholesomeness. Ante-mortem and post-mortem examination of buffalo, sheep, goat, pig and poultry. Utilization of slaughter house by-products, organic wastes available through animal industries, fallen and slaughtered effluent and glandular by-products. Structure, composition, nutritive value, post-mortem changes and eating quality of meat tissues. Fraudulent substitution of meat and its recognition. Principle of various preservation techniques like chilling, freezing curing, smoking, thermal processing, canning and irradiation. Meat cutting, packaging. Microbial and other deteriorative changes in meat and their identification. Standards and quality control measures adopted for meat and meat products in India. Meat food products order. Microbial spoilage of eggs, preservation and maintenance of eggs.

1.5 VETERINARY ANATOMY

Topographic anatomy and gross anatomical structures involved in the clinical examination and surgical interferences of importance in large and small animals. Radiographic anatomy of various regions of domestic animals. Microscopic study of important organs/systems of domestic animals.

1.6 VETERINARY PHYSIOLOGY AND BIOCHEMISTRY

Physiology of digestion, circulation, respiration and excretion in ruminants and simple stomach animals. Endocrine glands and their hormones –classification. general mode of action and regulation of hormones. Structural and functional organization of mammary glands, hormonal control of mammary growth, lactogenesis and galactopoiesis. Reaction of animals to different environmental variations and temperature. Central control of heat regulation. Temperature regulation in birds. Metabolism of carbohydrates, lipids and proteins in ruminants and nonruminants. Biochemistry of renal function, acid base

balance, stress, shock and digestive disorders. Role of blood sugar, ketone bodies, blood urea nitrogen, proteins, macrominerals and electrolytes as an aid to diagnosis. Role of enzymes for detection of tissue affections/organ affections (scope and limitations).

1.7 VETERINARY MICROBIOLOGY

Development of immune system, humoral and cellular immune responses. Antigens: Definition, specificity, azoprotein, heterophil and blood group antigens. Antibodies: Chemical and physical properties, electrophoresis, structure and function of immunoglobulins. Serological reactions: Introduction to principles and diagnostic applications of agglutination, precipitation, isohaemagglutination, phagocytosis, complement fixation, neutralization, toxin and antitoxin reaction, immunofluorescence. Hypersensitivity-allergy, classification, anaphylaxis and delayed type hypersensitivity, auto-immunity. Disease diagnosis —Polymerase chain reaction (P.C.R.). hybridoma technique, monoclonal antibody and DNA probes. Staining, special staining, cultural characters, aerobic and anaerobic cultivation, biochemical characters, pathogenicity test and antibiogram of bacteria and fungi. Sterilization, disinfection and asepsis.

1.8 VETERINARY PHARMACOLOGY AND TOXICOLOGY

Anticonvulsants, opioid agonists and antagonists, antipyretics, steroids and non-steroidal antiinflammatory drugs. Commonly used emollients, demulcents, stomachics, antiulcer, prokinetics, antiemetics, carminatives, antizymotics, purgatives, antidiarrhoeals, antihypertensives, diuretics, urinary acidifiers, urinary alkalizers, ecbolics, cardiac glycosides, vasodilators, coagulants, anticoagulants, antihistaminics, expectorants, mucolytics, antitussives drugs. General approaches to diagnosis and treatment of poisoning. Clinical signs, diagnosis and treatment of toxicities caused by commonly used organophosphates, carbamates, chlorinated hydrocarbons, pyrethroids, herbicides, fungicides, rodenticides, arsenic, lead, fluoride, nitrates, nitrites, urea, snake venom. Introduction and basic principles of antimicrobial therapy. Classification of antimicrobial drugs, development of resistance and interaction of antibacterials. Sulphonamides, quinolones, beta- lactam antibiotics, aminoglycosides, tetracyclines, amphenicols, macrolides, nitrofurans and other antibacterials. Antifungal, antiviral and antitubercular drugs. Chemotherapy of helminthic and protozoan infections. Antiseptics and disinfectants. Ectoparasiticides and antineoplastic drugs.

1.9 VETERINARY PARASITOLOGY

Classification (names only) of common parasites (Helminths, arthropods, Protozoa and parasitic diseases of domestic animals in Punjab. Common diagnostic techniques for different parasitic diseases. General Control measures against parasites. Chemoprphylaxis against parasites. Acaricide resistance.

1.10 VETERINARY PATHOLOGY

Etiology, epidemiology, transmission, pathogenesis, clinical findings, clinical pathology, diagnosis, treatment, prevention and control of the following diseases of

poultry:Respiratory disease complex, New castle disease, Infectious bronchitis, Infectious laryngotracheitis, Influenza, Duck virus hepatitis, Egg drop syndrome, Fowl pox, Coryza. Avian encephaloemyelitis. Infectious bursal disease, Neoplastic diseases – Mareks disease and Avian leucosis, etc. Salmonellosis- Pullorum disease, Typhoid and Paratyphoid, Pasteurellosis-Fowl cholera, Avian Mycoplasmosis, Chlamydiosis. Coli bacillosis, Spirochaetosis, Fungal infections –Aflatoxicosis, Aspergillosis and Favus. Parasitic infestation caused by Nematodes, Cestodes and Protozoa (blood and gastrointestinal). Nutritional deficiency diseases. Post mortem examination of large animals, small animals and poultry.

1.11 VETERINARY PUBLIC HEALTH

Sources of bacterial contamination of raw milk and method of control. Clean milk production; sources of contamination during collection, transport and processing of milk and methods of control. Milk borne diseases and methods of control. Toxic residues in milk and their health hazards. General principles and elements of meat inspection. Methods of slaughter. Conditions detected at meat inspection and their judgement; characteristics of meats of different food animals; composition, rigor mortis. Differentiation of meat of different food animals. Inspection of poultry, eggs, fish and game animals. Meat borne diseases and methods of control. Examination of lymph nodes and their importance in meat inspection. Role of livestock, pets, various wild and cold blooded animals in transmission of zoonotic diseases. Study of the important zoonotic diseases of the region. Methods of prevention, control and eradication of zoonotic diseases, Method of prevention and control of air and water borne diseases of animals. Stray animal control, fallen animals and environment: radiation, drugs, etc. as source of pollution. Pattern of disease distribution in community. periodicity of diseases, occurrence and dynamics of disease transmission, office international des epizootics (OIE), its functions, classification of diseases that are transmissible.

1.12 VETERINARY AND ANIMAL HUSBANDRY EXTENSION

Steps of extension teaching. Classification of extension teaching methods, their selection and use. Client dealing: Communication with rural and urban public for data collection, history taking, follow up, appraisal on prognosis, announcing death of animal to the owner, etc. Various kinds of farming e.g., large and small scale farming, mixed farming, co-operative and collective farming. Economic principles underlying co-operative societies, cooperative milk activities in India. Animal Husbandry planning and programmes, Animal Husbandry administration, Key village scheme, ICDP, Gosadan/Gosala, Panchayati Raj, Integrated Rural Development Programme in Animal Husbandry. Calculation of economics of livestock and poultry farming to know the profitability of the enterprise.

1.13 ANIMAL REPRODUCTION, GYNAECOLOGY AND OBSTETRICS

Development of female genitalia and description of pelvis in domestic animals. Sexual maturity in relation to reproduction. Role of hormones in various phases of reproduction. Oestrous cycle in domestic animals and factors affecting it. Synchronization of oestrous cycle. Ovulation. Transportation of sperms, fertilization and attachment. Development of foetus and foetal membranes. Types and functions of placenta. Gestation, duration and stages of gestation in domestic animals. Superfetation and Superfecundation. Superovulation and embryo transfer. Differential diagnosis of pregnancy. Disease and accidents during gestation. Prolonged gestation. Premature birth. Early embryonic mortality. Abortion in domestic animals. Fetal mummification, maceration, pyometra. Fertility, infertility and sterility. Functional infertility – anoestrus, ovarian hypoplasia, cystic ovary. Fertilization failure and repeat breeding. Infectious infertility - specific and nonspecific infections affecting genital organs. Sexual health control and herd reproductive health programme. Parturition in domestic animals including stages of parturition. Expulsion and retention of after birth. Postpartum diseases and complications (cervicovaginal prolapse, uterine prolapse, vaginitis, cervicitis, metritis, pyometra, postpartum paraplegia). Clinical use of hormones and prostaglandins. Intrauterine presentation of fetus, eutocia, dystokia. Types of dystokia. General handling of dystokia. Diagnosis and treatment of dystokia cases. Obstetrical operations. Mutation and forced extraction. Fetotomy and Caesarean section. Mismating, transmissible venereal tumor and pyometra in bitches. Development and comparative study of male genitalia and gonads. Growth, puberty, sexual maturity, libido. Endocrine control of reproduction in male domestic animals. Factors affecting maturity and sex drive in bulls. Sexual behaviour in males. Forms of male infertility and factors affecting infertility, its diagnosis and treatment. Diseases, abnormalities and malformations of male genitalia, their diagnosis and treatment of coital injury and infections. Testicular hypoplasia and degeneration. Disease of the accessory sex glands. Advantages and limitations of A.I. Methods of semen collection in various species. Technique of A.I. Factors affecting quality and quantity of semen. Tests for evaluation of semen, extension of semen, preservation of semen at different temperatures. Storage and shipment of semen. Semen metabolism. Biochemistry of semen.

1.14 VETERINARY MEDICINE

(A) General systemic states-hyperthermia, hypothermia, fever, septicaemia, toxaemia, shock and dehydration; (B) Diseases of (i) digestive system with special reference to rumen dysfunction and diseases of stomach in ruminants and simple stomach animals; (ii) peritoneum, liver and pancreas; (iii) respiratory system; (iv) cardiovascular system including blood and blood forming organs; (v) urinary system; (vi) nervous system; (vii) skin; (viii) musculo-skeletal system; (ix) eye; (x) ear; (xi) neonates: (C) Common neoplasms. Etiology, epidemiology, pathogenesis, clinical symptoms, clinical biochemistry, clinical pathology, diagnosis, treatment, prevention and control of: (A) Metabolic diseases – Milk fever; acute parturient hypocalcaemia in goats, sows and bitches; lactation tetany in mares; downer cow syndrome; ketosis; hypomagnesaemia;

nutritional haemoglobinuria in cattle and buffalo; osteodystrophia fibrosa; azoturia in equines; hypothyroidism and diabetes in dogs. (B) Diseases caused due to deficiency of iron, copper, cobalt, zinc, selenium, manganese, calcium, phosphorus, magnesium, vitamins A, B complex, C, D, E and K in domestic animals. Legal duties of veterinarians. Evidence procedure in court Code of conduct and ethics for veterinarians. Common offences against animals and laws related to these offences. Detection of frauds-doping, alteration of description, bishoping, etc. Legal aspects of examination of animals for soundness, examination of injuries. Animal insurance. Prevention of Cruelty to Animals Act, 1960 (59 of 1960) and various rules on animal welfare under this Act. The Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009 (salient features). Law relating to generation and disposal of biomedical waste. Causes of sudden death in animals. Signs of death. Post mortem examination of Vetro-legal cases, writing report, collection and despatch of morbid materials to forensic laboratory. Surveillance and monitoring and forecasting of animal diseases. Investigation of an epidemic, prevention, control and eradication of diseases. Etiology, epidemiology, transmission, pathogenesis, clinical findings, clinical pathology, diagnosis, treatment, prevention and control of the following diseases of cattle, horse, pigs, sheep, goats and pet animals: (i) Bacterial diseases- mastitis, joint ill, anthrax, ulcerative lymphangitis, glanders, strangles, black quarter, braxy, tetanus, enterotoxemia, bacillary haemoglobinurea, botulism, colibacillosis, salmonellosis, pasteurellosis, brucellosis, listeriosis, campylobacteriosis (vibriosis), tuberculosis, paratuberculosis, actinomycosis, actinobacillosis, erysipelosis, leptospirosis. Common diseases caused by Ricketts, Pseudomonas, Yersinia, Haemophilus, Bordetella, Moraxella, Mycoplasmas (ii) Viral diseases- Foot and mouth disease, vesicular stomatitis, vesicular exanthema, pox, rinderpest, mucosal disease, malignant head catarrh, ephemeral fever, infectious bovine rhinotracheitis, leucosis, viral pneumonia, calf diarrhoea virus, African horse sickness, African swine fever, rabies, ephemeral fever, pseudorabies, equine encephalomyelitis, infectious equine anemia, equine influenza, papillomatosis, equine abortions, swine & equine influenza, infectious canine hepatitis, parvovirus infection of dogs, canine distemper, transmissible gastroenteritis, sheep pulmonary adenomatosis, Maedi/visna (iii) fungal diseasesringworm, histoplasmosis, sporotrichosis, candidiasis, cryptococosis, coccidiodomycosis and mycotoxicosis; (iv) Parasitic diseases of economic importance- amphistomiasis, schistosomiasis, nematodiasis (round worms), verminous bronchitis, echinococcosis, coenurosis, other tapeworm infestations, visceral & cutaneous leishmaniasis, bovine sarcocystosis, toxoplasmosis, babesiosis, theileriasis, trypanosomiasis, anaplasmosis, ectoparasitic infestations (ticks, mange, fleas allergies, myasis).

1.15 VETERINARY SURGERY AND RADIOLOGY

General Surgery: General surgical principles, pre- operative and post operative considerations, Importance of sutures, suturing materials and different knots. Asepsisantisepsis, their application in veterinary surgery, sterilization of surgical material and instruments. Inflammation, abscess, tumors, cysts, hernia, etc. and their treatments.

Wound classification, symptoms, diagnosis, treatments, complication and their prevention and remedies. Hemorrhage and haemostasis, shock, haematoma, necrosis, gangrene, burn and scald, frost bite. Surgical infections their preventions and management. Surgical affections of muscles, artery and vein. Fracture and dislocation and other affections of joints. Anaesthesiology: General considerations, types of anaesthesia, definition and selection of anaesthetics and methods of administration. Local and regional analgesia. Premedication in domestic animals. Intravenous anaethesia, dissociative anaethesia. Preparation of the patient for anaethesia. Preparation, evaluation of dose and induction of anaesthesia. General anaethesia, anesthetic drugs, inhalation anaesthesia, its method of administration in horse, cattle and dog and gadgets for monitoring. Anaesthetic emergencies and remedies. Chemical restraint of wild /zoo animals. CNS stimulants and central muscle relaxants. Radiology: Productio and properties of X-rays.

Factors influencing production of radiograph (radiographic factors, geometric factors, photographic factors). Density, detail and contrast. X-ray accessories filters, restrictors, collimator, grid, etc. Principle of viewing and interpreting X-ray films. Classification and interpretation of radiographic lesions. Contrast radiography: classification, materials used, indications and contra indications. Biological effects of radiation. Radiation hazards and safety measures. Principles of ultrasonography, radiation therapy and physical therapy in veterinary practice. Positioning and radiography of different parts of the body in small and large animals. Surgery: Affections of the lips and cheek, tongue, palate, nose, sinuses, guttural pouch, horn, teeth and salivary glands and their treatment. Affections of neck, esophagus, trachea, pharynx and larynx. Congenital affections of lower jaw and their treatment. Affections of the ear and their treatment. Anatomical considerations and examination of the eye. Surgical affections of conjunctiva, cornea, ciliary's apparatus, lens, traumatic affections of the eye lids, eye, tumors of eye, retinal detachment. Injuries and infections of anterior and posterior chambers. Surgical approaches and general consideration for thoracic surgery. Contusions and fracture of rib, injuries of costal cartilage, fracture of sternum, perforated wounds, sternal fistula, pneumocoele. Surgical approaches to traumatic pericarditis of cattle, heart worm disease in dogs and abdomen in various species of animals. Hernia and its treatment in various species. Surgical affections of the stomach (in dogs and ruminants), intestine, rectum, anal glands, liver, spleen, pancreas, kidney, ureters, urinary bladder, urethra, penis, sheath, testicle, scrotum, udder and tail. Spaying in various species. Lameness, its definition and classifications. Body conformation in relation to lameness, diagnosis of lameness. General methods of therapy. Specific joint diseases in dogs and large animals and their treatment. Application of external and internal immobilization for fracture. Rehabilitation. Shoulder slip (Sweeny), bicipital, bursitis, arthritis, capped elbow, radial paralysis, carpitis, bent knee, knock knee, hygroma of knee, open knee joint and blemished knee. Fracture of carpal bone and fracture of accessory carpal. Contraction of digital flexors. Splints and sore shin. Tendinitis, wind puffs and seasmoditis. Osslets, ring bones, quittor,

side bones, navicular disease, pyramidal disease and fracture of extensor process. Lamintis, sand crack, seedy toe, fracture of third phalanx and pedal osetitis. Canker, thrush and corn. Cording up, myostitis of psosas, iliac thrombosis, crural paralysis, sub luxation of sacro-iliac ligament, rupture of round ligament and trochantric bursitis. Femoral nerve paralysis, upward luxation of patella, stringhalt, gonitis, chondromalacia of patella, fracture of fibula, rupture of tendo achilles and rupture of peroneus tertus. Fibrotic and ossifying myopathy. Thorough pin, bog spavin and curb. Bovine lameness: contusions of sole, ulceration of sole, septic, laminitis, avulsion of hoof and declawing. Interdigital fibroma, cyst, sand crack and hoof deformities. Therapeutic shoes and corrective shoeing. Examination of animals for soundness and preparation of soundness certificate.

(B) General Knowledge, Logical Reasoning & Mental Ability

(a) General Knowledge & Current Affairs

General Knowledge and Current affairs of National and International importance including:

- (i) Economic issues.
- (ii) Polity issues.
- (iii) Environment issues
- (iv) Science and Technology.
- (v) Any other current issues.
- (vi) (a) History of India with special reference to Indian freedom struggle movement
 - (b) History of Punjab- 14th century onwards.

(b) Logical Reasoning & Mental Ability

- (i) Logical reasoning, analytical and mental ability
- (ii) Basic numerical skills, numbers, magnitudes, percentage, numerical relation appreciation.
- (iii) Data analysis, Graphic presentation charts, tables, spreadsheets.