



Admission Notification

Faculty of Arts/Commerce/Science/Law University of Allahabad

Post Graduate Admission Test (PGAT) – 2022 Session 2022-2023

Please visit <http://www.aupravesh2022.in> or click on link [Admission-2022](#) of www.allduniv.ac.in for ONLINE Application and more details

IMPORTANT NOTES

1. The applicant must take due care while filling up Online Application Form. The information provided by the applicant in his/her form shall not be changed or altered in any case and the University will not entertain any such request under any circumstances. The University shall not be liable for any mistake made by the applicant.
2. In case, the number of registered candidates at any of the examination centres is less than 100 (One Hundred), all such registered candidates will be allotted to the nearest examination centre.
3. There is no provision of revaluation/scrutiny of answer sheets.
4. In case of any discrepancy in the Hindi version, the English version of the brochure will be treated as final.
5. Only such RTI applications shall be entertained which are received within 60 days from the declaration of final result.
6. Each candidate is required to mention his/her Sub-Category alongwith his/her Overall Category i.e. UR, SC, ST OBC and EWS.
7. To give benefit to applicant who has appeared in/passed the final year of the graduation course required for eligibility in academic session 2021-2022, the applicant who has passed the final year of the graduation course required for eligibility will attract deduction of 5% for every session gap. The maximum deduction will not be more than 15% in any case.
8. Every candidate will have to declare about any disciplinary action/police action against him.
9. The Registration Fees for PGAT-I Courses: Unreserved, EWS and OBC Category is Rs.800/- and SC/ST/PH is Rs. 400/.
10. The Registration Fees for PGAT-II Courses: Unreserved, EWS and OBC Category is Rs.1600/- and SC/ST/PH is Rs. 800/.
11. Every candidate can view his/her Answer Sheet within one month of declaration of Results by paying a token amount of Rs. 100/- at Pravesh Bhawan.
12. Entrance test centres:
ONLINE & OFFLINE (both): Prayagraj, Lucknow, Kanpur, Gorakhpur, Varanasi, Bareilly in Uttar Pradesh and New Delhi.
ONLINE only: Bhopal, Kolkata, Patna and Thiruvanthpuram.



IMPORTANT DATES

IMPORTANT EVENT	DATE(S) / TIME	
Opening of Online Registration	11th June 2022	
Closing of Online Registration and payment	1st July 2022	
Opening of Downloading Admit Cards Online	TO BE ANNOUNCED LATER	
ENTRANCE TEST	PGAT- I	Lists I, II, III : TO BE ANNOUNCED LATER
		List IV : TO BE ANNOUNCED LATER
	PGAT- II	List V : TO BE ANNOUNCED LATER



Post Graduate Admission Test - 2022

University of Allahabad, a premier Institute of learning and research, invites applications for admission in different Post Graduate Courses for academic session 2022-2023 and the list of such courses is given below in form of group of five lists. Post Graduate Admission Test-2022 (PGAT-2022) is classified into two categories namely **PGAT-I** and **PGAT-II**. **PGAT-I** is meant for courses in conventional subjects as mentioned in **List I**, **List II**, **List III** and **List IV** whereas **PGAT-II** is meant for courses in specialized/non-conventional subjects as mentioned in **List V**.

List-I

Courses available in Humanities and Social Sciences

Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
1.	M.A.	Ancient History	01	Yes
2.	M.A.	Economics	02	Yes
3.	M.A.	Education	03	No
4.	M.A.	English Literature	04	Yes
5.	M.A.	English Language	05	Yes
6.	M.A.	Hindi	06	Yes
7.	M.A.	Med. & Mod. History	07	Yes
8.	M.A.* ^a	Music (Vocal)	08A	No
9.	M.A.* ^b	Music (Sitar)	08B	No
10.	M.A.* ^c	Music (Tabla)	08C	No
11.	M.P.A.* ^a	Vocal	08A	No
12.	M.P.A.* ^b	Sitar	08B	No
13.	M.P.A.* ^c	Tabla	08C	No
14.	M.A.*	Painting	09	No
15.	M.A.	Philosophy	10	Yes
16.	M.A.	Political Science	11	Yes
17.	M.A.	Sanskrit	12	No
18.	M.A.	Sociology	13	Yes
19.	M.A.	Urdu	14	No

^a There will be same test for M.A. in Music (Vocal) and M.P.A. in Music (Vocal)

^b There will be same test for M.A. in Music (Sitar) and M.P.A. in Music (Sitar)

^c There will be same test for M.A. in Music (Tabla) and M.P.A. in Music (Tabla)

* Candidates for this course will have to undergo an additional test devised and conducted by the concerned Department. Final merit will be computed on the basis of total of marks scored in PGAT-2022 and that scored in the above mentioned additional test.



List-II

Courses available in Natural Sciences

Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
1	M.Sc.	Botany	15	No
2	M.Sc.	Chemistry	16	No
3	M.Sc.	Computer Science	17	No
4	M.Sc.	Physics	18	No
5	M.Sc.	Zoology	19	No

List-III

Courses available in Humanities and Science

Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
1	M.A. / M. Sc	Anthropology	20	No
2	M.A. / M. Sc	Defence Studies	21	No
3	M.A. / M. Sc	Mathematics	22	No
4	M.A. / M. Sc	Geography	23	No
5	M.A. / M. Sc	Psychology	24	Yes
6	M.A. / M. Sc	Statistics	25	No

List-IV

Courses available in Commerce & Law

Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
1	M. Com.	Commerce	26	No
2	LL. M.	Law	27	No

List-V

Courses available for Specialized / Non conventional subjects

Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
1.	B. Ed.	Education	28	No
2.	M. B. A. * ^e	Business Management	29	No
3.	M.B.A. (Rural Development)* ^e	Business Management	29	No
4.	M. Ed.	Education	30	No
5.	M. P. Ed. *	Physical Education	31	No
6.	M.A.	Mass Communication	32	No
7.	M.A.	Film & Theatre	33	No
8.	M.Sc.	Bio-Chemistry	34	No



Sl. No.	Course	Subject	Course Code	Provision of Non Subject Candidate
9.	M.Sc.	Agricultural Science (Agricultural Botany)	35	No
10.	M.Sc.	Agricultural Science (Agricultural Chemistry & Soil Science)	36	No
11.	M.Sc.	Agricultural Science (Agricultural Zoology & Entomology)	37	No
12.	M.Sc.	Materials Science	38	No
13.	M.Sc.	Bioinformatics	39	No
14.	M.Sc.	Environmental Science	40	No
15.	M.Sc.	Textile and Apparel Designing	41	No
16.	M.Sc.	Design and Innovation in Rural Technology	42	No
17.	M.Sc.	Applied Geology	43	No
18.	M.Sc.	Food and Nutrition	44	No
19.	M.A.	Women Studies	45	No
20.	M.Tech.	Earth System Sciences	46	No
21.	M.A. in Development Studies (MDS)	Development Studies	47	No
22.	M.F.A.*	Painting	48	No
23.	M.Sc.	Biotechnology	49	No

^e There will be same test for M.B.A. and M.B.A. (Rural Development).

* Candidates for this course will have to undergo an additional test conducted by the concerned Department. Final merit will be computed on the basis of total of marks scored in PGAT-2022 and that scored in the abovementioned additional test.



Very Important

For all the Courses, Terms and Eligibility Conditions are given below and it is advisable to applicant to read the Terms and Eligibility Conditions carefully before filling his/her Form.

- **Subject Candidate:**

The applicant having appeared in/passed final year examination of his/her graduation or equivalent examination required for eligibility with a subject mentioned in List I, List II, List III and List IV as one of his/her subjects in final year of his/her graduation or its equivalent is termed as Subject Candidate for the respective course in the subject.

An applicant can apply for admission in a course with a given subject mentioned in List I, List II, List III and List IV provided he/she qualifies as Subject Candidate for the course in the subject.

- **Non Subject Candidate:**

The applicant having appeared in/having passed final year examination of his/her graduation or equivalent examination required for eligibility but not having appeared in/ not having passed final year examination of his/her graduation or equivalent examination with a subject out of subjects mentioned in List I, List II, List III and List IV as one of his/her subject in final year of his/her graduation or its equivalent is termed as Non Subject Candidate for the respective course in the subject. Courses having provision of Non Subject Candidate are described as follows:

An applicant who does not qualify as Subject Candidate in a course in Hindi/ English / Medieval and Modern History/ Ancient History/Philosophy/Political Science but is applying as a Subject Candidate for two courses in the subjects allotted to the applicant in final year of his/her graduation or its equivalent out of the subjects mentioned in List I, List II, List III and List IV excluding Hindi, English, Medieval and Modern History, Ancient History, Philosophy, Political Science can opt for admission in a course in Hindi/English/Medieval and Modern History/ Ancient History/ Philosophy/ Political Science as a Non Subject Candidate along with exemption from appearing in the respective PGAT-2022 test mandatory for corresponding Subject Candidates. The merit of such Non Subject Candidate will be computed on the basis of average of his/her scores in the respective two PGAT-2022 tests for which he/she is a Subject Candidate.

An applicant who does not qualify as Subject Candidate for a course in Sociology/Psychology but is applying as a Subject Candidate for two courses in the subjects allotted to the applicant in final year of his/her graduation or its equivalent out of the subjects mentioned in List I, List II, List III and List IV excluding Sociology and Psychology can opt for admission in a course in Sociology/Psychology as a Non Subject Candidate along with exemption from appearing in the respective PGAT-2022 test mandatory for corresponding Subject Candidates provided he/she has scored 60% or above in his/her graduation. The merit of such Non Subject Candidate will be computed on the basis of average of his/her scores in the respective two PGAT-2022 tests for which he/she is a Subject Candidate.

An applicant who does not qualify as Subject Candidate for a course in Economics but is applying/has applied as a Subject Candidate for two courses in the subjects allotted to the applicant in final year of his/her graduation or its equivalent out of the subjects mentioned in List I, List II, List III and List IV excluding Economics can opt for admission in a course in Economics as a Non Subject Candidate along with exemption from appearing in the respective PGAT-2022 test mandatory for corresponding Subject Candidates provided he/she had either Mathematics and Statistics as subjects in final year of his/her graduation or Economics as one of the three subjects of his/her graduation. The merit of such Non Subject Candidate will be computed on the basis of average of his/her scores in the respective two PGAT-2022 tests for which he/she is a Subject Candidate.



For admissions in courses in given subjects as mentioned in List V, separate applications are required for each such course with no restriction on number of such applications provided eligibility criteria for respective course(s) are met by the applicant.

● **RESERVATION AND SPECIAL CONSIDERATION / QUOTA:**

A. In accordance with provision of Section 9 of the University of Allahabad Act, 2005 (Act No. 26 of 2005) seats shall be reserved for Scheduled Caste (SC), Scheduled Tribe (ST) and Other Backward Classes (OBC) category candidates in all subjects / course for which the Admission Test has been held, as given here under:

- (i) 15% of the total seats in each subject / course shall be reserved for candidates belonging to Scheduled Caste (SC) category;
- (ii) 7.5% of the total seats in each subject / course shall be reserved for candidates belonging to Scheduled Tribe (ST) category; and
- (iii) 27% of the total seats in each subject / course shall be reserved for candidates belonging to Other Backward Caste (OBC) category.
- (iv) In case the seats reserved for Scheduled Tribe (ST) category candidates remain vacant on account of non-availability of candidates the same shall be filled by the candidates of Scheduled Caste (SC) candidates.
- (v) 10% of the total seats shall be reserved for candidate belonging to EWS category. Reservation to EWS candidates shall be given by the University as per Govt. of India guidelines, the regulation/norms issued by the UGC and subject to any decision of the Hon'ble Supreme Court of India or Hon'ble Hihg Court of Allahabad, if any.

Note: These rules are indicative and UGC Regulation on Reservation and directives of Ministry of Education as on the date of declaration of Results shall be followed.

B. Kashmiri Migrants:

Weightage as per Government of India guidelines shall be given to Kashmiri Migrants. In order to avail this weightage, the candidates shall have to present a certificate to this effect from an officer of the Ministry of Education not below the rank of Joint Secretary or equivalent.

C. NCC Weightage:

A weightage of 5% shall be added to the score obtained by the candidate holding NCC 'C' certificate in the Admission Test / Entrance Test. **NCC Weighate will not be applicable in B.Ed., M.Ed., M.B.A. and M.B.A. (RD) courses.**

D. Foreign Nationals/NRI:

Foreign Nationals shall be required to apply through International Students Advisor in accordance with the procedure laid down by the University of Allahabad. The candidate in this case shall not be required to appear in the Admission Test / Entrance Test, but shall be considered for admission on the recommendation of a committee constituted for the purpose, which shall examine the academic credentials and certificates of the candidate before making any recommendation.

E. Sports Quota:

Under Sports-Quota, at the graduate level only those candidates can be considered for admission who are eligible to participate in Inter-University Tournaments as per Association of Indian Universities (AIU), New Delhi rules and have participated at State and National Championships organized under School Games Federation of India and Junior Level (under 19 years of age) District, Region, State and National Championships organized by various District/State Associations and Federations. The



candidates will be selected in order of merit subject to availability of seats.

- (i) The Advisory Committee, Sports Board, University of Allahabad reserves the right to conduct the field trials and verification of documents of any candidate to determine genuineness of the documents.
- (ii) The candidate shall be required to produce all the original game / sports certificate in support of his her claim at the time of admission / interview. The University reserves the right to verify the documents (games / sports certificates etc.) and if found fake, suitable action shall be taken against the candidate.
- (iii) 2% of the total seats in each subject/ course shall be allotted under Sports Quota.
- (iv) Admission under separate quota will strictly be on the basis of merit list provided by the advisory committee, Sports Board.
- (v) **Sports Quota will not be applicable in B.Ed., M.Ed., M.B.A. and M.B.A. (RD) courses**

F. Person with Disability (Divyang):

- (i) As per section 32(1) of the Rights of Persons with Disabilities Act, 2016, all Government institutions of higher education and other higher education institutions receiving aid from the Government shall reserve not less than **five(05) per cent** seats for person with benchmark disabilities. Therefore 5% of total seats for this course will be available for person with disability who can pursue this course without any difficulty.
- (ii) A candidate who has a certified disability of not less than 40% in any limb or in orthopaedic structure which, in the opinion of the Medical Board (constituted by the University of Allahabad), amounts to an overall physical handicap of not more than 70% or is a certified Visually impaired or a Hearing impaired, may be admitted to the concerned course / subject, irrespective of his position in the order of merit of the total aggregate score, on the recommendation of the Medical Board.
- (iii) Seats under this quota shall be filled in order of preference given below. One percent each shall be reserved for person with benchmark disability under clause (a), (b) and (c), and one percent with benchmark disability under clauses (d) and (e) namely.
 - a. Blindness and low vision.
 - b. Deaf and hard of hearing.
 - c. Locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy.
 - d. Autism, intellectual disability, specific learning disability and mental illness.
 - e. Multiple disabilities from amongst person from clauses (a) to (d).
- (iv) The privilege shall not be given except claimed by the candidate at the time of application. At the time of admission the candidate shall be required to produce a certificate issued by the Chief Medical Officer of the appropriate District or by the Viklang Kendra, Allahabad, which testifies to his disability and bears an attested photograph indicating his / her disability clearly.
- (v) All candidates entitled to be admitted under the above quota to a course shall be adjusted against their respective social category.



G. Teacher/Employee Ward Quota:

- i. After the completion of admission on the sanctioned seats in each course of study, the wife/husband, sons and daughters of regularly appointed serving and retired teachers / employee of the University, the University Institutes, the constituents Colleges and constituents Institutes which we shall call unit hereafter, who produce relevant certificate duly signed by the Registrar in case of University, the Director in case of University Institutes, the Principal in the case of constituent Colleges (units) and the Director in case of constituent Institutes shall be admitted, on the basis of their relative scores against 5% supernumerary seats (with a minimum of one seat) in each course of study, only in the unit in which such Teachers/Employees are serving or from where they have superannuated,

Provided that in case seats remain vacant in a course in the unit, these will be filled by the wards of the employees of other units,

- ii. It is clarified that the unit mentioned in clause (i) means the university/constituent colleges of the university.
- iii. Teacher/Employee Ward benefit will be granted only when the candidate has made such a claim in the Application Form and presents the required documents and certificates at the time of admission. The order of merit for admission shall be determined on the basis of computed marks of the candidate.

• Session Gap Deduction:

An applicant who has passed his/her graduation in academic session 2020-21 or in sessions earlier than session 2020-21 will attract deduction for his marks in graduation as per the following table:

Academic Session of Graduation	Deduction
Session 2020-21	5% of the obtained marks
Session 2019-20	10% of the obtained marks
Session 2018-19	15% of the obtained marks
Sessions earlier than session 2018-19	15% of the obtained marks

PGAT 2022 Test Pattern:

1. Each PGAT 2022 test of **300** marks will consist of **150 Multiple Choice Questions (MCQs)**.
- 2.1 First fifty questions of PGAT 2022 test for a course mentioned in List I, List II and List III will be compulsory for all candidates. These fifty questions will be related to General Awareness, General English, General Hindi, Logical Reasoning and Mental Ability. Each correct answer will be awarded '2' (two) marks.
- 2.2 Remaining hundred questions of PGAT 2022 test for a course mentioned in List I, List II and List III will be related to two subjects of final year of the applicant's graduation for which applicant has applied as a Subject Candidate wherein fifty-fifty questions will be related to each subject separately. Applicants are advised to fill the correct codes for their respective subjects carefully. Each correct answer will be awarded '4' (four) marks. Total of marks for each subject will be computed separately as sum of marks scored for fifty compulsory questions and that scored for fifty questions of the respective subject.
- 2.3 An applicant is allowed to attempt just fifty questions related to only one of the two subjects of final year of his/her graduation as his/her choice in the application form as a Subject Candidate in place of remaining hundred questions as mentioned in above mentioned sub-clause 2.2. Applicant's candidature as a Non Subject Candidate for courses mentioned in List I, List II, List III and List IV will be annulled once



he/she makes such a choice and total of marks of such candidate will be computed only for the chosen subject that will be equal to sum of the marks scored for fifty compulsory questions and that scored for fifty questions of the chosen subject.

- 3.1 First fifty questions of PGAT 2022 test for a course mentioned in List IV and List V except LL.M. B.Ed., M.Ed., M.B.A./M.B.A. (RD) will be compulsory for all the candidates. These fifty questions will be related to General Awareness, General English, General Hindi, Logical Reasoning and Mental Ability. Each correct answer will be awarded '2' (two) marks.
- 3.2 Remaining hundred questions of PGAT 2022 test for a course mentioned in List IV and List V except LL.M. B.Ed., M.Ed., M.B.A./M.B.A. (RD) will be related to respective subject. Each correct answer will be awarded '2' (two) marks.
- 3.3 Please see the test pattern for LL.M. B.Ed., M.Ed., M.B.A./M.B.A. (RD) in their respective brochures.

Mode of PGAT 2022 Test:

1. PGAT-I test meant for courses mentioned in **List I, List II, List III** and **List IV** will be conducted **Online** as well as **Offline**.
2. PGAT-II test meant for courses mentioned in **List V** will be conducted **Online** only.

Precautions:

- ❖ The applicants are advised to take due care in filling up the Online Application Form. The information provided by the applicant in his/her Online Application Form will not be changed/altere d/modified in any case once the form is submitted and the University will not entertain at all any such request. Further, the University will not be liable for any mistake committed by the applicant.
- ❖ In case, the number of registered candidates at any of the examination centres is less than 100 (One Hundred), all such registered candidates will be allotted to the nearest examination centre.
- ❖ There is no provision of re-evaluation/scrutiny of answer sheets.
- ❖ In case of any discrepancy in Hindi version of the brochure, English version of the brochure will be treated as final.
- ❖ Each applicant is required to inform at the right place provided in the form whether he/she has completed/ is pursuing any Post Graduation Course form University of Allahabad/any other university.



Table - I

Master Chart for Seats in Post Graduate in Different Units for academic session 2022-23
(After implementation of EWS quota)

Sl.	Subject	Code	Total Seats										TOTAL
			AU	CMP	KP	ADC	ISDC	JT	SSK	AK	SPM	RT	
1	Ancient History	1	192	63	-	63	63	-	63	-	63	-	507
2	Economics	2	192	63	-	63	63	50	-	63	-	-	494
3	Education	3	39	63	-	63	63	-	63	38	-	-	329
4	English Literature	4	327	63	-	63	63	-	63	63	-	-	642
5	English Language	5											
6	Hindi	6	385	63	-	63	63	50	63	63	50	63	863
7	Med. & Mod. History	7	211	63	-	63	63	-	63	63	-	-	526
8	Music (Vocal)	08A	39	-	-	31	-	-	31	25	-	-	126
9	Music (Sitar)	08B	39	-	-	31	-	-	31	-	-	-	101
10	Music (Tabla)	08C	39	-	-	31	-	-	31	-	-	-	101
11	M.P.A. (Vocal)	08A	19	-	-	-	-	-	-	-	-	-	19
12	M.P.A. (Sitar)	08B	19	-	-	-	-	-	-	-	-	-	19
13	M.P.A. (Tabla)	08C	19	-	-	-	-	-	-	-	-	-	19
14	Painting	9	39	-	-	31	-	-	31	-	-	-	101
15	Philosophy	10	192	63	-	63	50	-	63	-	-	-	431
16	Political Science	11	144	63	-	63	63	-	-	63	63	63	522
17	Sanskrit	12	221	63	-	63	50	63	-	63	-	-	523
18	Sociology	13	43	63	-	-	63	-	63	63	-	-	295
19	Urdu	14	171	50	-	31	-	-	38	-	-	-	290
20	Botany	15	77	75	-	-	-	-	50	-	-	-	202
21	Chemistry	16	135	75	-	-	-	-	50	-	50	-	310
22	Computer Science	17	38	-	-	-	-	-	-	-	-	-	38
23	Physics	18	77	50	-	50	-	-	-	-	-	-	177
24	Zoology	19	77	75	-	-	-	-	50	-	50	-	252
25	Anthropology	20	19	-	-	-	-	-	-	-	-	-	19
26	Defence Studies	21	31	-	-	38	38	-	-	-	38	-	145
27	Geography	22	144	37	-	38	-	50	-	-	38	-	307
28	Mathematics	23	231	50	-	50	-	-	-	-	-	-	331
29	Psychology	24	56	50	-	38	31	-	-	-	-	-	175
30	Statistics	25	39	-	-	-	-	-	-	-	-	-	39
31	M. Com.	26	326	100	-	63	88	-	-	-	63	-	640
32	LL.M.	27	77	75	-	38	-	-	-	-	-	-	190
33	B.Ed.	28	-	-	63	-	-	-	125	-	-	-	188
34	MBA +MBA(RD)	29	58+58(GBP)	-	-	-	-	-	-	-	-	-	116
35	M.Ed.	30	63	-	-	-	-	-	-	-	-	-	63
36	M. P.Ed. (Physical Education)*	31	50	-	-	-	-	-	-	-	-	-	50
37	M. A. in Mass Communication	32	56	-	-	-	-	-	-	-	-	-	56
38	M. A. in Film Theatre	33	12	-	-	-	-	-	-	-	-	-	12
39	M. Sc. Bio-Chemistry	34	27	-	-	-	-	-	-	-	-	-	27
40	M.Sc. in Agricultural Science (Agricultural Botany)	35	19	-	-	-	-	-	-	-	-	-	19
41	M.Sc. in Agricultural Chemistry & Soil Science	36	21	-	-	-	-	-	-	-	-	-	21
42	M.Sc. in Agricultural Zoology	37	19	-	-	-	-	-	-	-	-	-	19



Sl.	Subject	Code	Total Seats											
			AU	CMP	KP	ADC	ISDC	JT	SSK	AK	SPM	RT	TOTAL	
	& Entomology)													
42	M. Sc. in Material Science	38	19	-	-	-	-	-	-	-	-	-	-	19
43	M. Sc. in Bioinformatics	39	25	-	-	-	-	-	-	-	-	-	-	25
44	M. Sc. Environmental Science	40	39	-	-	-	-	-	-	-	-	-	-	39
45	M. Sc. In Textile and Apparel Designing	41	12	-	-	-	-	-	-	-	-	-	-	12
46	M. Sc. in Design and Innovation and Rural Technology	42	19	-	-	-	-	-	-	-	-	-	-	19
47	Applied Geology (Earth & Planetary Science)	43	19	-	-	-	-	-	-	-	-	-	-	19
48	Food & Nutrition	44	19	-	-	-	-	-	-	-	-	-	-	19
49	M.A. in Women Studies	45	20	-	-	-	-	-	-	-	-	-	-	20
50	M. Tech in Earth System Science	46	19	-	-	-	-	-	-	-	-	-	-	19
51	Master in Development Studies (MDS)	47	25	-	-	-	-	-	-	-	-	-	-	25
52	M. F. A. (Master in Fine Arts)*	48	8	-	-	-	-	-	-	-	-	-	-	8
53	M.Sc Biotechnology	49	16	-	-	-	-	-	-	-	-	-	-	16
Total													9544	

* These seats are available after increase of 25%.

* **The Number of Seats may be increased or decreased as per the decision of the competent authority.**

* Abbreviations used in above table are **AU**: University of Allahabad main campus; **CMP**: Chowdhary Mahadev Prasad Degree College; **KP**: K. P. Training College; **ADC**: Allahabad Degree College; **ISDC**: Ishwar Saran Degree College; **JT**: Jagat Taran Girls Degree College; **SSK**: Sadanlal Sanwaldas Khanna Girls Degree College; **AK**: Arya Kanya Degree College; **SPM**: Shyama Prasad Mukherjee Government Degree College; **RT**: Rajarshi Tandon Girls Degree College.

INFORMATION BROCHURE

This brochure contains the following sections:

SECTION

- I : General Information
 II : Admission Rules & Procedure
 III : Mode of the Entrance Test and Syllabus
 IV : Information relating to the Admission Test



IMPORTANT NOTE

1. This information brochure is for the general guidance of the applicants. The admission Test and admission to the Post graduate degree courses shall be governed by the relevant provisions of the University of Allahabad Act, 2005 and the First Ordinances made under section 29(2) University of Allahabad Act, 2005.
2. The executive instructions of the Government of India, the regulations/norms issued by the UGC and the order/judgments of the Hon'ble Supreme Court of India and the Hon'ble High Court at Allahabad shall be strictly followed with regard to reservation of seats in admission to the PG courses mentioned in the brochure.
3. Any subsequent change in the information brochure will be made available on the University Admission Test website <http://www.aupravesh2022.in> The admission to any PG course is suggestive of the fact that the terms and conditions laid down in the brochure are acceptable to the candidate and his/her legal guardian. The existing provisions of the Act, Statutes, Ordinances and Rules framed by the University of Allahabad and those modified from time to time shall be applicable to applicants. Any change in the rules, regulations, fee, special conditions, etc. shall mutatis mutandis apply to the admitted student.
4. The University of Allahabad reserves all the rights of conduct PGAT-2022 and any decision taken by the University in this regard shall be final and binding on all applicants.
5. RAGGING in the University of Allahabad is strictly prohibited as per orders of the Hon'ble Supreme Court of India. The orders of Hon'ble Supreme Court have been communicated by the UGC letter no. FI-8/2006 (CPP-II) dated March 4, 2007. If any incident of ragging is reported it will invite stringent penal action according to law and as per directives of the Hon'ble Supreme court of India.
6. This Brochure is being issued in Hindi and English versions, and in case there is any discrepancy between the two versions, the English version shall prevail.
7. The applicants are required to have a scanned copy of their coloured photograph (3.5 cm. x 4.5 cm) and their signature. These scanned copies of coloured photo (3.5cm. x 4.5 cm) in JPEG Format (*.JPG) 80 KB and signature in JPEG (*.JPG) 80 KB Format are required to be uploaded during the online form submission. The file size of photograph (80 KB) and signature (80KB) in any case shall not exceed. All aspirants filling the Online Form are advised to read the instructions to fill up the Online Form, which has all the pre-requisite and the guidelines to this regard.
8. The applicant must inform if he has any pending Police Cases against him.



SECTION-I

GENERAL INFORMATION

- 1.1 University of Allahabad shall conduct Post Graduate Admission Test, hereinafter called PGAT-2022 for admission to various Post-Graduate courses/subjects of the University of Allahabad for the session 2022-23, as specified (along with their numerical codes and number of seats) in the TABLE-I. Admission will be made according to merit in the PGAT-2022, subject to fulfilling the eligibility requirements mentioned below and availability of seat in the particular course for which the candidate has applied for and appeared in the PGAT-2022.

NOTE:

- (1) Candidates eligible to appear in the M.A. Admission Test, under the provisions of paragraph 1.2 and its sub-paragraphs and paragraph 1.6, must submit a single (i.e., only one) Form for the M.A. Admission Test and shall not submit any form for the M.Com. and M.Sc. Admission Tests.
- (2) Candidates eligible to appear in the M.Com. Admission Test, under the provisions of paragraph 1.2 and its sub-paragraph and paragraph 1.6 must submit a single (i.e., only one) Form for the M.Com. Admission Test and shall not submit any Form for the M.A. and M.Sc. Admission Test.
- (3) Candidates eligible to appear in the M.Sc. Admission Test, under the provisions of paragraph 1.2. and its sub-paragraph and paragraph 1.6 must submit a single (i.e. only one) Form for the M.Sc. Admission Test and shall not submit any Form for the M.A. and M.Com. Admission Test.
- (4) Candidates appearing for the M.A. Admission Test may indicate on the Form their choice for admission in either the two subjects in which they have appeared at the B.A. Part III Examination or in their (single) main subject at the B.A. (Honours) Examination, under the provisions of paragraphs 1.3.1, 1.3.4 and 1.3.6 and also may indicate their choice for admission in two M.A. subjects for which they are eligible to be considered under the provisions of paragraph 1.4, as non-subject candidates but he/she has to appear in only two subjects studied in B.A. Part-III Examination.
- (5) Candidates for the M.Com. Admission Test may (apart from M.Com.) indicate on the Form their choice for admission in two M.A. subjects for which they are eligible to be considered, under the provision of paragraph 1.4, as non-subject candidates. But he/she has to appear in only commerce subject.
- (6) Candidates for the M.Sc. Admission Test may indicate on the Form their choice for admission in either of the two subjects in which they have appeared at the B.Sc. Part III Examination or in their (single) main subject at the B.Sc. (Honours) Examination, under the provisions of paragraphs 1.3.3, 1.3.5 and 1.3.6 and also their choice for admission.
- (7) Admission in M.A. (Arabic) and M.A. (Persian) will be done through merit amongst the eligible candidates. Intake capacity is 94 seats in each subject. The Admission Forms will be available separately from Registrar Office, University of Allahabad.

TABLE-2

Courses Available in Humanities and Social Sciences

Sl. No.	Course	Subject	Code	See Eligibility Criteria as per the provisions of Paragraphs and Sub-paragraphs given against each subject
1.	M.A.	Ancient History	01	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
2.	M.A.	Economics	02	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
3.	M.A.	Education	03	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5



4.	M.A.	English Literature	04	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
5.	M.A.	English Language	05	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
6.	M.A.	Hindi	06	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
7.	M.A.	Med. & Mod. History	07	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
8.	M.A.	Music (Vocal)	08 (A)	1.2, 1.2.7
9.	M.A.	Music (Sitar)	08 (B)	1.2, 1.2.7
10.	M.A.	Music (Tabla)	08 (C)	1.2, 1.2.7
11.	M.P.A.	Music (Vocal)	08 (A)	1.2, 1.2.7, 1.2.31
12.	M.P.A.	Music (Sitar)	08 (B)	1.2, 1.2.7, 1.2.31
13.	M.P.A.	Music (Tabla)	08 (C)	1.2, 1.2.7, 1.2.31
14.	M.A.	Painting	09	1.2, 1.2.6
15.	M.A.	Philosophy	10	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
16.	M.A.	Political Science	11	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
17.	M.A.	Sanskrit	12	1.2
18.	M.A.	Sociology	13	1.2, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
19.	M.A.	Urdu	14	1.2

Courses Available in Natural Sciences

1	M.Sc.	Botany	15	1.2, 1.2.5
2	M.Sc.	Chemistry	16	1.2, 1.2.5
3	M.Sc.	Computer Science	17	1.2.1, 1.2.13
4	M.Sc.	Physics	18	1.2, 1.2.5
5	M.Sc.	Zoology	19	1.2, 1.2.5

Courses Available in Humanities and Science

1	M.A. / M.Sc.	Anthropology	20	1.2.1, 1.2.9
2	M.A. / M.Sc.	Defence Studies	21	1.2, 1.2.5, 1.4.1, 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.5.4
3	M.A. / M.Sc.	Mathematics	22	1.2, 1.2.5
4	M.A. / M.Sc.	Geography	23	1.2, 1.2.5
5	M.A. / M.Sc.	Psychology	24	1.2, 1.4.1(a), 1.4.1(d), 1.4.2, 1.4.3, 1.4.4, 1.4.5
6	M.A. / M.Sc.	Statistics	25	1.2, 1.2.5, 1.2.8

Courses Available in Commerce and Law

1	M. Com.	Commerce	26	1.2.2, 1.2.4
2	LL. M.	Law	27	1.2.15

List-V

Courses available for Specialized / Non conventional subjects

1.	B. Ed.	Education	28	1.2.23
2.	M. B. A.	Business Management	29	1.2.16, 1.2.31



3.	M.B.A. (Rural Development)	Business Management	29	1.2.16, 1.2.31
4.	M. Ed.	Education	30	1.2.24, 1.2.31
5.	M. P. Ed.	Physical Education	31	1.2.2, 1.2.22
6.	M.A.	Mass Communication	32	1.2.1, 1.2.12
7.	M.A.	Film & Theatre	33	1.2.2, 1.2.25
8.	M.Sc.	Bio-Chemistry	34	1.2.1, 1.2.10, 1.5.3
9.	M.Sc.	Agricultural Science (Agricultural Botany)	35	1.2.1, 1.2.11
10.	M.Sc.	Agricultural Science (Agricultural Chemistry & Soil Science)	36	1.2.1, 1.2.11
11.	M.Sc.	Agricultural Science (Agricultural Zoology & Entomology)	37	1.2.1, 1.2.11
12.	M.Sc.	Materials Science	38	1.2, 1.2.28, 1.4.1(c), 1.4.1(d)
13.	M.Sc.	Bioinformatics	39	1.2, 1.4.1(b), 1.4.1(d)
14.	M.Sc.	Environmental Science	40	1.2.2, 1.2.20
15.	M.Sc.	Textile and Apparel Designing	41	1.2.2, 1.2.21
16.	M.Sc.	Design and Innovation in Rural Technology	42	1.2.29
17.	M.Sc.	Applied Geology	43	1.2.1, 1.2.14
18.	M.Sc.	Food and Nutrition	44	1.2.27
19.	M.A.	Women Studies	45	1.2, 1.2.30
20.	M.Tech.	Earth System Science	46	1.2.2, 1.2.19
21.	M.A. in Development Studies (MDS)	Development Studies	47	1.2.2, 1.2.18
22.	M.F.A.	Painting	48	1.2.2, 1.2.17
23.	M.Sc.	Biotechnology	49	1.2.30

1.2 Eligibility: Candidates who have appeared/passed the Qualifying Graduate Examination i.e. the B.A./B.Sc./B.Com. (Three Year Degree Course) Examination of the University of Allahabad or BA/B.Sc./B.Com. (Three Year Degree Course or Honours Course) Examination of a University/ Institution recognized in this regard by the UGC, or an Examination recognized by the University of Allahabad as equivalent thereto are eligible to appear for the M.A./M.Sc./M.Com. Admission Test (PGAT-2022) respectively subject to the further provisions regarding eligibility given in the following sub-paragraphs.

1.2.1 The eligibility requirements for the Admission Tests for M.A./M.Sc. in Anthropology, M.Sc. in Bio-Chemistry, M.Sc. in Agricultural Sciences, M.A. in Mass Communication, M.Sc. in Computer Science, and M.Sc. in App. Geology are given in sub-paragraphs 1.2.2 and 1.2.9 to 1.2.15.

1.2.2 The Candidature of a candidate (and the admission granted on that basis) shall stand cancelled at any stage in case the candidate is found to be ineligible for appearing in the Admission Test.



- 1.2.3 For admission to M.A. (in subjects other than Anthropology), the candidate should have passed the B.A. Part III Examination in the same subject in which admission is sought or the B.A. (Honours) Examination with the same subject in which admission is sought as the main subject. In some subjects, certain candidates shall be eligible for admission as Non-subject candidates under the provisions specified in paragraph 1.4 and its sub paragraphs, provided they have indicated in the Form their choice for begin considered as Non subject candidates for these subjects. Candidates desirous of admission to M.A. in Painting, M.A. in Performing Arts and M.A. Music and Statistics must also see sub-paragraphs 1.2.6, 1.2.7 and 1.2.8.
- 1.2.4 For admission to M.Com., the candidate should have passed the B.Com./B.Sc./B.Sc. (Honours) Examination.
- 1.2.5 For admission to M.Sc. (in subjects other than Applied Geology, Anthropology, Bio-Chemistry and Computer Science), the candidate should have passed the B.Sc. Part III Examination in the same subject in which admission is sought or the B.Sc. (Honours) Examination with the same subject in which admission is sought as the main subject. Candidates desirous of admission to M.Sc. in Statistics must also see paragraph 1.2.8.
- 1.2.6 For admission to M.A. in Painting, candidates who have passed the B.F.A. (Four Year Course) or the B.V.A. (Four Year Course) Examination are also eligible.
- 1.2.7 Only Female candidates are eligible for admission to M.A. in Music (Vocal/Sitar / Tabla). Candidates who have passed the Sangeet Praveen / Alankar / Nipun Examination recognized by the University as equivalent to the B.A. Examination in Music are also eligible for admission to M.A. in Music.
- Male and Female both are, however, eligible for M.P.A. (Master in Performing Arts). The eligibility and test for both M.A. in Music and MPA is same.
- 1.2.8 For admission to M.A./M.Sc. in Statistics, if seats remain vacant after the admission of all eligible candidates who have passed the Qualifying Graduate Examination with Statistics, candidates who have passed the B.A./B.Sc. Part III Examination with Mathematics as a subject, with Statistics as a subject up to at least B.A./B.Sc. (Part II) Examination, or have passed the B.A./B.Sc. (Honours) Examination with mathematics as the main subject and Statistics as a subsidiary subject, may also be considered for admission on the basis of merit.
- 1.2.9 For admission to M.A./M.Sc. in Anthropology, candidates who have passed the B.A. Part III Examination with two subjects out of the set of the Social Sciences streams consisting of History, Political Science, Economics, Sociology, Psychology and Geography or the B.A./B.Sc. (Honours) Examination with Anthropology or a subject of the above mentioned Social Sciences stream as the main subject, or the B.Sc./B.Sc. (Honours) in Botany and Zoology Examination shall be eligible.
- 1.2.10 For admission to M.Sc. in Biochemistry, candidates who have passed the B.Sc. Three Year Degree Course with Chemistry/Biochemistry as one full subject in first, second and third year alongwith other life science subject combinations, or the B.Sc. (Honours) Course in Chemistry /Biochemistry with other life science subjects as subsidiary subject.
- 1.2.11 For admission to M.Sc. in Agricultural Science (Agricultural Botany/Agricultural Chemistry & Soil Science/Agricultural Zoology & Entomology) only those candidates are eligible who have passed the B.Sc. (Agriculture) Examination (Four-Year Course).
- 1.2.12 For admission to M.A. in Mass Communication, the Graduates of all subjects are eligible.
- 1.2.13 For admission to M.Sc. in Computer Science, a candidate is required to have passed B.Sc. (Three Years Degree Course) / B.Sc. (Honors) with Computer Science/Computer Maintenance/ Computer Application/Information Technology as one of his/her subjects at least up to B.Sc. Part II level.



- 1.2.14 For admission to M.Sc. in Applied Geology the eligibility conditions shall be as following : A candidate who has passed B.Sc. (Three Year Degree Course) with any two of the following subjects up to B.Sc. Part II level are eligible, (i) Physics (ii) Mathematics (iii) Geology. Candidate has to appear in any two of the above subjects for test.
- 1.2.15 See in separate brochure for LL.M.
- 1.2.16 See in separate brochure for M.B.A & M.B.A. (Rural Development)
- 1.2.17 For admission to M.F.A. (Master in Fine Arts), a candidate is required to have B.F.A. degree course with Applied Arts, Sculpture, Graphics, Textile Design and Painting with specialized area from recognized University or equivalent examinations thereto with 55% aggregate and not of more than 27 years of age on 1st July, 2022 shall be eligible to apply for admission to the First Semester of M.F.A. Degree. Candidate who have to their credit BFA in Painting, with Graphic or Textile of Allahabad University will be considered eligible for admission in Graphic/Textile Design stream.
- 1.2.18 For admission to M.A. (Development Studies), a candidate is required to have minimum 50% marks or equivalent grade in High School and Higher Secondary/Intermediate and 55% Marks or equivalent grade in Bachelor or Social Work/B.Com./B.A. in Economics/B.Sc. (Ag.)/Bachelor in Development Studies/Globalization and Development Studies/Bachelor in Business Administration/ Management/ Bachelor degree in Rural Development/Bachelor of Planning from a recognized University and minimum 50% score in PGAT-2022.
- 1.2.19 For admission to M.Tech. (Earth System Science), a candidate is required to have
- Master's degree in Physical Sciences/Mathematical Sciences/ Chemical Sciences/ Life Sciences/ Geosciences/ any cognate discipline or a B. Tech./B.E. with marks/CPI not below the 55% marks/ 5.5 (on a 10 point scale) (50% for SC/ST candidates) for appearing in the entrance exam.
 - Candidates working in a research and development organization on permanent basis in the field of Earth System/Cognate disciplines may be sponsored by his/ her employer for direct admission to the M. Tech. programme.
- 1.2.20 For admission to M.Sc. (Environmental Science), a candidate is required to have passed/ appeared in Bachelor's degree (10+2+3) examination with science subject from a recognized University, and has secured not less than 50% marks on the aggregate, provided that requirement of a minimum of 50% marks is not applicable in case of SC/ST candidates.
- 1.2.21 For admission to M.Sc. (Textile and Apparel Designing), a candidate is required to have passed B.Sc./ B.A./ B.Sc. (Home Science)
- 1.2.22 For admission to M. P. Ed. (Physical Education), a candidate is required to have
- A Bachelor of Physical Education (B.P.Ed.) or equivalent Or Bachelor of Science (B.Sc.) in Health and Physical Education with at least 50% marks for General and 45% marks for SC/ST/ OBC candidates and those sports persons who have represented India in International Championship OR who have won positions during last three academic sessions in the National/ Interschool Championships, being listed in Association of Indian Universities (AIU) and Indian Olympic Association (IOA).
 - The candidate should submit an original medical/fitness certificate through registered Government Medical Officer at the time of admission. An eligible candidate if she is married women shall be eligible to appear in Admission Test for admission to M.P.Ed course. In case, a Women candidate gets pregnant and reaches the stage of expectance during the course, she will have to discontinue her studies for at least one academic year. She can join back a fresh from the beginning of the semester keeping the guidelines pertaining to the maximum duration of the course in mind.



- 1.2.23 For admission to B.Ed., See in separate brochure for B.Ed.
- 1.2.24 For admission to M.Ed., See in separate brochure for M.Ed.
- 1.2.25 For admission to M.A. in Film & Theater, a candidate shall have a degree of graduation in any subject.
- 1.2.26 For admission to M.Sc. in Food and Nutrition, a candidate who has passed /appeared in B.Sc. (3rd Year) degree course in Home Science from any recognized university will be eligible to appear in the test.
- 1.2.27 For admission to M.Sc. in Materials Science, candidate should be B.Sc. with Physics or Chemistry as one subject in III year. Provided he/she has Mathematics as one subject at least up to II year.
- 1.2.28 For Admission to M.Sc. degree in Design and Innovation in Rural Technology following candidates are eligible:
- The admission to the course of M.Sc. degree in Design and Innovation in Rural Technology is open to any candidate who has earned Bachelor degree under 10+2+3 pattern of education with Botany/Zoology/Agriculture discipline of any Indian University or any accredited institution or any foreign University which the academic council of the University of Allahabad may recognize from time to time for this purpose.
 - The candidates shall be admitted through the entrance test conducted by the University.
- 1.2.29 A student seeking admission to M.A. Women studies must have obtained/appeared in a Bachelors degree from an accredited institution/University. Candidates for this course will have to undergo an additional test devised and conducted by the concerned department. Final merit will be computed on the basis of total of marks scored in PGAT-2022 and that scored in the abovementioned additional test.
- 1.2.30 For admission to M.Sc. Biotechnology, the candidate should be graduation with 50% marks with one or two of the following subjects : Biology/Biotechnology /Biochemistry /Neurobiology /Zoology / Botany. In addition veterinary Science, MBBS and BTech (Biotechnology) and BE (Biotechnology) graduates shall also be eligible.

Fees to be paid at the time of Admission (For M.Sc. Biotechnology only):

- Rs. 3810/- (including refundable caution fee of Rs. 2000/-)- Admission and first year Examination fees.
 - Rs. 30,000/- Semester Fee (for 1st Semester)
 - Hostel expenses extra if get admitted in hostel
- 1.3 Appearance in the Admission Test : Every candidate (other than candidates exempted from the admission test under paragraph 1.5) who fulfils the eligibility criteria, under paragraph 1.2 and its sub-paragraphs, is required to appear in the M.A./M.Com./ M.Sc. Admission Test, in accordance with the provisions given in the following sub paragraph (1.3.1 to 1.3.6).
- 1.3.1 Candidates who have passed the B.A. Examination, including candidates governed by paragraph 1.6, and are desirous of admission to M.A. in subjects other than Anthropology, including subjects for which they would be Non-subject candidates under sub-paragraphs, are eligible to appear in the M.A. Admission Test in the two subjects with which they have passed B.A. Part III Examination.
- 1.3.2 Candidates who have passed the B.Com/ B.Com. (Honours) Examination, including candidates governed by paragraph 1.6, who are desirous of admission to M.Com., or as Non-subject candidates to the relevant M.A. subjects, are eligible to appear in the M.Com. Admission Test.



- 1.3.3 Candidates who have passed the B.Sc. Examination, including candidates governed by paragraph 1.6, and are desirous of admission to M.Sc. in subjects other than Bio-Chemistry, Agricultural Sciences, Anthropology, Applied Geology and Computer Science or to M.Com. or as Non-subject candidates to the relevant M.A. subjects, are eligible to appear in the M.Sc. Admission Test in the two subjects with which they have passed B.Sc. Part III Examination.
- 1.3.4 Candidates who have passed the B.A. (Honours) Examination and are desirous of admission to M.A. in their main Honours subject (not being Anthropology), or as Non-subject candidates to relevant M.A. subjects, or having passed the B.A. (Honours) Examination with Mathematics as the main subject are desirous of also being considered for admission to M.A. in statistics (under sub-paragraph 1.2.8) are eligible to appear in the M.A. Admission Test only in their main Honours subject.
- 1.3.5 Candidates who have passed the B.Sc. (Honours) Examination and are desirous of admission to M.Sc. in their main Honours subject (not being Anthropology or Bio-Chemistry), or to M.Com. or a Non-subject candidates to relevant M.A. subject, or having passed the B.Sc. (Honours) Examination with Mathematics as the main subject are desirous of also being considered for admission to M.Sc. in Mathematics (under sub-paragraph 1.2.8), are eligible to appear in the M.Sc. Admission Test only in their main Honours subject.
- 1.3.6 In case the M.A./M.Sc. Admission Test is being organized in only a single subject out of the two subjects in which the candidate could appear under sub-paragraphs 1.3.1, 1.3.3, 1.3.4 or 1.3.5, the candidate shall appear in the Admission Test in such single subject only.
- 1.3.7 Candidates desirous of admission in M.Sc. in Bio-Chemistry, M.Sc. in Agricultural Sciences, M.A./M.Sc. in Anthropology, M.A. in Mass Communication, M.Sc. in Computer Science, M.Mus, M.F.A., M.A. (Theatre & Film), M.D.S., M.Tech. (ESS), M.Sc. (Bioinformatics), M.Sc. (Environmental Science), M.Sc. (Textile & Apparel Designing), M.Sc. (Applied Geology) and M.P.Ed. are required to appear in the separate Admission Test for these courses/subjects, and their admissions are not allowed on the basis of the general M.A/M.Sc. Admission Test.
- 1.3.8 Candidates enrolled in M.A./M.Com./M.Sc./D. Phil./ Ph.D. in the University of Allahabad or elsewhere or already holding the M.A./M.Com./M.Sc./D.Phil. /Ph.D. degree in any subject, are not eligible to appear in any Admission Test. However in special cases, where a prospective candidate claims a genuine interest in pursuing studies in a New Post-graduate programme and present credible evidence in affirmation of such genuine interest, may apply for second Post-graduate examination subject to the condition that he must have passed first P.G. Exam. by more than 60% marks and is granted permission by Vice-Chancellor, University of Allahabad.
- 1.3.9 Notwithstanding the provisions of paragraph 1.3.8, candidates enrolled in M.A./M.Sc. in a particular subject in the University of Allahabad or elsewhere or already holding the M.A./M.Sc., degree in the particular subject are not permitted to appear in the M.A./M.Sc. Admission Test in the same subject and similarly candidates already enrolled in M.Com. in the University of Allahabad or elsewhere, or already holding the M.Com. Degree, are not permitted to appear in the M.Com. Admission Test in any circumstance. In case such candidates appear in the concerned Admission Test despite this prohibition, their candidature for the same (and the admission granted on that basis) shall stand cancelled.
- 1.4 **Non-subject Candidates** : The admission of Non-subject candidates to M.A./M.Sc. in certain subjects is governed by the provisions of the following sub paragraphs. 1.4.1 to 1.4.5.
- 1.4.1 For admission to M.A. in Ancient History, Sociology, English, Hindi, Medieval & Modern History, Philosophy and Political Science candidates who have passed the B.A./B.Sc. Part III Examination without these subjects, or the B.Com./ B.Com. (Honours) Examination, shall be eligible to be



considered for admission as non-subject candidates up to the limit of 10% of the approved seats in each of these subjects, but in the case of Economics, the non-subject candidates must have studied Economics or Mathematics or Statistics as one of the subject up to at least the B.A./B.Sc. Part II level.

- 1.4.1 (a) For Admission in M.A./M.Sc. in Psychology, the candidates who have passed B.Sc. with 60% or above marks as well as candidates from social Science discipline having Education/Philosophy/ Geography / Political Science / Sociology / Social Anthropology/Economics as one of the subject in B.A.-III Examination have passed with 60% or above marks shall be considered as eligible candidates.
- 1.4.1 (b) The candidate who have appeared in PGAT-2022 in Bio-chemistry/Botany/ Zoology/ Chemistry/ Computer Science will be considered as eligible candidate for admission in M.Sc. (Bioinformatics), they shall be considered after the candidates who have a graduation degree in Bioinformatics.
- 1.4.1 (c) The candidate who have appeared in PGAT-2022 in Physics/Chemistry will be considered as eligible candidates for admission in M.Sc. (Materials Science), they shall be considered after the candidates who have graduation degree in Materials Science.
- 1.4.1 (d) The merit for such candidate will not be, in any case less than the last candidate of the subject in their respective category.
- 1.4.2 For admission in Non-subjects candidate has to appear in both subjects studied in B.A./B.Sc. III year or in Commerce only (B.Com. candidates) or in only Honors subjects. (Honors candidates). Non-subject candidates who qualify in the Admission Test, under sub-paragraph 1.4.1, may be required to undergo further assessment by the respective Department to determine their suitability for admission to the concerned subject. In the case of admission to Psychology, before such further assessment is carried out, the Head of the Department may arrange the non-subject candidates who qualify in the Admission Test in an over-riding order of priority on the basis of the Qualifying Graduate Examination passed or the subjects of the candidates at the same. Candidates desirous of being considered as Non-subject candidates are strongly advised to ascertain from the concerned Departments the provisions governing the admission of non-subject candidates before submitting their form.
- 1.4.3 Candidates (other than those exempted from the Admission Test under paragraph 1.5), who fulfill the eligibility criteria under paragraph 1.2 and its sub-paragraphs for being a non-subject candidates shall have to appear in M.A./M.Sc. Admission Test in the two subjects in which they have passed the B.A./B.Sc. Part III Examination. The standardized score of such candidate (under paragraph 2.2. of Section II) for purposes of admission as a non-subject candidate in relevant subjects or in M.Com., shall be determined by calculating the average of their Admission Test score in two subjects in which they have appeared. (For normalization suitable scaling formula may be applied as decided by core committee of PGAT-2022).
- 1.4.4 In case the M.A./M.Sc. Admission Test is being organized in only a single subject out of the two subjects in which the candidate could appear under sub-paragraph 1.3.1 or 1.3.2 the Standardized Score of such candidate (under paragraph 2.2. SECTION II) for purpose of admission as non-subject candidate in relevant subjects or in M.Com., shall be determined only on the basis of the Admission Test Score in such single subject. (For normalization suitable scaling formula may be applied as decided by core committee of PGAT-2022)
- 1.4.5 In case the M.A./M.Sc. Admission Test is being organized in both the subjects in which the candidate could appear under sub paragraph 1.3.1 or 1.3.2 but he candidate appears in only one of the two subjects the Standardized Score of such candidate for purpose of admission as a non subject



candidate shall be determined by treating the Admission Test score in the subject in which the candidate has not appeared to be zero(0).

- 1.5 Exemption from the Admission Test and Special Consideration: The provision relating to the categories of candidates who are eligible for exemption from the Admission Test, and the conditions governing such exemption, and the categories of candidates who, having appeared in the Admission Test are entitled to Special Considerations, are specified in the following sub-paragraphs 1.5.1 to 1.5.5
 - 1.5.1 Foreign nationals shall not be required to appear in the Admission Test, and their cases for admission shall be governed by the provisions of paragraph 2.2. of SECTION II.
 - 1.5.2 Non-Resident Indians (NRI), i.e. An Indian national domiciled abroad, or NRI wards, who have graduated from a foreign Univ., shall not be required to appear in the Admission Test, and their cases for admission shall be governed by the provision of paragraph 2.3 and 2.6.1 of SECT. II.
 - 1.5.3 Candidate for admission to M.Sc. in Bio-Chemistry who have passed the M.B.B.S. Examination and desirous of seeking admission to M.Sc. in Bio-chemistry shall not be required to appear in the Admission Test, and their cases for admission shall be governed by the provisions of paragraph 2.3 of SECTION II.
 - 1.5.4 Serving Officers of the Armed Forces, having the qualifications prescribed in the Ordinances and Regulations, shall be eligible for admission to supernumerary seats in M.Sc. in Defence Studies under rules prescribed in this regard.
 - 1.5.5 The provisions, on Special Considerations for certain categories, of candidates who are required to appear in the Admission Test, are specified in SECTION II.
 - 1.5.6 For admission to M.F.A. (Master in Fine Arts), M.A. in Theatre & Film, Master in Development Studies, M.Sc. in Materials Science, M.Sc. in Computer Science, M.Tech. in Earth System Science, M.Sc. in Bioinformatics, M.Sc. Environmental Science, M.Sc. in Textile and Apparel Designing, M.P.Ed. subjects separate eligibility criteria given, please see the brochure.
- 1.6 Provisional Admission to certain categories of graduates of the University of Allahabad: An examinee who has appeared for the B.A./ B.Sc./ B.Com. (Part III) Examination of the University of Allahabad for the year 2022 and has not been successful in the said examination but is eligible to appear, and is appearing in the Second Examination (Back Paper) of 2022 for the same, shall be eligible to appear in the concerned Admission Test and also to be considered for admission, provided he is not ineligible on any other ground. Such candidate must submit the Form and appear for the Admission Test along with successful examinees. Upon securing an appropriate place in the order of merit of successful candidates such candidate may be granted provisional admission, but such provisional admission shall automatically stand cancelled in case such candidate is not successful in the Second Examination. This facility is not admissible to candidates who have graduated from other Universities.
 - 1.6.1 An examinee who has appeared for the B.A./B.Sc./ B.Com. (Part III) Examination of the University of Allahabad or any other University for the year 2022 and his result is not declared shall be eligible to appear in the concerned Admission test. Such candidates if successful must submit their result/marksheet at the time of admission in the respective departments, otherwise they will not be considered for admission in Post Graduate course applied for.



SECTION-II

ADMISSION RULES AND PROCEDURE

- 2.1 Admissions to the courses of study referred to in SECTION I are governed by the relevant provisions of the University of Allahabad Act 2005 and the first ordinance made under section 29(2) of University of Allahabad Act 2005.
- 2.2 In the case of such candidates as may be exempted from the Admission Test, the Standardized Score, for any subject shall be calculated, for the denominator of 300, on the basis of the marks obtained in such subject in all the Parts of the Three-year Degree Course examination taken together.
 - 2.3.1.1 The marks obtained by the candidate in the Admission Test for M.A./M.Sc. in any subject (on the denominator of 300) shall be his Standardized Score for such subject in general. However, for admission in M.A./M.Sc. in Statistics, the marks obtained in the Admission Test for Mathematics shall be the Standardized Score for a candidate who has passed the Graduate examination with Mathematics but without Statistics.
 - 2.3.1.2 The marks obtained in both the subjects in the M.A./ M.Sc. Admission Test shall be converted to the Standardized Score by summing up the marks obtained in test in the two subjects and calculating standardized score on the denominator of 300. Such standardized score will be used for calculation of merit for admission to M.Sc. Computer Science, M.Sc. Applied Geology (Earth & Planetary Science Deptt.) as well as in the case of the Non-subject category and for admission to Hostels. When two candidates secure the same Standardized Score, inter-se merit shall be decided on the basis of the total marks obtained by the candidate at the Graduate examination after excluding the marks obtained in the Practical Examination. If there is a tie once again, the same shall be decided by draw of lots.
 - 2.3.1.3 The total of the marks obtained in both the subjects in the M.A./ M.Sc. Admission Test as calculated for a denominator of 300, shall be the Standardized Score of the candidate for the M.A. subject for which he/ she is a Non-subject candidate and for M.Com. In case, in the circumstances referred to 1.4 of SECTION I, the candidate has appeared in the Admission Test in a single subject, as marks obtained by him in such single subject, as calculated for a denominator of 300. In case the candidate is required to appear in two subjects in the M.A./M.Sc. Admission Test but has appeared in only one subject, for the calculation of his Standardized Score under this Rule, it shall be deemed that his score in the second subject, in which he did not appear, is zero (0).
 - 2.3.1.4 The marks obtained by the candidate in the M.Com. Admission Test, calculated for a denominator of 300. shall be his Standardized Score for M.Com. and for those subjects of M.A. for which he is a Non-subject candidate.
- 2.4.1 The Computed Marks of all candidates (who have appeared in the Admission Test), for each subject of M.A./M.Sc, and for M.Com. shall be determined in accordance with the procedure laid down in paragraph 2.5 of this section. Admission shall be made in each subject and in M.Com up to the limit of seats available in the same, in the consolidated order of merit of Computed Marks, but admission shall be granted to candidates of Special Categories (such as. Non-subject candidates. Arts and Science graduates for admission in M.A./ M.Sc. Anthropology, Outstanding Sports persons, Physically Challenged, etc.) only up to the maximum limit (ceiling) of seats assigned to each such category, Separate orders of merit shall be drawn for unreserved (General) seats and for reserved seats for the Scheduled Castes, Scheduled Tribes and other categories for which reservation is applicable. The candidates eligible for admission under the Special Consideration specified in paragraph 2.6 of this section shall be granted admission irrespective of their place in the order of merit list but without exceeding the prescribed ceilings in that regard.



- 2.4.2 The Computed marks of the candidate who. after passing the qualifying graduate examination of the University of Allahabad and qualifying in - (i) the Admission Test for M.A./M.Sc in Anthropology. M.Sc. in Bio-Chemistry or M.Com or (ii) the Admission Test in any other subject of MA./M.Sc. features lowest in the merit order of admitted candidates in the concerned course/subject, shall be the Cut-off Marks for admission to the said course/ subject, and any candidate of any other category, as well as any candidate who is eligible for consideration for provisional admission under paragraph 1.6 of SECTION I with lesser Computed Marks than such Cut-off Marks shall not be eligible for admission to such course subject However, this restriction shall not be applicable to candidates governed by the Special Consideration under paragraph 2.6 of this Section.
- 2.5 For the calculation of the Computed Marks of a candidate, a discount will be applied or a weightage will be added to his Standardized. Score in accordance with the following provisions:
- 2.5.1 For admission to any subject of M.A./M.Sc. or to M.Com., preference shall be given to fresh graduates (i.e. candidates who have passed the qualifying graduate examination for the academic year 2016-17) over graduates of preceding academic years. Accumulative penalty at the rate of 5% of the Standardized Score shall be applied for every gap year in case of non-fresh graduates, subject to the maximum discount of 15%.
- 2.6 The following special consideration as provided in 2.6.1, 2.6.2 and 2.6.3, shall be applicable to candidates for admission to any subject of M.A./ M.Sc. or to M.Com. and who are Foreign nationals.
- 2.6.1 Foreign nationals who have applied through the International Students' Advisor in accordance with the procedure laid down by the Post Graduate Admission Board in this regard, shall not be required to appear in the Admission Test for any subject of M.A./M.Sc. or for M.Com., but shall be considered for admission on the recommendation of a Committee constituted for the purpose, which shall examine their academic credentials and certificates before making any recommendation.
- 2.6.4 A candidate who has been granted admission under any of the Special Considerations shall be adjusted, according to his social category, on the unreserved seats, or on the seats reserved for his social category, in the concerned subject in M.A./ M.Sc. or in M.Com.
- 2.7 All candidates for admission to M.A. and M.Sc. in Defence Studies/Mathematics/ Statistics shall be arranged in combined order of merit and admitted on that basis. In all the said subjects only those candidates shall be admitted to M.Sc. who have passed the qualifying graduate examination with science subjects.
- 2.8.1 The acceptance of the Application Form of the candidate shall be provisional and shall not give him any guarantee or right of admission.
- 2.8.2 The place of a candidate in the order of merit for any subject in M.A./M.Sc. or for M.Com. shall be modified in case of an error in the calculation of his Computed Marks, and the admission of a candidate who is excluded from the said order of merit as a result of the rectification of his Computed Marks shall be cancelled.
- 2.8.3 The instructions regarding the enrollment of admitted candidates in the courses of subjects concerned, and other procedures to be under-taken by such candidates, as well as the penalties (including cancellation of admission) for failure to comply with the said instructions, shall be issued by the Post-Graduate Admission Board and shall be binding on the admitted candidates.
- 2.9 If a candidate uses or attempts to use unfair means or indulges in any other kind of improper activity, during the Admission Test, or during the processes precedent or subsequent to the Admission Test engages in any intimidatory, violent or other activity which disturbs or disrupts any of such processes or keeps a mobile phone during examination he shall be charged and punished for resorting to unfair means/unfair practices. In such cases the procedure and penalty (which may extend from cancellation of his candidature/admission to debarment from admission to the



University and the institutions associated with it for one or more years or forever) shall be determined by the Post Graduate Admission Test Board.

- 2.10 The University reserves the right to refuse admission to any candidate without specifying any reason and to make changes in the rules and procedures for admission.
- 2.11 The admission and enrollment of a candidate to any course of study in violation of these Rules, or of the Ordinances/ Regulations/ other provisions of the University shall stand cancelled with retrospective effect if such violation comes to light at any stage.
- 2.12 If a candidate has given false information in the Application Form or has concealed any relevant fact or presented a misleading version of such relevant fact, or enclosed any false or fraudulent document, his claim to be considered for admission shall stand cancelled and he shall be governed by the provisions of paragraph 2.10 of this section.
- 2.13 The following provisions shall be binding on all students of the University.
- 2.13.1 No student of the University (including any University Institute) is permitted to be admitted/enrolled simultaneously in more than one degree-granting course of study (including research) in the University or to be admitted/ enrolled in any degree granting course of study in any other Institution (including a University or Constituent College or Constituent Institute of the University) during the pendency of his admission/enrollment in a degree granting course in the University.
- 2.13.2 The admission/enrollment of a student referred to in paragraph 2.13.1 in the course of study concerned in the University shall automatically stand cancelled with effect from the date of his admission/enrollment in any degree-granting course of study in any other Institution, (including a University or Constituent College or Constituent Institute of the University).
- 2.13.3 In case a student referred to in paragraph 2.13.1 secures admission/enrollment in a new degree-granting course of study in the University (including a University Institute) during the pendency of his admission/enrollment in another earlier admission/enrollment shall automatically stand cancelled with effect from the date of his later admission/ enrollment.
- 2.13.4 A student whose admission/ enrollment in a Post-graduate degree granting course of study (including Law) automatically stands cancelled under paragraph 2.13.3, but who at the time of such cancellation had earned eligibility to appear at any part of the examination of the said course of study as an ex-student may, upon passing the Final Examination of the new course of study referred to in paragraph 2.13.3, or upon the termination of his admission/enrollment there in apply to the Examinations Committee for permission to appear in the said part of the Examination as an ex-student. However The Examination Committee shall not grant such permission except on the following conditions:
- 2.13.4.1 The record establishes that at the time of the said cancellation, he had earned the said eligibility.
- 2.13.4.2 Not more than four consecutive academic sessions have elapsed since the academic session in which he was admitted/ enrolled in the said part as a regular student.
- 2.13.5 No student of the University (including a University Institute) shall appear as a regular and / or an ex-student in the same academic session in any part of the examination of more than one degree-granting course of study.
- 2.13.6 A person who has been on the rolls of the University (including the University and Constituent Colleges and Constituent Institutes of the University) for a period of eight academic sessions or more (excluding the actual but not more than the permissible maximum period of enrollment as a research scholar) shall not be eligible for admission to any course of study.
- 2.13.7 No student of the University (excluding the Institute of Correspondence Courses and Continuing Education), other than one sponsored or permitted by his employer to attend (and fulfill the attendance requirements of) the course of study concerned, is permitted to engage whole-time employment or whole-time self- employment.



NOTE: Before submitting the Form, the candidate should ensure that his candidature is consistent with the Rules specified in paragraph 2.13.1-2.13.7, above.

SECTION-III

MODE OF THE ENTRANCE TEST

- 3.1 The entrance test for admission to M.A/ M.Sc./ M.Com./M.Tech. course for the session 2022-23, as specified in the first section of the Brochure, will be conducted simultaneously at various centres across the country: **ONLINE & OFFLINE (both):** Prayagraj, Lucknow, Kanpur, Gorakhpur, Varanasi, Bareilly in Uttar Pradesh and New Delhi. **ONLINE only:** Bhopal, Kolkata, Patna and Thiruvanthpuram. (If the number of candidates appearing at a particular centre is less than 100 then their examination centre be given to the nearest centre).
- 3.2 The candidates seeking admission to M.A. and M.Sc. Courses, shall have to appear in the test in both the subjects which they have studied in B.A./ B.Sc. Illrd year. But the candidates who have passed B.A/ B.Sc. (Honours) shall appear in the test in only subject of Honours, as specified in section I of the Brochure.
 - 3.2.1 Candidate seeking admission in M.Sc. Computer Science course, shall have to appear separately in test for Computer Science. Question Paper will have two sections. Section-I : Mathematics (compulsory) and section-II : Physics or Computer Science.
 - 3.2.2 Candidate seeking admission in M.Sc. Applied Geology shall have to appear in test in any two of the following subject. (i) Physics (ii) Mathematics (iii) Geology.
- 3.3 The time duration of the PGAT-2022 will be of two hours for M.A. and M.Sc. courses as well as for M.Com, M.A/ M.Sc. Anthropology. M.Sc. Bio-Chemistry. M.Sc. Agricultural Sciences. M.Sc. Computer Science, M.Mus. and M.A. Mass Communication. Additional 15 minutes shall be given for the distribution of booklets and filling up the entries on the cover page of the answer booklet of each subject.
- 3.4 There shall be combined questions-booklets each for M.A. and M.Sc. courses. There shall be separate question papers for M.Com. M.A./ M.Sc. Anthropology. M.Sc. Bio-Chemistry. M.Sc. Agricultural Sciences, M.Sc. Computer Science and M.A Mass Communication. The question booklets shall consist of separate question papers of 300 marks for each subject covered under the above mentioned courses i.e. M.A. and M.Sc. The question papers of M.Com., M.A./ M.Sc. Anthropology. M.Sc Bio-Chemistry, M.Sc. Agricultural Sciences, M.Sc. Computer Science and M.A. Mass Communication shall also be of 300 marks each. The pattern of questions papers will be uniform for all the subjects.
 - 3.4.1 M.F.A. (Master in Fine Arts), M.A. in Theatre & Film, Master in Development Studies, M.Sc. in Materials Science, M.Tech. in Earth System Sciences, M.Sc. in Bioinformatics, M.Sc. Environmental Science, M.Sc. in Textile and Apparel Designing and M.P.Ed. (Physical Education) please see brochure/syllabus.
- 3.5 The candidate appearing in the test for admission to M.A. and M.Sc. courses, will be provided with two answer booklets-one for each subject which he/she has studied in B.A./ B.Sc. Illrd year. The candidate appearing in one subject for admission to M.A./M.Sc. courses (only for honours students) M.Com./M.A./ M.Sc. Anthropology, M.Sc. Bio-chemistry, M.Sc. Agriculture Sciences, M.Sc. Computer Science and M.A. Mass Communication will be provided with one answer booklet. Appropriate space will be marked for each answer in the answer booklet. The invigilator will collect the first answer booklet at the expiry of 1:30 hours, and the second answer booklet at the completion of the test. The candidates shall be required to solve the question papers in a single sitting and shall not be allowed to leave the hall before the completion of the test. The detailed programme of the PGAT-2022 is given on the page no. 2.



- 3.6 For admission in M.A. Music (Vocal and Instrumental- Sitar/ Tabla) and M. Mus. besides the theory paper of 300 marks a Practical Test will also be conducted by the concerned department. The marks allotted for practical test will be 100 marks. The results shall be prepared and announced on the basis of marks obtained both in the written test and the practical exams. For admission in M.A. Painting also, Practical Test of 100 marks will be conducted by the department of Visual Arts. The results shall be prepared and announced on the basis of marks obtained both in the written test and the practical exams.
- 3.7 The question paper of every subject in M.A./M.Sc. / M.Com. etc. entrance test will generally cover the syllabus of B.A./ B.Sc./ B.Com. Course of the University of Allahabad. The syllabus of PGAT-2022 is given in this booklet.
- 3.8 Multiple choice types of questions will be asked in all the test papers of the Admission Test:
- 3.9 The candidates are advised to follow the instructions printed on the cover page of the answer booklet carefully.
- 3.10 Talking with other candidates in the examination hall, use or attempt to use unfair means, involvement in improper activities, interference in the proper conduct of the examination by the candidate himself or with the help of other persons or flouting the official instruction are totally prohibited. The candidates shall be punished for unfair means/ improper conduct if he transgresses any one of the prohibition.
- 3.11 The candidate must hand over his answer-booklet to the invigilator in the examination hall after the completion of the examination. If the candidate fails to hand over his answer booklet to the invigilator, or detaches one or more sheets from the answer-booklet or smuggles out the whole or the part of the answer booklet or hands over any other answer-booklet in place of the booklet which has been issued to him will be charged with unfair means and his examination will be cancelled.
- 3.12 The candidate should keep in mind that the Admission Test is to a measure of his knowledge in the subject as well as the speed of answering the questions. The candidate has to compete with other candidates for getting a place in the merit list in every subject of M.A./ M.Sc. and M.Com. Therefore it is expected of him that he would carefully read the instructions given in the booklet and should give an appropriate answer having understood the questions correctly. The word limit has to be adhered strictly.
- 3.13 The candidate has to bring his admit card compulsorily that has been issued to him in order to appear in the admission test. If a candidate fails to bring the admit card he/she shall not be allowed to sit in the Admission Test.
- 3.14 Candidates are strictly prohibited to bring to the Admission Test premises and examination hall any improper/ unauthorized material, books, parts of books, hand written/ typed/printed pages, sketches, Photostat copies, bags and other materials that could render unfair help in answering questions. The use of calculators is strictly prohibited in the Admission Test.
- 3.15 The candidate has to use a single colour ink/ ball pen refill in answering his questions. Therefore, the candidates should bring them in proper quantity while coming in to the examination hall.
- 3.16 Scrutiny or re-valuation of the answer-booklets of the Admission Test will not be permitted in any condition.
- 3.17 Use or possession of Mobile/Cellular Phones/Electronic gadgets is strictly prohibited. If any candidate is found in possession these during the examination in the campus his examination would automatically be cancelled. He/she may be barred from all other University examinations as well.



SECTION-IV

INFORMATION AND INSTRUCTIONS RELATING TO THE ADMISSION TEST

Admit Card: Admit Cards for all the valid applications received by the university will be processed and enabled on the website <http://www.aupravesh2022.in>. The Candidates can download their admit card from the website after entering their Application ID and date of birth. Candidates must correctly enter their date of birth in the Online Application Form. All Admit Cards will be uploaded for all the valid applications one week before actual commencement of the PGAT-2022 Test.

IMPORTANT: No Admit Card will be sent by post or distributed from the counters. The Admit Cards downloaded from the website <http://www.aupravesh2022.in> are valid and does not require any attestation.

Note: The information provided and the data supplied by the applicant through Registration Application/Form shall be preserved in the University for a period of only six months from the date of the declaration of the result of Entrance/Admission Test. The records will be disposed off after the said period and no enquiry shall be entertained in this regard by the University after the expiry of the said period. The University shall use this data for various purposes; hence, in no case shall any change be allowed at a later stage. Therefore, all the information must be furnished correctly, completely and clearly by the applicant himself/herself as per the instructions given in the brochure/website <http://www.aupravesh2022.in>. The Evaluated OMR Answer Sheets/Answer Booklets will be preserved only for a period of six months after the declaration of results of Entrance/Admission Test. The records will be disposed off after the said period and no enquiry shall be entertained in this regard by the University after the expiry of the said period.

- 4.1 ONLINE APPLICATIONS: Candidates can submit online form for the PGAT-2022 test at the website <http://www.aupravesh2022.in>. The website provides all the information required for online form submission.
- 4.2 Online Prospectus: The prospectus for PGAT-2022 can be downloaded from the website <http://www.aupravesh2022.in> and the admission seeking candidates can visit the website and download it. Candidates are advised to read the prospectus carefully before applying.
- 4.3 Process of filling up the Online Registration Form: Candidates willing to submit the online form are first required to open the website <http://www.aupravesh2022.in> and submit their online form, by entering all columns correctly.

4.4 PROCEDURE FOR ONLINE SUBMISSION OF APPLICATION FORM FOR ADMISSION TEST

Candidates can submit online form for the Admission Test-2022 at the concerned link of the **website** <http://www.aupravesh2022.in> or Admission-2022 link www.allduniv.ac.in. The website has all the information required for online form submission. Online Prospectus: The prospectus for all courses of Admission Test-2022 is available on the concerned link of the <http://www.aupravesh2022.in> or Admission-2022 link www.allduniv.ac.in and the admission aspirants can visit the website and download it. Aspirants are advised to read the prospectus carefully before applying.

Requirement for Online Form Submission:

All aspirants filling the online form are advised to read the instructions to fill up the online form, which has all the pre-requisite and the guidelines in this regard. Admission aspirants are required to have following in advance while submitting Application Form :



- (i) A scanned copy of their coloured photograph (3.5 x 4.5 cm) and their signature. These scanned copies of coloured photo (3.5 x 4.5 cm) in JPEG (*.JPG) Format and Signature in JPEG (*.JPG) Format are required to be uploaded during the online form submission. The file size of photograph and signature in any case shall not exceed 80 KB for each file separately.
- (ii) **Aadhar Number**, in case the candidate is having.

Note:

- **For admission, the candidates should report to the respective Department, as per their admission schedule.**

For convenience of applicants applying online, a Help Desk, offering following phone number and email ID, has been setup by University of Allahabad

Helpdesk No.: +91-9453819479, 9453819486, 9453819385

Helpdesk email ID: helpdesk.aupravesh2022@gmail.com

Note: Call centre timing – 10:00 AM to 07:00 PM (All Days)



प्रवेश सूचना

कला संकाय / वाणिज्य संकाय / विज्ञान संकाय / विधि संकाय इलाहाबाद विश्वविद्यालय, प्रयागराज परास्नातक प्रवेश परीक्षा (PGAT) – 2022 सत्र 2022-2023

आनलाइन आवेदन एवं अधिक जानकारी के लिए कृपया <http://www.aupravesh2022.in>
अथवा www.allduniv.ac.in पर उपलब्ध लिंक Admission-2022 का अवलोकन करें।

महत्त्वपूर्ण निर्देश

1. अभ्यर्थी प्रवेश फार्म भरते (ऑन लाइन) समय यह अवश्य सुनिश्चित कर लें कि उनके द्वारा उपलब्ध करायी गई समस्त सूचनायें सही हैं और उनकी प्रविष्टियाँ फार्म में सही हैं। सूच्य हो कि अभ्यर्थी द्वारा उपलब्ध करायी गई सूचनायें एवं भरी गई प्रविष्टियों को किसी भी दशा में परिवर्तित नहीं किया जायेगा और विश्वविद्यालय न तो इस सन्दर्भ में उत्तरदायी होगा और न ही इस सम्बन्ध में किसी भी प्रकार का आवेदन/निवेदन स्वीकार करेगा।
2. यदि किसी केन्द्र/सेन्टर पर परीक्षार्थियों की संख्या सौ से कम है तो इस दशा में परीक्षार्थी को दूसरा निकटतम केन्द्र/सेन्टर आवंटित कर दिया जायेगा।
3. उत्तर पत्रकों/पुस्तिकाओं के पुनरीक्षण की कोई व्यवस्था नहीं है।
4. विवरणिका के हिन्दी और अंग्रेजी संस्करण में दिये गये नियमों में यदि कोई विरोधाभास होगा तो अंग्रेजी संस्करण में दिये गये नियम ही मान्य होंगे।
5. केवल उन्हीं RTI याचिकाओं को स्वीकार किया जायेगा जो अन्तिम परिणाम प्रकाशित होने के 60 दिन के अन्दर प्राप्त होंगी।
6. प्रत्येक अभ्यर्थी को अपनी श्रेणी, अनारक्षित, अनुसूचित जाति, अनुसूचित जनजाति, अन्य पिछड़ा वर्ग तथा आर्थिक कमजोर वर्ग के साथ अपनी सह-श्रेणी (Sub-category) भी लिखना है।
7. वर्तमान सत्र 2021-22 में अर्ह परीक्षा देने वाले विद्यार्थियों को लाभ पहुँचाने के प्रत्येक वर्ष के गैप पर 5% परीक्षा में प्राप्त अंकों की कटौती की जायेगी। अधिकतम कटौती 15% होगी।
8. प्रत्येक अभ्यर्थी को अपने खिलाफ हुये सभी अनुशासन सम्बन्धी कार्यवाही तथा पुलिस द्वारा की गयी कार्यवाही को स्पष्ट करना होगा।
9. **पी.जी.ए.टी-I का पंजीकरण शुल्क** – सामान्य, आर्थिक कमजोर वर्ग एवं अन्य पिछड़ा वर्ग के अभ्यर्थियों के लिए रु. 800/- तथा अनुसूचित जाति/अनुसूचित जनजाति/विकलांग के अभ्यर्थियों के लिए रु. 400/- निर्धारित है।
10. **पी.जी.ए.टी-II का पंजीकरण शुल्क** – सामान्य, आर्थिक कमजोर वर्ग एवं अन्य पिछड़ा वर्ग के अभ्यर्थियों के लिए रु. 1600/- तथा अनुसूचित जाति/अनुसूचित जनजाति/विकलांग के अभ्यर्थियों के लिए रु. 800/- निर्धारित है।
11. प्रत्येक अभ्यर्थी प्रवेश भवन में परीक्षाफल घोषित होने के एक माह के अन्दर रु. 100/- के टोकन शुल्क देकर अपनी उत्तर-पुस्तिका का निरीक्षण कर सकता है।
12. **परीक्षा केन्द्र :**
ऑनलाइन एवं ऑफलाइन (दोनों): प्रयागराज, लखनऊ, कानपुर, गोरखपुर, वाराणसी, बरेली एवं नई दिल्ली।
केवल ऑनलाइन: पटना, कोलकाता, तिरुवनन्तपुरम एवं भोपाल।



महत्त्वपूर्ण तिथियाँ

ऑनलाइन पंजीकरण का प्रारम्भ	11 जून, 2022	
ऑनलाइन आवेदन पत्र एवं शुल्क जमा करने की अन्तिम तिथि	1 जुलाई, 2022	
ऑनलाइन प्रवेश पत्र प्राप्त करने की तिथि	बाद में घोषित की जायेगी	
प्रवेश परीक्षा की तिथि	PGAT- I	सूची I, II, III : बाद में घोषित की जायेगी
		सूची IV : बाद में घोषित की जायेगी
	PGAT- II	सूची V : बाद में घोषित की जायेगी



परास्नातक प्रवेश परीक्षा (PGAT) – 2022

इलाहाबाद विश्वविद्यालय जो कि शिक्षण एवं शोध में भारत के लब्ध-प्रतिष्ठित संस्थानों में से एक है शैक्षिक सत्र 2022–23 हेतु स्नातकोत्तर स्तर के विभिन्न पाठ्यक्रमों में प्रवेश हेतु विद्यार्थियों को आमन्त्रित करता है। सम्पूर्ण स्नातकोत्तर पाठ्यक्रमों की सूची निम्नवत है। स्मरण रहे कि समस्त पाठ्यक्रमों को दो भागों में विभक्त किया गया है : **PGAT-I** जिसमें सूची I, II, III एवं IV में उल्लेखित पारम्परिक विषय सम्मिलित हैं, एवं **PGAT-II** जिसमें सूची V में उल्लेखित विशेषज्ञता सम्बन्धी/गैर पारम्परिक विषय सम्मिलित हैं।

सूची-I

Courses available in Humanities and Social Sciences

क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
1.	M.A.	प्राचीन इतिहास (Ancient History)	01	हाँ
2.	M.A.	अर्थशास्त्र (Economics)	02	हाँ
3.	M.A.	शिक्षाशास्त्र (Education)	03	नहीं
4.	M.A.	अंग्रेजी साहित्य (English Literature)	04	हाँ
5.	M.A.	अंग्रेजी भाषा (English Language)	05	हाँ
6.	M.A.	हिन्दी (Hindi)	06	हाँ
7.	M.A.	मध्यकालीन एवं आधुनिक इतिहास (Med. & Mod. History)	07	हाँ
8.	M.A.* ^a	संगीत, गायन (Music (Vocal))	08A	नहीं
9.	M.A.* ^b	संगीत, सितार (Music (Sitar))	08B	नहीं
10.	M.A.* ^c	संगीत, तबला (Music (Tabla))	08C	नहीं
11.	M.P.A.* ^a	गायन (Vocal)	08A	नहीं
12.	M.P.A.* ^b	सितार (Sitar)	08B	नहीं
13.	M.P.A.* ^c	तबला (Tabla)	08C	नहीं
14.	M.A.*	पेंटिंग (Painting)	09	नहीं
15.	M.A.	दर्शनशास्त्र (Philosophy)	10	हाँ
16.	M.A.	राजनीतिशास्त्र (Political Science)	11	हाँ
17.	M.A.	संस्कृत (Sanskrit)	12	नहीं
18.	M.A.	समाजशास्त्र (Sociology)	13	हाँ
19.	M.A.	उर्दू (Urdu)	14	नहीं



सूची -II

Courses available in Natural Sciences

क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
1	M.Sc.	वनस्पति विज्ञान (Botany)	15	नहीं
2	M.Sc.	रसायन शास्त्र (Chemistry)	16	नहीं
3	M.Sc. ^d	कम्प्यूटर साइंस (Computer Science)	17	नहीं
4	M.Sc.	भौतिक शास्त्र (Physics)	18	नहीं
5	M.Sc.	जन्तु विज्ञान (Zoology)	19	नहीं

सूची -III

Courses available in Humanities and Science

क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
1	M.A. / M.Sc.	मानवशास्त्र (Anthropology)	20	नहीं
2	M.A. / M.Sc.	रक्षा अध्ययन (Defence Studies)	21	नहीं
3	M.A. / M.Sc.	गणित (Mathematics)	22	नहीं
4	M.A. / M.Sc.	भूगोल (Geography)	23	नहीं
5	M.A. / M.Sc.	मनोविज्ञान (Psychology)	24	हाँ
6	M.A. / M.Sc.	सांख्यिकीय (Statistics)	25	नहीं

सूची -IV

Courses available in Commerce & Law

क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
1	M. Com.	वाणिज्य (Commerce)	26	नहीं
2	LL. M.	विधि (Law)	27	नहीं

सूची -V

Courses available for Specialized / Non conventional subjects

क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
1.	B. Ed.	शिक्षाशास्त्र (Education)	28	नहीं
2.	M. B. A.* ^e	व्यवसाय प्रबन्धन (Business Management)	29	नहीं
3.	M.B.A. (Rural Development)* ^e	व्यवसाय प्रबन्धन (Business Management)	29	नहीं
4.	M. Ed.	शिक्षाशास्त्र (Education)	30	नहीं
5.	M. P. Ed.*	शारीरिक शिक्षा (Physical Education)	31	नहीं
6.	M.A.	जनसंचार (Mass Communication)	32	नहीं



क्रम संख्या	पाठ्यक्रम	विषय	पाठ्यक्रम कूट	गैर-विषय अभ्यर्थी का प्रावधान
7.	M.A.	फिल्म एवं थियेटर (Film & Theatre)	33	नहीं
8.	M.Sc.	जैव रसायन (Bio-Chemistry)	34	नहीं
9.	M.Sc.	कृषि विज्ञान (कृषि वनस्पति विज्ञान) Agricultural Science (Agricultural Botany)	35	नहीं
10.	M.Sc.	कृषि विज्ञान (कृषि रसायन एवं मृदा विज्ञान) Agricultural Science (Agricultural Chemistry & Soil Science)	36	नहीं
11.	M.Sc.	कृषि विज्ञान (कृषि जीव एवं कीट विज्ञान) Agricultural Science (Agricultural Zoology & Entomology)	37	नहीं
12.	M.Sc.	द्रव्य विज्ञान (Materials Science)	38	नहीं
13.	M.Sc.	जैव सूचना विज्ञान (Bioinformatics)	39	नहीं
14.	M.Sc.	पर्यावरण विज्ञान (Environmental Science)	40	नहीं
15.	M.Sc.	वस्त्र एवं परिधान डिजाइनिंग (Textile and Apparel Designing)	41	नहीं
16.	M.Sc.	ग्रामीण तकनीकी में डिजाइन एवं नवोन्मेष (Design and Innovation in Rural Technology)	42	नहीं
17.	M.Sc.	अनुप्रयुक्त भू-विज्ञान (Applied Geology)	43	नहीं
18.	M.Sc.	खाद्य एवं पोषण (Food and Nutrition)	44	नहीं
19.	M.A.	महिला अध्ययन (Women Studies)	45	नहीं
20.	M.Tech.	पृथ्वी प्रणाली विज्ञान (Earth System Science)	46	नहीं
21.	M.A. in Development Studies (MDS)	विकास अध्ययन (Development Studies)	47	नहीं
22.	M.F.A.*	पेंटिंग (Painting)	48	नहीं
23.	M.Sc.	जैव प्रौद्योगिकी (Biotechnology)	49	नहीं

^a There will be same test for M.A. in Music (Vocal) and M.P.A. in Music (Vocal)

^b There will be same test for M.A. in Music (Sitar) and M.P.A. in Music (Sitar)

^c There will be same test for M.A. in Music (Tabla) and M.P.A. in Music (Tabla)

^e There will be same test for M.B.A. and M.B.A. (Rural Development).

* तारांकित विषयों में विद्यार्थियों को प्रवेश परीक्षा के अतिरिक्त संबंधित विभागीय परीक्षा में शामिल होना अनिवार्य है। इन विषयों में अन्तिम प्रवेश, प्रवेश परीक्षा (अधिकतम अंक 300) एवं विभागीय परीक्षा में प्राप्त प्राप्तांकों के योग के आधार पर निर्धारित मेरिट लिस्ट के अनुसार होगा जिसे विभागवार निर्धारित किया गया है।



महत्त्वपूर्ण

सभी पाठ्यक्रमों के लिए अर्हता शर्तें नीचे अभिलिखित हैं। कृपया आवेदन पत्र भरने से पूर्व शर्तों का विधिवत् अध्ययन करें।

विषय अभ्यर्थी :

ऐसे अभ्यर्थी को जिसने सूची I, सूची II, सूची III एवं सूची IV में सूचीकृत किसी ऐसे विषय में अपने स्नातक पाठ्यक्रम की परीक्षा उत्तीर्ण की है अथवा अपने स्नातक पाठ्यक्रम के अन्तिम वर्ष की परीक्षा दी है जो कि उस अभ्यर्थी के स्नातक पाठ्यक्रम के अन्तिम वर्ष या उसके समकक्ष का विषय रहा है इस विवरण पुस्तिका में उपरोक्त विषय विशेष से सम्बन्धित पाठ्यक्रम में 'विषय अभ्यर्थी' के रूप में परिभाषित किया गया है।

कोई आवेदक सूची I, सूची II, सूची III एवं सूची IV में सूचीकृत किसी भी पाठ्यक्रम में आवेदन कर सकता है यदि वह उस पाठ्यक्रम के संदर्भ में विषय अभ्यर्थी की पात्रता हेतु आवश्यक सभी शर्तों को पूरी करता है।

गैर-विषय अभ्यर्थी :

ऐसे अभ्यर्थी को जिसने अपने स्नातक पाठ्यक्रम की परीक्षा उत्तीर्ण कर ली है या जिसने अपने स्नातक पाठ्यक्रम के अन्तिम वर्ष की परीक्षा दी है सूची I, सूची II, सूची III एवं सूची IV में सूचीकृत ऐसे सभी विषयों के पाठ्यक्रम के संदर्भ में इस विवरण पुस्तिका में 'गैर-विषय अभ्यर्थी' के रूप में परिभाषित किया गया है जो उस अभ्यर्थी के स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय नहीं रहे हैं।

कोई आवेदक, जो कि हिन्दी/अंग्रजी/मध्यकालीन एवं आधुनिक इतिहास/प्राचीन इतिहास/दर्शनशास्त्र/राजनीति विज्ञान से संबंधित पाठ्यक्रम के संदर्भ में 'विषय अभ्यर्थी' की पात्रता हेतु आवश्यक सभी शर्तों को पूरा नहीं करता है परन्तु वह उन दो विषयों से संबंधित पाठ्यक्रमों में 'विषय अभ्यर्थी' के रूप में आवेदन करने की प्रक्रिया में है जो उसके स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय रह चुके हैं और हिन्दी, अंग्रजी, मध्यकालीन एवं आधुनिक इतिहास, प्राचीन इतिहास, दर्शनशास्त्र, राजनीति विज्ञान, प्रतिरक्षा अध्ययन से भिन्न रहे हैं, हिन्दी/अंग्रजी/मध्यकालीन एवं आधुनिक इतिहास/प्राचीन इतिहास/दर्शनशास्त्र/राजनीति विज्ञान से संबंधित पाठ्यक्रम में 'गैर विषय अभ्यर्थी' के रूप में आवेदन कर सकता है। ऐसे गैर-विषय अभ्यर्थियों को उक्त विषय की संबंधित प्रवेश परीक्षा जो कि संबंधित विषय अभ्यर्थियों के लिये अनिवार्य है, में परीक्षा देने से छूट है। ऐसे गैर-विषय अभ्यर्थी के योग्यता स्तर की गणना उसके द्वारा विषय अभ्यर्थी के रूप में उपरोक्त दो संबंधित प्रवेश परीक्षाओं में अर्जित अंकों के औसत के आधार पर होगी।

कोई आवेदक, जो कि समाजशास्त्र/मनोविज्ञान से संबंधित पाठ्यक्रम के संदर्भ में 'विषय अभ्यर्थी' की पात्रता हेतु आवश्यक सभी शर्तों को पूरा नहीं करता है परन्तु जो उन दो विषयों से संबंधित पाठ्यक्रमों में 'विषय अभ्यर्थी' के रूप में आवेदन करने की प्रक्रिया में है जो उसके स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय रह चुके हैं और समाजशास्त्र एवं मनोविज्ञान से भिन्न रहे हैं और जिसने अपने स्नातक पाठ्यक्रम में कुल 60 प्रतिशत अथवा अधिक अंक अर्जित किये हैं। समाजशास्त्र/मनोविज्ञान से संबंधित पाठ्यक्रम में 'गैर विषय अभ्यर्थी' के रूप में आवेदन कर सकता है। ऐसे गैर-विषय अभ्यर्थियों को उक्त विषय की संबंधित प्रवेश परीक्षा जो कि संबंधित विषय अभ्यर्थियों के लिये अनिवार्य है, में परीक्षा देने से छूट है। ऐसे गैर-विषय अभ्यर्थी के योग्यता स्तर की गणना उसके द्वारा विषय अभ्यर्थी के रूप में उपरोक्त दो संबंधित प्रवेश परीक्षाओं में अर्जित अंकों के औसत के आधार पर होगी।

कोई आवेदक, जो अर्थशास्त्र से संबंधित पाठ्यक्रम के संदर्भ में 'विषय अभ्यर्थी' की पात्रता हेतु आवश्यक सभी शर्तों को पूरा नहीं करता है परन्तु जो उन दो विषयों से संबंधित पाठ्यक्रमों में 'विषय अभ्यर्थी' के रूप में आवेदन करने की प्रक्रिया में है जो उसके स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय नहीं रहे हैं और अर्थशास्त्र से भिन्न रहे हैं एवं या तो गणित तथा सांख्यिकी उसके स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय रहे हैं या



अर्थशास्त्र उसके स्नातक पाठ्यक्रम के तीन विषयों में से एक रहा है, अर्थशास्त्र से संबंधित पाठ्यक्रम में 'गैर विषय अभ्यर्थी' के रूप में आवेदन कर सकता है। ऐसे गैर-विषय अभ्यर्थियों को उक्त विषय की संबंधित प्रवेश परीक्षा जो कि संबंधित विषय अभ्यर्थियों के लिये अनिवार्य है, में परीक्षा देने से छूट है। ऐसे गैर-विषय अभ्यर्थी के योग्यता स्तर की गणना उसके द्वारा विषय अभ्यर्थी के रूप में उपरोक्त दो संबंधित प्रवेश परीक्षाओं में अर्जित अंकों के औसत के आधार पर होगी।

सूची V में सूचीकृत विभिन्न विषयों के पाठ्यक्रमों में प्रवेश हेतु, प्रत्येक पाठ्यक्रम के लिये पृथक आवेदन करने की आवश्यकता है और इस प्रकार के आवेदनों की संख्या पर कोई प्रतिबंध नहीं है यदि संबंधित पाठ्यक्रमों में प्रवेश संबंधी सभी पात्रता-शर्तें पूरी हो रही हैं।

स्थान (Seat) आरक्षण –

(अ) कमजोर वर्ग के अभ्यर्थियों के लिये आरक्षण

- 1.0 इलाहाबाद विश्वविद्यालय अधिनियम, 2005 (2005 का अधिनियम 26) के परिनियम के खण्ड 9 के अन्तर्गत अनुसूचित जाति, अनुसूचित जनजाति तथा अन्य पिछड़े वर्ग के अभ्यर्थियों के लिए सभी विषयों/पाठ्यक्रमों जिसके लिए प्रवेश आयोजित है, निम्न अनुपात में आरक्षण प्रदान किया जायेगा।
- 1.1 प्रत्येक विषय/पाठ्यक्रम के कुल सीटों/स्थानों का 15 प्रतिशत स्थान अनुसूचित जाति वर्ग के अभ्यर्थियों के लिए आरक्षित।
- 1.2 प्रत्येक विषय/पाठ्यक्रम के कुल सीटों/स्थानों का 7.5 प्रतिशत स्थान अनुसूचित जनजाति वर्ग के अभ्यर्थियों के लिए आरक्षित।
- 1.3 प्रत्येक विषय/पाठ्यक्रम के कुल सीटों/स्थानों का 27 प्रतिशत स्थान अन्य पिछड़े वर्ग के अभ्यर्थियों के लिए आरक्षित।
- 1.4 यदि अनुसूचित जनजाति वर्ग के लिए आरक्षित स्थान उस वर्ग के अभ्यर्थियों की अनुपलब्धता के कारण रिक्त रहते हैं तो रिक्तियों को अनुसूचित जाति वर्ग के अभ्यर्थियों द्वारा भरा जायेगा।
- 1.5 कुल सीटों का 10 प्रतिशत आर्थिक कमजोर वर्ग के अभ्यर्थियों हेतु आरक्षित होगा। माननीय सर्वोच्च न्यायालय एवं इलाहाबाद उच्च न्यायालय के निर्णय के अधीन होगा।

विशेष– आरक्षण सम्बन्धी नियमों में भारत सरकार मानव संसाधन मन्त्रालय द्वारा किये गये सभी परिवर्तन बाध्यकारी होंगे।

(ब) विस्थापित कश्मीरी :

- 2.0 विस्थापित कश्मीरियों को तत्सम्बन्धी प्रमाण-पत्र (जो कि मानव संसाधन मन्त्रालय के सक्षम अधिकारी जो कि संयुक्त सचिव स्तर अथवा समकक्ष से निचले स्तर का न हो के द्वारा प्रदत्त) के आधार पर भारत सरकार के निर्देशों/प्रावधानों के तहत अधिभार/अधिलाभ प्रदान किया जायेगा।

(स) एन0सी0सी0 अधिभार/अधिलाभ :

- 3.0 ऐसे अभ्यर्थी जो राष्ट्रीय कैडेट कोर (एन.सी.सी.) 'बी' के प्रमाण पत्र धारक हैं को उनके प्राप्त अंकों में 5% अधिलाभ जोड़ दिया जायेगा।



(द) विदेशी नागरिक/अनिवासी भारतीय :

4.0 उन विदेशी नागरिकों के लिए जिन्होंने अर्हकारी परीक्षा उत्तीर्ण करके अन्तर्राष्ट्रीय छात्र सलाहकार के माध्यम से आवेदन किया है, उनको प्रवेश परीक्षा में सम्मिलित होना अनिवार्य नहीं है। उन्हें इलाहाबाद विश्वविद्यालय द्वारा नियुक्त विदेशी परामर्शदात्री समिति की संस्तुति पर प्रवेश दिया जा सकता है। समिति संस्तुति के पूर्व अभ्यर्थी के शैक्षिक स्तर पर तथा उनकी प्रमाणिकता का अध्ययन करेगी।

(य) खेलकूद कोटा :

5.0 इस कोटे के अन्तर्गत स्नातक स्तर पर केवल उन्हीं अभ्यर्थियों के आवेदन पर विचार किया जायेगा, जो कि अन्तर विश्वविद्यालय टूर्नामेंट में भारतीय विश्वविद्यालय संघ (ए0आई0यू0) नयी दिल्ली के नियमों के अनुसार भाग लेने के अर्ह है तथा जूनियर स्तर (कक्षा 10 तथा 12) पर 'स्कूल गेम्स फेडरेशन ऑफ इण्डिया' तथा जूनियर स्तर (19 वर्ष आयु से निम्न) जिला, क्षेत्र, प्रदेश तथा राष्ट्रीय चैम्पियनशिप जो कि मान्यता प्राप्त विभिन्न जिला/प्रदेशीय एसोशियेशन और फेडरेशन के द्वारा आयोजित की गयी हो, में अपने विद्यालय का प्रतिनिधित्व किया हो।

अभ्यर्थियों का चयन सीट/स्थान की उपलब्धता तथा विषय में प्राप्त मेरिट के आधार पर किया जायेगा।

5.1 सलाहकार समिति, स्पोर्ट्स बोर्ड तथा इलाहाबाद विश्वविद्यालय को 'फील्ड ट्रायल' का आयोजन करने तथा अभ्यर्थी द्वारा प्रस्तुत अर्हकारी प्रमाण-पत्रों/दस्तावेजों आदि का परीक्षण करने/सत्यता जाँचने आदि का सर्वाधिकार सुरक्षित है।

5.2 अभ्यर्थियों को प्रवेश/इण्टरव्यू/काउंसलिंग के समय खेलकूद से सम्बन्धित अपने समस्त मूल प्रमाण-पत्रों व अभिलेखों को अवश्य प्रस्तुत करना होगा। विश्वविद्यालय का यह सर्वाधिकार सुरक्षित है कि वह समस्त अभिलेखों/प्रमाण-पत्रों की सत्यता परखे तथा यदि यह गलत अथवा असत्य पाया जाता है तो अभ्यर्थी के विरुद्ध नियमानुसार कार्यवाही की जायेगी।

5.3 प्रत्येक विषय/पाठ्यक्रम में कुल स्थानों का 2 प्रतिशत स्थान खेलकूद कोटे के अन्तर्गत आवन्तित है।

5.4 खेलकूद कोटा में प्रवेश स्पोर्ट्स बोर्ड की सलाहकार समिति द्वारा दी गई वरीयता सूची के आधार पर ही होगा।

(र) दिव्यांग कोटा: पाठ्यक्रम के स्वीकृति स्थानों के 5% की अधिकृत सीमा तक प्रवेशार्थी।

6.0 (i) दिव्यांगजन अधिकार अधिनियम, 2018 की धारा 32 (1) के अनुसार, उच्च शिक्षा की सभी सरकारी संस्थाएं और सरकार से सहायता प्राप्त कर रही अन्य शिक्षा संस्थाएं संदर्भित दिव्यांगजनों के लिए 5% स्थानों को आरक्षित रखेंगी। इसलिए, पाठ्यक्रम के कुल स्वीकृत सीटों की 5% सीटें दिव्यांगजनों हेतु उपलब्ध होंगी।

(ii) वे अभ्यर्थी जिनके किसी अंग या अस्थि रचना में न्यूनतम 40% विकलांगता है, विश्वविद्यालय द्वारा गठित मेडिकल बोर्ड मतानुसार अधिकतम 70% की समग्र शारीरिक अक्षमता है या जो प्रमाणित नेत्रहीन हैं अथवा जो सुनने में असमर्थ हैं, मेडिकल बोर्ड की संस्तुति के आधार पर उनका सम्बन्धित पाठ्यक्रम/विषय में प्रवेश हो सकता है।

(iii) खण्ड (क), (ख) एवं (ग) के संदर्भित दिव्यांगजनों हेतु एक प्रतिशत सीटें प्रत्येक हेतु आरक्षित होंगी तथा खण्ड (घ) एवं (ङ) के संदर्भित दिव्यांगजनों के लिए एक प्रतिशत सीटें प्रत्येक हेतु आरक्षित होंगी।

(क) अंध और निम्न दृष्टि

(ख) बधिर और श्रवणशक्ति में ह्रास

(ग) चलन दिव्यांगता जिसके अन्तर्गत प्रमस्तिष्क घात, रोगमुक्त कुष्ठ, बौनापन, तेजाब आक्रमण के पीड़ित और पेशीय दुष्पोषण भी है।



(घ) स्वपरायणता, बौद्धिक दिव्यांगता, विशिष्ट अधिगम और मानसिक रुग्णता।

(ङ) प्रत्येक दिव्यांगता के लिए पहचान किए गए पदों के खण्ड (क) एवं खण्ड (घ) के अधीन व्यक्तियों में से बहु दिव्यांगता।

(iv) यह विशेष सुविधा तभी अनुमन्य होगी जबकि अभ्यर्थी ने प्रवेश आवेदन प्रपत्र में इसका दावा किया है तथा उसने उपर्युक्त के मुख्य राजकीय चिकित्सा अधिकारी या विकलांगता प्रमाण-पत्र (जिसमें विकलांगता को स्पष्ट दर्शाता हुआ उसका फोटो भी है) प्रवेश के समय प्रस्तुत किया है।

(v) विशेष सुविधाओं के अधीन प्रविष्ट प्रवेशार्थियों को उनके सामाजिक कोटि के अनुसार आरक्षित स्थानों पर समायोजित किया जाएगा।

(vi) (क), (ख), (ग), (घ) एवं (ङ) में वर्णित सीटों पर प्रवेश, उनकी सम्बन्धित अपंगता के प्रतिशत के अनुसार किया जाएगा।

(ल) शिक्षक/कर्मचारी पाल्य कोटा :

विश्वविद्यालय, संघटक कॉलेज, विश्वविद्यालय संस्थान एवं संघटक संस्थान, जिन्हें इसके पश्चात् इकाई कहा जायेगा, के नियमित एवं सेवानिवृत्त अध्यापकों एवं कर्मचारियों के पत्नी, पति, बेटा या बेटी के लिए विश्वविद्यालय के नियमों के अन्तर्गत कुल सीटों की पाँच प्रतिशत सीटें आरक्षित होंगी। उसी इकाई में कार्यरत या सेवानिवृत्त अध्यापकों/कर्मचारियों को वरीयता प्रदान की जायेगी।

बशर्ते यदि किसी इकाई में सीटें रिक्त रह जायेंगी तो उसे अन्य इकाई के अध्यापकों/कर्मचारियों के पाल्यों द्वारा भरी जायेंगी।

नोट— कर्मचारी/अध्यापक पाल्य कोटा का लाभ तभी अनुमन्य होगा यदि अभ्यर्थी ने इस कोटे का दावा विहित आवेदन-पत्र में किया हो तथा प्रवेश के समय आवश्यक दस्तावेज एवं प्रमाण-पत्र प्रस्तुत करता है।

सत्र अन्तराल कटौती :

ऐसे आवेदक, जिसने अपने स्नातक पाठ्यक्रम की अन्तिम परीक्षा सत्र 2020-21 या उसके पूर्व के सत्रों में उत्तीर्ण की है, के स्नातक पाठ्यक्रम के प्राप्तांक की गणना नीचे दी गयी तालिका के अनुसार कटौती करने के पश्चात् होगी—

सत्र जिसमें आवेदक ने स्नातक पाठ्यक्रम की अन्तिम परीक्षा उत्तीर्ण की है	प्राप्तांक में कटौती का प्रतिशत
सत्र 2020-21	5 प्रतिशत
सत्र 2020-20	10 प्रतिशत
सत्र 2018-19	15 प्रतिशत
सत्र 2018-19 से पूर्व के सत्र	15 प्रतिशत

पी.जी.ए.टी. 2022 प्रवेश परीक्षा का प्रारूप —

1. प्रत्येक पी.जी.ए.टी. 2022 परीक्षा में कुल 300 अंकों के 150 बहुविकल्पीय प्रश्न होंगे।

2.1 सूची I, सूची II एवं सूची III के सूचीकृत पाठ्यक्रमों से संबंधित पी.जी.ए.टी. 2022 प्रवेश परीक्षा में प्रथम 50 प्रश्न सामान्य जानकारी, सामान्य अंग्रेजी, सामान्य हिन्दी, तार्किक विमर्श एवं बौद्धिक क्षमता से संबंधित होंगे एवं सभी संबंधित अभ्यर्थियों के लिये अनिवार्य होंगे। प्रत्येक सही उत्तर के लिए दो (2) अंक दिये जायेंगे।

2.2 सूची I, सूची II एवं सूची III के सूचीकृत पाठ्यक्रमों से संबंधित उपरोक्त प्रवेश परीक्षा में शेष 100 प्रश्न



उन दो विषयों से संबंधित होंगे जो अभ्यर्थी के स्नातक पाठ्यक्रम के अन्तिम वर्ष के विषय रह चुके हैं और जिन दोनों विषयों के लिये अभ्यर्थी ने 'विषय अभ्यर्थी' के रूप में आवेदन किया हुआ है। 100 प्रश्नों में से 50-50 प्रश्न उपरोक्त दोनों विषयों से पूछे जायेंगे।

अभ्यर्थियों हेतु यह परामर्श है कि वह अपने संबंधित विषयों के लिये उचित संकेत का प्रयोग करें। प्रत्येक सही उत्तर के लिये चार (4) अंक प्रदान किये जायेंगे।

प्रत्येक विषय हेतु कुल अंकों की गणना 50 अनिवार्य प्रश्नों एवं 50 विषय संबंधी प्रश्नों के प्राप्तांकों के योग के रूप में अलग-अलग तौर पर होगी।

एक अभ्यर्थी उपरोक्त दोनों विषयों से संबंधित 100 प्रश्नों की जगह केवल एक विषय से संबंधित 50 प्रश्नों का उत्तर देने का विकल्प भी चुन सकता है। परन्तु ऐसा विकल्प चुनने पर वह अभ्यर्थी सूची I, सूची II एवं सूची III में सूचीकृत किसी भी पाठ्यक्रम हेतु 'गैर विषय अभ्यर्थी' के रूप में आवेदन कर सकने के प्रावधान से वंचित हो जायेगा। कुल अंकों की गणना एकमात्र चयनित विषय हेतु की जायेगी जो कि 50 अनिवार्य प्रश्नों एवं 50 उपरोक्त विषय संबंधी प्रश्नों के प्राप्तांकों के योग के बराबर होगा।

- 3.1 सूची IV एवं सूची V में सूचीकृत पाठ्यक्रमों से संबंधित पी.जी.ए.टी. 2022 की प्रवेश परीक्षा में प्रथम 50 प्रश्न सामान्य अध्ययन से संबंधित होंगे एवं सभी संबंधित अभ्यर्थियों के लिये अनिवार्य होंगे। प्रत्येक सही उत्तर के लिये दो (2) अंक दिये जायेंगे।
- 3.2 सूची IV एवं सूची V में सूचीकृत पाठ्यक्रमों से संबंधित पी.जी.ए.टी. 2022 की प्रवेश परीक्षा में शेष 100 प्रश्न संबंधित विषय से होंगे। प्रत्येक सही उत्तर के लिये दो (2) अंक दिये जायेंगे।

पी.जी.ए.टी. 2022 (PGAT-2022) प्रवेश परीक्षा के प्रकार :-

1. पी.जी.ए.टी.-I प्रवेश परीक्षा जो कि सूची I, सूची II, सूची III एवं सूची IV में सूचीकृत पाठ्यक्रमों से संबंधित हैं आनलाइन एवं ऑफलाइन दोनों ही प्रकारों में आयोजित होगी।
2. पी.जी.ए.टी.-II प्रवेश परीक्षा जो कि सूची V में सूचीकृत पाठ्यक्रमों से संबंधित है केवल आनलाइन प्रकार से आयोजित होगी।

सावधानियाँ

- आवेदकों के लिये परामर्श है कि वह आनलाइन आवेदन प्रपत्र में दी गयी सूचनायें आवेदन की प्रक्रिया पूर्ण होने के पश्चात् किसी भी स्थिति में संशोधित/परिवर्तित नहीं की जायेंगी एवं विश्वविद्यालय किसी भी रूप में ऐसे किसी भी प्रार्थना का संज्ञान नहीं लेगा। इसके अतिरिक्त, विश्वविद्यालय आवेदकों द्वारा की गयी किसी भी त्रुटि के लिये उत्तरदायी नहीं होगा।
- यदि किसी (केन्द्र/सेन्टर) पर परीक्षार्थियों की संख्या सौ से कम है तो इस दशा में परीक्षार्थी को दूसरा निकटतम केन्द्र/सेन्टर आवंटित कर दिया जायेगा।
- इस प्रवेश परीक्षा में पुनर्मूल्यांकन का कोई प्रावधान नहीं है।
- यदि विवरण पुस्तिका के हिन्दी अवतरण में कोई विसंगति पायी जाती है तो विवरण पुस्तिका का अंग्रेजी अवतरण प्रामाणिक होगा।
- प्रत्येक अभ्यर्थी हेतु आवेदन प्रपत्र में आवंटित स्थान पर यह सूचित करना आवश्यक है कि क्या अभ्यर्थी इलाहाबाद विश्वविद्यालय या किसी अन्य विश्वविद्यालय में किसी परास्नातक पाठ्यक्रम में शिक्षा प्राप्त कर रहा है या ऐसे किसी परास्नातक पाठ्यक्रम की परीक्षा उत्तीर्ण कर ली है।



ADMISSION SYLLABUS

Ancient History, Culture and Archaeology (01)

Early Cultures and Civilizations of India

Definition of Archaeology and relation with other disciplines; Palaeolithic cultures: Salient features, Geographical distribution, Belan Valley, Son Valley; Mesolithic Cultures: Salient features, Geographical distribution - Vindhya, Ganga Plains; Neolithic Cultures: Salient features, Geographical distribution-South India, Vindhya and Ganga Plains; Harappan Civilization: Origin and extent, salient features, chronology and decline;

Chalcolithic Cultures-

- a. Central India and Deccan: Kayatha Culture, Ahar Culture, Jorwe Culture
- b. Copper-Hoards and Ochre Colour Pottery (OCP)

Iron Age: Antiquity of Iron; PGW and NBPW Cultures; Sites: Atranjikhhera, Hastinapur, Kausambi, Taxilla, Arikamedu;

Paper-II: History of India upto the Kushanas (C. 600 B.C.-C.319 A.D.)

- Sources: Literary Indian and Foreign sources Epigraphic Numismatic Archaeological sources Early State Formation
- The Mahajanapadas: Rise of Magadha from Bimbisara to Mahapadma Nanda, Persian Invasion, Alexander's Invasion, bases and features of monarchical states; Nature of Republics
- Mauryan Empire and its Decline, Magadhan Expansion in the time of Chandragupta Maurya - administration, society and economy in the Mauryan Period; Asoka and his Dhamma; Decline of the Mauryan Empire.
- Political Fragmentation C. 200 BC - AD 300 Early History of Sungas and Satavahanas Achievements of Pushyamitra Sunga and Gautamiputra Satkarni Saka-Satavahana Struggle, Decline of Satavahana dynasty
- Foreign Invasions and Dynasties: Indo-Greeks, Sakas, Pahlavas, and Kushanas : Kaniska -I : date and achievements

Outline of Ancient World Civilizations

Earliest Civilizations-I Egyptian Civilization: Political development under the Pharaohs; Egyptian Religion, Art and Intellectual Achievements

Earliest Civilizations-II:

Mesopotamian Civilizations: Salient features Sumerian Civilization Babylonian Civilization

- Assyrian Civilization Chaldean Civilization
- Greek Civilization Homeric Age
- Periclean Age : Contribution of Pericles
- Salient features of Hellenic and Hellenistic Civilizations Roman Civilization



- Julius Caesar and Augustus - Their contributions Roman Culture : Law, Art, Literature,
- Religion and Science; Roman Legacy
- Development of Christianity under Roman Empire.
- Ancient Palestine, Iran and China:
- Achaemenid Empire; Zarathustra and his reforms
- Parthian Civilization, Sassanian Civilization

Chou and Chin Periods: Cultural Achievements Confucius & Lao-Tzu History of Ancient India (C 319 AD to 1200 AD) Gupta Dynasty

Gupta Rulers their achievements: Chandragupta-I, Samudragupta, Chandragupta-II, Kumargupta I, Skandagupta and the Huna invasion , Decline of the Guptas, Vakataka-Gupta Relation, Huna invasion, Maukharis, Later Guptas

Harsha Career and achievements, relation with contemporary rulers, (Harsha's relationship with Pulakesin -II), visit of Hiuen Tsang

Gurjara-Pratihara, Pala, Rastrakuta; Political History of Gurjara Pratihara, Pala and Rastrakuta, Tripartite struggle, Cultural Achievements

Pallava Dynasty; Political and Cultural Achievements of Pallavas Chalukya Dynasty; Political and Cultural Achievements of Chalukyas of Vatapi, Vengi and' Kalyani Chola Dynasty Political History, Administration, relations with contemporary powers, Cultural achievements.

Indian Culture

Foundation of Indian Culture; Sources of Study; Definition and Characteristics; Harappan Civilization; Vedic Culture;

Main Features of Ancient Indian Society; Varnasrama System; Ancient Indian Education System, Taxila, Nalanda and Vikramashila; Position of Women; Guilds and their roles, Ancient Indian Religions; Saivism; Vaisnavism; Jainism; Buddhism;

Socio-Spiritual Streams; Sankaracharya; Bhakti Movement; Interaction between Islam and Indian Society with special reference to impact on Indian society Social and Religious Movements in Nineteenth Century India.

Concepts and Currents in History

Nature and characteristics of history, objectivity and subjectivity in history, causation in history, history is science or art.

Introduction to approaches of history - Oriental, (Colonial), Nationalist, Marxist

Philosophy of history with special reference to Hegel, Ranke, Karl Marx, Spengler, Toyanbee Nationalism : Germany, Italy, India, Imperialism and colonialism : World War-II and Revolutions - Russian and Chinese.



Ancient Indian Art and Architecture

Beginnings of Indian Art; Characteristic Features of Ancient Indian Art; Pre-historic Art; Harappan Art & Architectur

Mauryan, Sunga and Kusana Art; Asokan Pillars, Capital Figures, Folk Art; Stupa: Bharhut, Sanchi, Amrawati; Rock-cut Cave Archilctecture (Chaitya/Vihara)-Karle, Bhaja; Kusana Art: Evolution of Buddha Images Mathura Style Gandhara Style;

Gupta Art: Essential features; Beginning of temple Architecture-Bhitargaon temple; Deogarh temple; Ancient Indian Paintings with special reference to Ajanta Temple architectural styles: Nagara, Dravid, Besara

Art & Architecture under; Chalukyas : Aihole, Pattadakal; Chandela: Khajuraho temples; Orissan Temples : Lingaraja and Konark

Art & Architecture under; Rashtrakutas: Kailash Temple of Elora; Pallavas: Rathas of

Mahabalipuram; Cholas : Brihadishwara Temple of Tanjavur.



ECONOMICS (02)

Measures of Dispersion-Range, Quartile/Percentile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation, Lorenz Curve, Measures of skewness and Kurtosis.

Correlation: Linear Rank, Index Numbers: Nature, Construction, Limitation, Importance, Construction of Index Numbers: Simple, Weighted and Price Relative Methods.

Macro Economics:

National Income: its Measurement and Limitations, Nature of National Income Accounts in Closed and Open Economy, Uses of National Income Analysis, Social Accounting, Environmental Accounting.

Theory of Employment, Say's Law of Market, Classical Theory, Keynesian Critique of Classical Theory, Simple Keynesian Theory of Employment and Income Determination, Investment function. Keynesian Consumption Function, Concept of Investment Multiplier.

Nature and Causes of Trade Cycles, Theories of Trade Cycle: Hawtrey, Hayek,

Schumpeter. Inflation: types, causes and impact, Inflation Employment Tradeoff: Phillips Curve, Macro Theory of Distribution: Ricardo, Marx and Kaldor. Theories of Growth: Harrod and Domar Growth Models. Population and Development, Model of H. Leibenstein, the Low Level Equilibrium Trap: Nelson;

Development and Planning:

Development: Meaning, Measurements and Indicators of Development. PQLI, HDI, GDI, GII, Causes of Under-development. Circular Causation: Myrdal and Nurkse, Over-Population. Technological Backwardness, Environment and Development.

Selected Theoretical Prescriptions of Development: Rostow's Stages of Growth, Problem of Choice of Technique. Models of Development: Balanced vs Unbalanced Growth, Hirschman, Rosenstein Rodan, Two Gap Theory.

Measures for Development, Augmentation of Savings, Investment Strategy, Capital Accumulation, Improvement in Technology and Industrialisation, Surplus Labour as a Source of Capital Formation-Lewis and Nurkse, Choice of Technique, Human Capital and Economic Development. Sustainable Development: Meaning and historical Evolution.

Money and Public Finance:

The Quantity Theory of Money: Fisher and Cambridge Approaches. Keynes' Fundamental Equations. An Elementary Treatment of Saving and Investment Approach. Concepts and Components of Money Supply.

Theory of Commercial Banking, Theory of Credit Creation, Credit Multiplier. Theory of Central Banking, Types of Banks- Development, Cooperative, Universal etc. Techniques of Credit Control, The Reserve Bank of India, Control of Commercial Banks & Control of Credit.



Public Finance and Private Finance: Concepts and Problems, Public and Private Goods, Principle of Maximum Social Advantage. Public Expenditure: Nature and Effect. Federal Finance concept, Federal Finance in India, Division of Resources, Finance Commission: Role and objectives.

Taxation: Progressive, Regressive & Proportionate. Direct and Indirect Taxes. Principle of Taxation: Ability to Pay. Least Aggregate Sacrifice, Incidence, Impact and Shifting of Taxation in Perfect Competition and Monopoly.

Economic Analysis:

The Theory of Imperfect Competition, Duopoly, Oligopoly, Collusive and Non-collusive Oligopoly, Cournot, Bertrand, Edgeworth, Stackleberg, Chamberlin's Small Group Oligopoly Model, The Kinded Demand Curve, Cartels: Joint Profit Maximization and Market Sharing Cartels.

Monopolistic Competition Models, The Criticism of Marginalist Approach to the Theory of the Firm, Welfare Economics: The Criteria of Social Welfare, The National Income Criteria, The Hedonist; The Cardinal Approach to Social Welfare, Pareto Optimality, Kaldor-Hicks Compensation Principle; Bergson's Social Welfare Function.

International Economics:

Basis of International Trade. Theories of International Trade: Adam Smith, Ricardo. J.S. Mill's Theory of Reciprocal Demand. Marshall-Edgeworth Offer Curve, Haberler's Opportunity Cost Theory; Heckscher's Critique of Classical Theory.

Terms of Trade and Gains from Trade: Kinds of Terms of Trade, Factors Influencing Terms of Trade, Prebisch Singer Model, Relation between Terms of Trade and Gains from Trade. Immiserizing Growth Theory. Balance of Payments: Meaning, Definition, and Illustration: Disequilibrium in BOP

Exchange Rates: Purchasing Power Parity Theory, Balance of Payments Theory, Fixed and Flexible Exchange Rates, Spot and Forward. Free Trade and Protection, Exchange Control Infant Industry Argument, Instruments of protection: Tariff, Quota and Devaluation, Exchange Control. Measures for correction in BOP.

India's Economic Policy:

General Objectives of Economic Policy in Developing Countries.

Unemployment and Poverty: A General Overview & Policies

Population Policy : National Population Policy and Population Policy of Uttar Pradesh. Environmental Problems & National Environment Policy Industrial Policy : Role and Objectives Industrial Policy of India

Private and Public Sector Competition Act

Micro, Small and Medium Enterprises Policies Energy Sector: Problems and Energy Policy Agricultural Policy in India: Objectives and Overview Community Development Project and Panchayati Raj Rural Development Programme Agricultural Price Policy Food Policy and The Public Distribution System.



EDUCATION (03)

1. **Principles of Education:** Meaning and scope of education; Aims of education; Approaches to education; Agencies of education; Curriculum; Educational Planning.
2. **Problems of Indian Education:** Primary education, secondary education, higher education, adult education; National Policy on Education; Language Controversy.
3. **Educational Philosophy & Sociology:** Nature, scope and need of philosophy of education; Naturalism, Idealism, Pragmatism, Realism, Existentialism; Educational Sociology; Culture and education; Social Satisfaction; Social Mobility' Social Changes; Futurology.
4. **Educational Psychology:** Nature, scope and methods and educational psychology; Growth and development; Individual difference; Intelligence; Creativity; Personality; Learning; transfer of learning; Motivation; Group dynamics
5. Measurement, evaluation and action research in Education, Measure of Central Tendency and Standard Deviation.
6. **Indian and Western Education:** Sir Syed Ahmed Khan, Madan Mohan Malviya, Tagore, Vivekanand, Mahatama Gandhi, Radhakrishnana, Plato, Rousseau, Dewey, Russel.
7. Environmental education; Educational technology; Distance education; Value education; Peace education; Human rights education; Population education



ENGLISH LITERATURE (04)

Note : Candidates can attempt either English Literature or English Language question paper.

Multiple choice questions based on the following in the ratio of 25:25:50 from the syllabic of B.A. Part I, II & III respectively.

POETRY :

- William Shakespeare :
 - Sonnet 29: "When in disgrace with fortune and men's eyes"
 - Sonnet 138 "When my love swears that she is made of truth"
- John Donne: "Canonization"
- John Milton: Paradise Lost (Satan's Speech)
- John Dryden: Absalom and Achitophel, Lines 150-197. (False Achitophel).
- Alexander Pope: "Essay on Man" (Lines 1-18)
- William Blake: The Nurse's Song
- William Wordsworth: (a) "Tintern Abbey", (b) "The World is too much with us"
- Percy B. Shelley: (a) "Ode to the West Wind" (b) "A Lament"
- John Keats: (a) "Ode to a Nightingale", (b) "La Belle dame sans merci"
- Sarojini Naidu: The Flute Player of Brindaban
- Toru Dutt: "Baughmaree"
- Rabindra Nath Tagore: From Gitanjali : (a) 11th, Leave the Chanting, (b) 12th Fruit Gathering.
- Nissim Ezekiel: "Background", "Casually"
- Frost: "Stopping by the Woods"
- Walt Whitman: "O Captain, My Captain!"
- Alfred Lord Tennyson: (a) "Break, Break, Break" ; (b) "Ulysses"
- Robert Browning: (a) "My Last Duchess" ; (b) "Prospice"
- Matthew Arnold: (a) "Dover Beach"; (b) "Memorial Verses"
- Thomas Hardy: (a) "The Darkling Thrush"; (b) "The Voice"
- Gerard Manley Hopkins: (a) "Pied Beauty" (b) "Thou Art Indeed Just Lord . . ."
- W. B. Yeats: (a) "The Second Coming" ; (b) "Prayer for My Daughter"
- T. S. Eliot: "Love Song of Alfred J. Prufrock"
- W. H. Auden: "In Memory of W. B. Yeats"
- Adil Jussawala: "Sea Breeze, Bombay"
- Kamla Das: "An Introduction"
- Keki N. Daruwalla: "Ghagra in Spate"
- Derek Walcott (West Indian): "A Far Cry From Africa"
- Wole Soyinka (Nigerian): "Dragonfly at My Window Pane"
- Amiri Baraka (African-American): "Wise I"
- Judith Wright (Australian): "Bora Ring"
- A. D. Hope (Australia): "Australia"
- Michael Ondaatje (Sri Lanka/Canada): "Letters and Other Worlds"
- Eunice de Souza (India): "Autobiographical"
- Agha Shahid Ali (India): "Postcard from Kashmir" and "A Lost Memory of Delhi"
- A. K. Ramanujan (India) "Love Poem for a Wife I"
- Arun Kolatkar (India) "The Priest's Son" and "The Butterfly"
- Sylvia Plath (America): "Mirror" and "Daddy"
- Gwendolyn Brooks (America): "The Lovers of the Poor"
- Emily Dickinson (America): "After Great Pain, A Former Feeling Comes"
- Sherman Alexie (America): "On the Amtrak from Boston to New York City"
- Lorna Dee Cervantes (America): "Refugee Ship"
- Practical Criticism : There will be multiple choice questions (MCQs) based on unseen passages of prose and B. A. Part III: English Literature
- DRAMA :
George Bernard Shaw: *Arms and the Man*.
Mahesh Dattani: *Where There's a Will*
The following plays are prescribed:
William Shakespeare: *Macbeth*
William Shakespeare: *The Merchant of Venice*
T. S. Eliot: *Murder in the Cathedral*
Eugene O'Neill: *Desire Under the Elms*
Harold Pinter: *The Birthday Party*
Girish Karnad: *Hayavadana*



Prose and Fiction:

An Anthology of English Prose edited by the Dept. of English & MEL, University of Allahabad, Macmillan

The following **essays** are prescribed:

1. E. V. Lucas: "Tight Corners"
2. A. G. Gardiner: "In Defence of Ignorance"
3. Robert Lynd: "Student"
4. G. K. Chesterton: "On the Pleasure of No Longer Being Very Young"
5. George Orwell: "Reflections on Gandhi"
6. Aldous Huxley: "Pleasures"
7. J. B. Priestly: "On Doing Nothing"
8. Bertrand Russell: "The Road to Happiness"
9. Richard Wright: "Twelve Million Black Voices"
10. A. C. Benison: "The Art of the Essayist"
11. Francis Bacon: "Of Studies"
12. Proverbs, Chapter XV. (From The Bible)
13. Addison "Will Wimble"
14. Steele "The Spectator Club"
15. Goldsmith: "Beau Tibbs"
16. Johnson, "Letter to Chesterfield"
17. Lamb, "Dream Children"
18. Charlotte Perkins Gilman, "The Yellow Wallpaper"
19. Anita Desai: "A Farewell Party"
20. James Thurber "The Secret Life of Waltermity"
21. Katherine Mansfield "The Fly"
22. Jane Austen: Pride and Prejudice
23. Charles Dickens: David Copperfield
24. E. M. Forster: A Passage to India
25. Salman Rushdie : Haroun and the Sea of Stories

The following novel is prescribed : R. K. Narayan: The Guide, George Orwell: Animal Farm



ENGLISH LANGUAGE (05)

FOR B. A. ENGLISH LANGUAGE SYLLABUS: Please see University website www.allduniv.ac.in
([http://allduniv.ac.in/department/english and modern european languages](http://allduniv.ac.in/department/english%20and%20modern%20european%20languages))

(CLICK ENGLISH DEPARTMENT AND OPEN SYLLABUS COLUMN)



HINDI (06)

- हिंदी साहित्य का इतिहास
- भाषा विज्ञानं
- भारतीय काव्यशास्त्र
- पाश्चात्य काव्यशास्त्र
- काव्यभाषा
- आलोचना और साहित्य चिंतन की नई दिशाएं



MEDIEVAL AND MODERN HISTORY (07)

SECTION A : HISTORY OF THE MODERN WORLD (1453-1945) : A survey of the Political, Social Economic and Cultural history of the Modern World,

SECTION B : HISTORY OF MEDIEVAL INDIA (1206-1740)

SECTION C : HISTORY OF THE MODERN INDIA (1740-1950)



M. A. (MUSIC) / MPA [08 (A), (B) & (C)]

VOCAL – 08(A)

1. Detailed study of the following Ragas:

Puriya, Marwa, Jai-Jaiwanti, Suddha Kalyan, Deshkar, Kamod, Chayanat, Todi, Multani, Miyan-Malhar, Gound-Malhar, Adana, Darbari Kanhada, Basant, Paraj, Puriya Dhanashri, Shri, Hindol, Suddha Sarang, Madhuwanti.

2. Taal

Rupak, Teevra, Dadra, Kaharwa, Trital, Jhaptal Ektal, Dharmar, Ada Chartal, Pancham Sawari, Gaj jhampa, Chartala, Sooltal, Deepchandi, Jhoompa, Tilwada.

3. Details introduction of all the Ragas and Taalas mentioned above.
4. Comparative study of the Samprakit Ragas and Taalas.
5. Study of Alpatva and Bahutva, Tirobhav and their use and importance.
6. Laya and layakari- Different types of Layakaries, Dugun, Tigun Chaugun and Ada.
7. Different styles of Gayaki - Dhruvapad, Dhamar, Tappa, Thumari and Chaiti.
8. Brief study of different Gharanas of Vocal Music.
9. Life sketch and contribution of Eminent Musicians and Vocalist.
10. Vibration and frequency, pitch and its relation with vibrator, Amplitude, (Swaymbhu Swar); Consonance and Dissonance, Main Types of chords, Absorption, echo, Reverberation and Resonance of sound, Placement of Sudha and Vikrit Swars on different shruties according to Lochan, Ahobal, Pundarik, Ramamatya, Somnath.
11. Notation system of Bhatkhande and Vishnudigambar, various types of intervals of notes. Different Musical scales, comparative study of Notation System of Bhatkhande and Western Music, placement of notes on „Veena’ according to Pt. Srinivas, Comparative study of Northern Sothern Talapaddhaties.
12. Biographies of Bhatkhande, Vishnudigambar, Tansen, Ustad Vilayat Khan, Ameer Khusroo, Pt. Ravi Shankar, Pt. Ram Sahai, Ahmad Jan Thirakwa, Nana Sahib Pansse.
13. History of Music and classification of Ragas and Taals. History of Music of Ancient period up to 13th century. Short History of Music of Medieval and Modern periods. Comparison of Hindustani and Karnataka Music Systems. Gram, Moorchana its kind and their importance. Kind of Gamaka. Brief knowledge of Different Gharanas.



INSTRUMENTAL SITAR - 08(B)

- Detailed study of the following Ragas:**
Puriya, Marwa, Jai-Jaiwanti, Suddha Kalyan, Deshkar, Kamod, Chayanat, Todi, Multani, Miyan-Malhar, Gound-Malhar, Adana, Darbari Kanhada, Basant, Paraj, Puriya Dhanashri, Shri, Hindol, Suddha Sarang, Madhuwanti.
- Taalas**
Rupak, Teevra, Dadra, Kaharwa, Trital, Jhaptal Ektal, Dharmar, Ada Chartal, Pancham Sawari, Gaj jhampa, Chartala, Sooltal, Deepchandi, Jhoompa, Tilwada.
- Details introduction of all the Ragas and Taalas mentioned above.**
- Comparative study of the Samprakit Ragas and Taalas.**
- Study of Alpatva and Bahutva, Tirobhav-Avirbhav and their use and importance.**
- Laya and layakari- Different types of Layakaries, Dugun, Tigun Chaugun and Ada.**
- Different styles and Baj - Masetkhani, Razakhani, Firozkhani etc.**
- Brief study of different Gharanas of Sitar.**
- Life sketch and contribution of Eminent Musicians and Instrumentalists.**
- Vibration and frequency, pitch and its relation with vibrator, Amplitude, (Swaymbhu Swar); Consonance and Dissonance, Main Types of chords, Absorption, echo, Reverberation and Resonance of sound, Placement of Sudha and Vikrit Swars on different shruties according to Lochan, Ahobal, Pundarik, Ramamatya, Somnath.**
- Notation system of Bhatkhande and Vishnudigambar, various types of intervals of notes. Different Musical scales, comparative study of Notation System of Bhatkhande and Western Music, placement of notes on 'Veena' according to Pt. Srinivas, Comparative study of Northern Sothern Talapaddhaties.**
- Biographies of Bhatkhande, Vishnudigambar, Tansen, Ustad Vilayat Khan, Ameer Khusroo, Pt. Ravi Shankar, Pt. Nikhil Banerjee.**
- History of Music and classification of Ragas and Taals. History of Music of Ancient period up to 13th century. Short History of Music of Medieval and Modern periods. Comparison of Hindustani and Karnataka Music Systems. Gram, Moorchana its kind and their importance. Kind of Gamaka. Brief knowledge of Different Gharanas.**



INSTRUMENTAL TABLA - 08(C)

1. Detailed study of the following Taalas : Trital, Jhaptal, Rupak, Teevra, Sooltal, Ektal, Chartal Basant, Pancham Swari, Gaj Jhampa, Dhamar, Laxmi, Rudra, Shikhar, Brahma, Kurnbha, ganesh, Matt, Dadra and Kaharwa, Jat Taal, Deepchandi Taal.
2. Kayada, Palta, Peshkar, Rela, 'Laggi-Ladi', Paran, different types of Chakkardar, Tihai, and paran, Tripalli, Choupalli, Nauhakka, Jhoolna ke Bol, Gat- Farad, Mukhda, Mohra.
3. Ten Varnas of Tabla.
4. Study of Sam Matrik and Samprakrit Taalas.
5. Different Gharanas of Tabla playing with their style and Baj.
6. Life sketch and contribution of Eminent Musicians and Musicologist.
7. Laya-Layakari, different kinds of Layakaries, Dugun, Tigun, Chaugun, Aad, Kuada, Biyad etc.
8. Life sketch and style of playing leading Tabla Artists, Padam Bhushan Pt. Samta Prasad, Padam Vibhushan Pt. Kishan Maharaj .
9. Vibration and frequency, pitch and its relation with vibrator, Amplitude, (Swaymbhu Swear); Consonance and Dissonance, Main Types of chords, Absorption, echo, Reverberation and Resonance of sound, Placement of Sudha and Vikrit Swars on different shruties according to Lochan, Ahobal, Pundarik, Ramamatya, Somnath.
10. Notation system of Bhatkhande and Vishnudigambar, various types of intervals of notes. Different Musical scales, comparative study of Notation System of Bhatkhande and Western Music, placement of notes on 'Veena' according to Pt. Srinivas, Comparative study of Northern Sothern Talapaddhaties.
11. Biographies of Bhatkhande, Vishnudigambar, Tansen, Ameer Khusroo, Pt. Ram Sahai, Ahmad Jan Thirakwa, Nana Sahib Panse.
12. History of Music and classification of Ragas and Taals. History of Music of Ancient period up to 13th century. Short History of Music of Medieval and Modern periods. Comparison of Hindustani and Karnataka Music Systems. Gram, Moorchana its kind and their importance. Kinds of Yati. Brief knowledge of Different Gharanas.
13. Gharana of Tabla Tabla Aur Pakhawaj Ka Tulnatmak Adhyayan. Classification of Instruments.
14. Taal Ka Manovaijyanik Prabhav.



M.A. (PAINTING) (09)

M.A. Painting:

Theory : (conducted by the University)

Syllabus : Aesthetics & Art Appreciation (Indian and Western)

History of Indian Art (Pre-history to Modern)

History of Western Art (Pre-history to Modern)

Folk, Tribal and current trends in Art Scenario.

Practical : (conducted by the Department)

For admission in M.A. in Painting candidate has to appear in Practical Drawing Test of 100 marks. Time: 120 minutes of 100 marks in any medium.

(The candidates are advised to contact the Head, Visual Arts for Practical Test)



PHILOSOPHY (10)

1. Ethics
2. Indian Philosophy
3. Western Philosophy
4. Logic
5. Theory of Knowledge
6. Philosophy of Religion
7. Socio-Political Philosophy



POLITICAL SCIENCE (11)

POLITICAL THEORY :

Definition, Nature and Scope of Pol. Science, Nomenclature relation with other social sciences, Different approaches idealistic, Individualistic, Liberal, Social Welfare, Contemporary Libertarian Concept, Gandhian Concept and Marxian view of state, Sovereignty, Nation and Nationalism , Challenges before nation-state, Globalisation and emergence of civil society, Concept of liberty, equality, law, rights, justice, punishment and citizenship, evolutionary socialism, Marxism, Fascism, Democracy and Communitarianism.

INDIAN GOVERNMENT AND POLITICS:

The constituent assembly, Preamble, Main features of Indian Constitution, Procedure to amend the Constitution, Federalism, Fundamental Rights, Directive Principles of State Policy, Fundamental Duties.

President, Prime Minister and Council of Ministers, Parliament, Judiciary, Judicial, Review and Activism, Governor, Chief Minister, Council of Ministers, State Legislature, Panchayati Raj and Urban Local Bodies, Party System in India.

WESTERN POLITICAL THOUGHT:

Features of Ancient Greek Political Thought, Plato, Aristotle, Aquinas, Machiavelli, Bodin, Hobbes, Locke and Rousseau, Bentham, Mill, Green, Hegel, Marx, Lenin, Mao.

COMPARATIVE GOVERNMENT AND POLITICS:

Meaning, approaches, nature and scope of comparative government and politics. Constitutionalism, Rule of Law, Legislature Executive and Judiciary, Organisation of Government-Unitary, Federal, Parliamentary and Presidential Democracy, Democracy Dictatorship, Local Self Government, Political Culture and Socialization, Political Parties, Pressure Groups, Electoral Process, Public opinion and Bureaucracy.

INDIAN POLITICAL THINKERS:

Features of Ancient Indian Political Thought, Political Ideas of Manu, Kautilya, Features of Jain and Budhist Political Thought, Political Ideas of Mahabharat, Indian Renaissance and Political Ideas of Raja Ram Mohan Roy, Dayanand and Vivekanand, Political Ideas of Tilak, Arvindo Ghosh, M.N. Roy and Jai Prakash, Jawahar Lal Nehru, Mahatama Gandhi and B.R. Ambedkar.

INTERNATIONAL RELATIONS:

The study of International Relations, Role of State and Non-State Actors, Cold War, Feature of present world order, Globalisation and impact on world politics, Problem of Third World



Security, NAM, North-South Dialogues, ASEAN and SAARC, International Terrorism, Nuclear Proliferation, Disarmament and Arms Control, Collective Security, Indian Foreign Policy, Indo-US Relations.

INDIAN ADMINISTRATION:

Meaning, scope and significance of Public Administration, NPA and NPM Organisation, Ecology of Indian Administration, Structure of organisation (Central and Cabinet Secretariats, P.M.O.), Centre-State Relations, Public sector undertakings, Parliamentary Control over financial Administration, Growth of civil services in India, D.M. and O&M, 73rd - 74th Constitutional amendment Acts, welfare administration for- S.C., S.T. and Women, Generalist- Specialist, Controversy, Problem of corruption, Lokpal and Lok Ayukta, Minister-Civil Servant relationship.

Note: For details please see the syllabus of U.G. Pol. Science University of Allahabad.



SANSKRIT (12)

Group - A

Group – A

1. अभिज्ञान शाकुंतलम् अङ्क 1 से 4 तक
2. पूर्वमेघ 21 श्लोकों तक
3. किरातर्जुनीयम् - प्रथम सर्ग : श्लोक 1 से 35 तक
4. कादंबरी कथामुखम् प्रभातवर्णनपर्यंत
5. ऋग्वेद के निम्नलिखित सूक्त -
 - (i) विश्वदेवासूक्तम्
 - (ii) विष्णुसूक्तम्
 - (iii) इन्द्रसूक्तम्
 - (iv) प्रजापतिसूक्तम्
 - (v) पुरुषसूक्तम्
 - (vi) वाक् सूक्तम्
 - (vii) शुक्लयजुर्वेद से शिव संकल्पसूक्तम्
6. लघुसिद्धान्त कौमुदी संज्ञा और संधि प्रकरण
7. नीतिशतक - आरंभ से 30 श्लोक तक

Group – B

1. साहित्य दर्पण (केवल पहला और दूसरा परिच्छेद)
2. उत्तररामचरितम् - तीसरे अङ्क तक
3. तर्कसंग्रह
4. श्रीमद्भगवद्गीता (केवल दूसरा, तीसरा और नौवाँ अध्याय)
5. मध्यसिद्धान्तकौमुदी का कारक प्रकरण (केवल व्यावहारिक ज्ञान)



SOCIOLOGY (13)

EMERGENCE OF SOCIOLOGY AND PIONEER THINKERS: Emergence of Sociology (Definition, Nature, Scope and Subject Matter of Sociology) and its Relationship with other Social Sciences; Works of Comte (Positivism), Spencer (Social Darwinism), Durkheim (Social Facts, Solidarity, and Suicide), Weber (Social Action, Authority, Idea, Type, Protestant Ethics and the Spirit of Capitalism), Marx (Materialistic Conception of History, Class Struggle, Alienation), Pareto (Circulation of Elites), Parsons (Social Action and AGIL) and Merton (Functional Analysis).

BASIC CONCEPT: Society, community, Culture, Civilization; Socialization - Agencies and Theories; Social Structure and Function; Institution and Association; Social Group and Its Types; Customs, Norms, Values, Sanctions and Laws; Status, Role and its Types.

SOCIOLOGICAL PERSPECTIVES: Evolutionary, Structural, Functional, Conflict and Interactional.

INSTITUTIONS : Kinship and Its Types, Forms and Usages; Family and Its type; Marriage and Its Types; Economy and Its Forms-Urban, Rural and Tribal Economy (Primitive communism, Concept of Property and Ceremonial Exchange among Tribes- Potlatch and Kula Ring, Division of labour, Jajmani Relations); Religion - Theories and Forms of Religion, Magic, and Religion and Science; Political - Elites and Leaders, Political Parties, Caste Panchayat and Panchayati Raj Institutions (PRIs); Education as a Social System.

SOCIO-CULTURAL PROCESS AND CHANGES: Cultural lag, Assimilation, Acculturation, Cooperation, Competition, Conflict; Universalization and Parochialization, Sanskritization, Westernization, Modernization and Secularization; Meaning of Social Changes and Its Types (progress, Development, Growth, Evolution and Revolution); Theories and Factors of (Demographic, Biological, Economic, Technological and Cultural) of Social Change; Approaches to Development.

STRATIFICATION, MOBILITY AND SOCIAL MOVEMENT: Meaning of Stratification - Its Forms and Theories (Functional, Conflict, Weberian); Social Mobility and Its Type; Meaning and Theories of Caste, Caste as a Unit and caste as a System, Dominant Caste, Changing Dimension of Caste and Class; Meaning of Social Movement and its types.

SOCIAL RESEARCH: Objectivity and Subjectivity in Social Sciences, Positivism and Empiricism in Sociology, Sociological, Explanations, Types of research, Steps in Social Research; Research Designs (Exploratory, Descriptive and experimental); Methodology, Method & Techniques: Ethnography, Observation, Case study, Content Analysis, Survey, Sampling, Questionnaire, Schedule and Interview; Data Analysis - Measures of central tendency, Correlation and Chi-Square.



UNDERSTANDING INDIAN SOCIETY AND VARIOUS SOCIAL ISSUES : Eminent, Indian Thinkers on Indian Social System; Unity in Diversity - Language, Religion, Caste and Cultural Pattern; Varnasharama System, Purushartha, Joti and Varma; Issues on Villages, Towns and Cities; tribes, Dalits, Women and Minorities, Racial and Physical Distribution of Tribes in India; tribe-Caste Continuum; Rural-Urban Continuum; Social Problems and Their remedies - Religious, Ethnic and Regional, OBC, SC, ST, Women and Minorities, Dowry, Domestic Violence, Intra and Inter-Generational Relations, Communalism, Terrorism and Corruption; Social Disorganization - crime and Delinquency, Theories of Crime, White Collar Crime, Theories and Types of Punishment; Nation- building and Ethnic Identities, Development induced Displacement and Environmental Issues.



URDU (14)

Syllabus of Urdu subject (Graduation level course) of University of Allahabad



BOTANY (15)

Fungi; Lichens; Bacteria and Plant Viruses; Algae; Bryophyte; Pteridophyta; Gymnospermophyta; Taxonomy; Morphology & Anatomy; Life History; Plant Physiology; Plant Ecology; Cytology; Genetics; Molecular Biology; Evolution; Microbiology And Applied Microbiology; Genetic Engineering, Plant Pathology; Economic Botany; Applied Plant Anatomy; Plant Breeding; Marine Biology & Limnology; Palaeobotany and Palynology; Plant Diversification; Morphogenesis and Tissue Culture.



CHEMISTRY (16)

A (PHYSICAL CHEMISTRY)

Thermodynamics, Chemical Kinetics, and Catalysis, Chain Reactions and Photochemistry, Electro-Chemistry, Atomic Structure, Gasses State, Surface Phenomena.

B (ORGANIC CHEMISTRY)

Bonding in Carbon Compounds, Aromaticity and Huckel's rule, Aliphatic and Aromatic

Aldehydes and Ketones (i) Optical Isomerism (ii) Geometrical Isomerism, Active Methylene Compounds, Spectroscopy U.V. Visible, IR, NMR, Cycloparaffins, Carbohydrates, Diazonium Compounds, Synthetic Polymers, Synthetic applications of Grignard reagents.

C (INORGANIC CHEMISTRY)

Atomic Structures and Periodic Properties, Chemical Bonding and Molecular Structure, Co-ordination Chemistry, Chemistry of Representative Elements, Transition metals including Lanthanides, Extractive Metallurgy, Environmental Pollution, Metal Ions in Biological Systems, Preparation, Properties and Structures, Inorganic Analysis.



COMPUTER SCIENCE

PGAT 2018 Syllabus (M. Sc. Computer Science Course)

1. BASIC ELECTRONICS :

Boolean Algebra: Decimal, Binary, Octal and Hexadecimal Numbers and their interconversion, Boolean Expressions, Truth table representation, SOP and POS forms, Theorems of Boolean Algebra and their use in simplification of Boolean Expressions, Karnaugh map method and its use in simplification of logic expressions.

Logic Gates and Logic Families: Basic logic gates, Elementary idea of commonly used logic families, Working of Standard TTL logic gates, , Implementing Logic circuit using Basic/Universal logic gates.

Combinational Circuits and their Implementation: Adder, Subtractor, Parity Generator, Encoder, Decoder, Multiplexer and De-multiplexer Circuits, Combinational circuit design using multiplexer.

Sequential Circuits and their Implementation: Characteristics & Excitation table of RS,JK, T and D Flip flop, Clocked and Edge triggered Flip flops; Ripple counters and Synchronous counters; Binary, BCD and modulo counters, Shift Registers.

2. COMPUTER FUNDAMENTALS :

Generation of Computers: Functional Block Diagram of a Computer; Types of Computer, Hardware and Software, Components of a system: memory, CPU, I/O, Basic I/O methods, Generations of Computer, Generation of Programming languages, Language Translators - Compiler, Interpreter & Assembler, Hardware and Software, Application vs System Software, Operating System and its functions. Single user, multi-user, time-shared system.

Computer Memory: Concept of sequential and random storage, RAM, ROM, EPROM, Auxiliary storage devices, Magnetic and optical discs. Cache memory, virtual memory.

I/O Devices and Interfacing: Serial and parallel communication, Interfacing, Types of buses, I/O devices- keyboard, mouse, light pen, touch screen, VDU, LCD, dot matrix, laser and ink jet printers, plotters.

3. COMPUTER ARCHITECTURE AND ORGANIZATION :

Data Representation, Signed numbers, fixed and floating point numbers, binary number addition, subtraction, multiplication and division, 1s and 2s complement method.

Basic Computer Organization: CPU, Registers, ALU, System Buses, Memory organization and interleaving, memory hierarchy, Memory mapped and standard I/O, Programmed I/O, Interrupt driven I/O and DMA.

Microprocessor Architecture: 8085 microprocessor architecture, pin diagram, Interrupts, Instructions, Addressing modes.



4. PROGRAMMING IN C :

Flowchart representation, algorithm, Stages in Program development; Low, middle and high level languages; Languages translators; Syntax and logical errors.

Features of C Language: Variables, Data types, Operator, storage classes, Expressions, Library functions, C pre-processor, Control flow, arrays; structures; I/O operations, functions, macros, files and pointers.

5. DATA STRUCTURE :

Data structures, Representation and Implementation, Complexity calculation of algorithms, Linearity and Non-linearity of data structures.

Linear Data Structures : Arrays, Ordered lists and their representations, List operations-Insertion, Deletion, Traversal; Stacks, Queues, Priority Queues, Linked lists, Doubly linked lists, Sparse matrix, representation

Non-Linear data Structure: Binary Trees and their representation, Binary Tree traversals, Threaded Binary trees, Height balancing and AVL tree, union and find algorithms, Decision tree, Graphs and their representations, Graph search, Graph traversal, Connected Components and spanning trees, Shortest path.

Searching and Sorting: Sequential search Binary search, Hashing, Chaining and symbol tables, Collision processing, Indexed search techniques, Bubble, Insertion, Quick, Radix and Heap Sort

6. COMPUTER NETWORKS :

Channel capacity, Baud & bit rate; Maximum data rate of a channel; MUX:TDM, FDM; Synchronous & asynchronous transmission; Data Transmission modes

The electrical Interface: Attenuation & distortion sources, Signal types, Signal propagation delay, Transmission media-Wired & wireless, comparison of different transmission media, Concepts of modulation- AM, FM, PM, Digital signal modulation vs Analog signal modulation, Baseband & Broadband transmission.

Data Networks: Circuit switching, Message Switching & Packet switching; Virtual circuit vs circuit switching; Network topology; Linear, Circular, Star, Tree & Graph, Ethernet, Token ring, Token bus & FDDI, ATM, Role of ATM in inter-networks; Network Protocol basics; Error control & link management; data link control protocols bit oriented & character oriented protocols; OSI model TCP/IP.

Error detection & correction: Asynchronous data error detection; Data correction using parity, Error detection for synchronous transmission; Checksum error detection; Hamming code, CRC.

Network components: Switches, Hubs, Concentrators, Modem, Network interface card, Repeaters, Bridges, Routes and Gateways.



PHYSICS (18)

Thermodynamic equilibrium, Zeroth law, first law, second law, reversible process, Carnot's theorem, entropy and disorder; thermodynamic relations and applications. Clausius-Clayperon equation, phase transitions of first and second order.

Radiation as e.m. wave, Kirchoffs law. black body radiation, pressure and energy density, Stefan-Boltzmann law, Planck's law and its limiting cases. Phase space, ensembles, equilibrium and fluctuation, entropy and probability, entropy of a perfect gas, microcanonical, canonical and grand canonical ensembles, partition function, Boltzmann distribution, B.E. and FD. statistics, simple applications.

Gauss' Law, Biot-Savart law, Vector Potential, Faraday law. Amperes circuital law, generalization of Ampere's law by Maxwell, Maxwell's equations and its solution in free space and simple dielectrics. Poynting theorem, plane wave propagation in metals and plasmas.

Interference Diffraction Special theory of Relativity Uncertainty principle

Linear Harmonic oscillator, Angular momentum, commutation relations, Ladder operators eigenvalues of L , and L_z , Parity operator Hydrogen atom problem, Pauli spin matrices.

Time-independent non-degenerate perturbation theory and its simple applications, Identical particles, symmetric and anti-symmetric wave function.

Crystalline state of solids, unit cell, bravais lattice, reciprocal lattice, interatomic forces, vibrations of monoatomic and diatomic chains, phonons.

Free electron theory of metals, electrons in periodic potential, Bloch waves, semiconductors, p-n, junction, diode, rectification, ripple factor, Transistor action and

characteristics, C.E. amplifiers and its frequency response. Logic gates, Boolean algebra, Combination logic, Integrated Circuits. Solar Cell, Amplitude modulation.

Laser: Stimulated and spontaneous emission. Einstein's coefficients, relative contribution of stimulated and spontaneous emissions, population inversion, Laser emission, characteristic of Laser light (including temporal), Amplification in an inverted medium, threshold condition for lasing.

Holography: Basic principles of Holography, Recording and Viewing of a hologram. Thick Hologram, Multiplex hologram, White light reflection holograms.

Optical Instruments: Introduction of multiple beam interferometry, Fabry-perot interferometer and etalon (resolving power and determination of wavelengths), Resolving power of Lumer Gehreck plate, Grating and prism spectrograph for visible, IR and UV regions.

Atomic Physics: Bohr-Sommerfield Model (Historical developments), Bohr model and the spectra of hydrogenic atoms, Critical resonance and the Ionisation potentials. Frank-Hertz experiment. Characteristic and continuous X-rays, Moseley's law, Bragg's law.



Space Quantization, Vector atom model and Quantum Numbers, Magnetic moment of the electrons and magneton, Larmor Precession, Electron Spin, Stern-Gerlach experiment, Qualitative concept of various quantum number of an electron, Pauli's exclusion principle and electronic configuration of atoms.

Magnetic Properties of Materials :

Diamagnetism, Larmor's theory and diamagnetic susceptibility. Paramagnetism, Langevin's theory and Curie-Weiss Law, Qualitative discussion of Ferromagnetism and antiferromagnetism.

Quantum Concepts:

Particle nature of radiation, Photoelectric effect and Compton effect. Wave nature of particles. De-Broglie Waves, Davisson-Germer experiment, Wave Packets, Phase velocity and group velocity, Heisenberg's Uncertainty Principle and applications, One dimensional Schrodinger's Wave Equation and concept of probabilities, amplitude, application to onedimensional potential step and barrier. Quantum Mechanical Tunneling.

Nuclear Physics:

Natural radioactivity, Laws of radioactive disintegration, radioactive series, Detection of radiation, GM Counter and Bubble Chamber, Scintillation Counter.

Kinematics of nuclear reactions, artificial nuclear transmutation, discovery of neutron, radioactive tracers, transuranic elements. Cyclotron Constitution of nucleus, Binding energy, liquid drop model and the semiempirical mass formula, Elementary theory of α -decay, β -decay and discovery of neutrino Magic numbers and the shell model, exchange forces in nuclei and Yukawa theory (qualitative), Fission and fusion, Nuclear reactors (qualitative), Thermonuclear energy. Classification of Elementary Particles, Leptons, mesons and baryons and their quantum numbers, Conservation Laws.



ZOOLOGY (19)

Nonchordates, Taxonomy and Evolution, Physiology and Biochemistry, Protochordates and Vertebrates.

Special Topics

Sphenodon as living fossil, Biting mechanism of poisonous snake; snake venom and antivenin. Flight adaptations of birds, Aquatic mammals.

Animal Distribution and Ecology, Genetics and Cell Biology, Molecular Biology and Genetic Engineering, Economic Zoology and Environmental Biology, Development Biology and Ethology.



ANTHROPOLOGY (20)

GENERAL ANTHROPOLOGY

Meaning and Scope of Anthropology: Branch of Anthropology, a) Social-Culture Anthropology, b) Physical/Biological Anthropology, c) Archaeological Anthropology, d) Linguistic Anthropology.

Relations of Anthropology with other disciplines: Life Sciences, Earth Sciences, Medical Sciences; Social Sciences and Humanities.

The Basic terms and Concepts in Anthropology: Culture, Society, Association, Institution, Culture change, Socialization, Mutation, Paleoanthropology, Geological time Scale, Glaciations and Pluviations, Pleistocene.

SOCIAL-CULTURE ANTHROPOLOGY

Definition and types of Marriage, Family, Kinship: Economic and Political Anthropology: Meaning and Scope. Religion and Magic: Definition and Meaning. The Basic of Indian Social System Indian Village

Major Concepts in Indian Anthropology: Dominant Caste, Sanskritisation, Westernization, Sacred Complex, Nature-Man-Spirit complex, Little and Great Tradition, tribe-caste continuum. Special Constitutional Provisions, Problems and welfare measures related to tribes.

Theories of Social-Cultural anthropology : Evolutionism, Diffusionism, Functionalism, Culture and Personality, Contributions of the following Anthropologists:

- a) Robert Redfield,
- b). Durkheim, c) L.P. Vidhyarthi, d) M.N. Srinivas. Fieldwork Tradition in Anthropology

Major tools of Research : Observation, Interview, Case Study, Life History, Survey Research, Schedule and Questionnaire, geological Method.

PHYSICAL ANTHROPOLOGY

Theory of Organic Evolution: Lamarckism, Neo-Lamarckism, Darwinism, Neo- Darwinism, Synthetic theory of Evolution.

Position of man in animal kingdom: distribution, classification and physical characters of Primate

Comparative Anatomy of Man and Ape Fossil evidences of emergence of man:

- (a) Dryopithecine complex



- (b) Australopithecine complex
- (c) Pithecanthropus, Sinanthropus
- (d) Neanderthal, Cro Magnon

Concept of Race : Criteria of Racial classification, Genetic basis of race, Racial classification of Indian Population (Guha's Classification).

Human Genetics : Basic Concept of Genetics, Mendelian Principles with reference to human. **Bio-Statistics-** Measures of Central Tendency: Mean, Median, Mode, and Standard Deviation.

ARCHAEOLOGICAL ANTHROPOLOGY

Concept: History, Pre-History, and Proto-history.

Methods of Dating : Relative and Absolute methods.

Tool making techniques and tool topology.

Paleolithic, Mesolithic and Neolithic Culture of Europe.

Indus Valley Civilization: Main features, Town planning, economy, Polity, religion, Art & Craft, and Causes of Decline.



DEFENCE & STRATEGIC STUDIES (21)

- Art of Warfare in Indian,
- Contemporary Study of War and Peace
- Indian Military History
- World Military History
- Strategic Thought
- National Security, Science, Technology
- National Security, Current Development related to India's Defence and Security



MATHEMATICS (22)

Geometry: Straight lines and planes, Spheres, Cones and cylinders, Central conicoids, Generating lines, Conics in polar coordinates.

Algebra: Sets, Relations and Maps, Groups, Cyclic groups, Normal subgroups and quotient groups, Lagrange's theorem, Symmetric and alternating groups, isomorphism theorems, Rings, Integral domains and Fields, Ideals and quotient rings, Polynomial rings, Linear and quadratic congruences, Legendre symbol, Arithmetic functions.

Analysis: Real number system, convergence of sequences and infinite series of real numbers, absolute and conditional convergence, Limits, continuity and differentiability of functions of one real variable, Mean value theorems and their applications, Riemann integrals, Convergence of improper integrals.

Limit, continuity, Partial and directional derivatives, Differentiability of functions of several real variables, Mean value theorems and Taylor's theorem for functions of several real variables, Jacobians, Inverse and Implicit function theorem, Convergence and uniform convergence of sequences and series of functions, Basic concepts in metric spaces, compactness in metric spaces, complex analytic functions.

Differential Equations: Differential Equations of first order and their applications, Equations of higher degree, Singular solutions, Linear differential equations of higher order, Variation of parameters, Linear systems of first order, Existence and uniqueness theorems for solutions of differential equations.

Vector Calculus: Scalar and Vector fields, Gradient, Divergence and Curl, Line integrals, Double integrals, Surface integrals and Volume integrals, Gauss', Stokes' and Green's theorems and their applications.

Linear Algebra: Vector spaces, Subspaces, Linear independence, Linear span, Bases and Dimension. Linear transformations and Matrices, Rank-Nullity Theorem, Systems of Linear Equations, Gauss elimination, Normal and Echelon form of a matrix, Determinant, Cramer's Rule, Eigenvalues and eigenvectors, Cayley-Hamilton Theorem, Diagonalization, Inner product spaces, Bilinear and quadratic Forms.

Mechanics: Virtual work, Catenary, Simple harmonic motion, Motion in a plane, Constrained Motion, Central orbits, Forces in three dimensions, Moments and products of inertia of rigid bodies, D'Alembert's principle.

Hydrodynamics: Kinematics of fluid motion, velocity potential, stream lines, Euler's equation of Motion, Fluid Motion in two dimensions: Complex potential, Sources, Sinks and Doublets and their image system with regard to a line and a circle.

Numerical Methods: Numerical techniques for roots of general equations, Interpolation, Numerical differentiation and integration, Numerical solution of first and second order ordinary differential equations, Matrix factorization and iterative methods for systems for linear equations, Estimation of eigenvalues and eigenvectors, Least square curve fitting.



GEOGRAPHY (23)

Lithosphere: Origin of the earth, Geological history of earth; Interior of the earth; Rocks; Endogenetic and Exogenetic Forces, Volcanic and Earthquakes; Drainage pattern; Origin of Continents, Mountain Building, Plate Tectonic Theory, cycle of erosion & Interruption; Mass movement of rock wastes; Landforms formed by running water, wind, coastal, glacier and peri-glacier.

Atmosphere: Structure and composition of the atmosphere; Insolation; Pressure belts and winds; Local winds; Origin of Monsoons; Humidity and rainfall; El Nino phenomena-Jet Stream, Tropical and temperate cyclones, Koeppen & Thonthwaite classification of world climates; Major climatics.

Hydrosphere: Continental shelf, continental slope, deep sea plains and ocean deeps; Bottom relief of Atlantic and Indian Oceans; salinity; tides; ocean currents; coral reefs. **Human Geography** : Nature, Scope, Development, Branches and Approaches of human geography; Man and Environment Relationship - Determinism, Neo-determinism, Possibilism, Neo-determinism & Human ecology of Mountains & Deserts and Probalism; Approaches - ecological, spatial, behavioural and welfare; Human adaptation, Races & Tribes; Types of farming; agricultural regions of the world; Production & distribution iron ore, coal, petroleum, Hydroelectricity, Iron and steel, Cotton textile and Chemical, fishing industry, Social groups and organization; Diffusion of Cultures; Cultural hearths; Major cultural realms,

Population Geography : Population - growth and demographic transition, distribution and density pattern; Structure and Composition of population; Migration of population in India World; Population policy in India. Over population, under population; optimum population; population -- resource regions; population problems in India; population planning and control

Settlement Geography: Rural settlements - types and patterns, size, spacing and morphology; distribution of rural settlements in Ganga plain; Urban settlements -- types and patterns, size, spacing and morphology; Classification of towns. Central place theory, Trends of urbanization in the world and in India; Problems of urbanization in India; Urban policy in India.

Regional Geography of India: Structure, relief and drainage; climate, origin of monsoon, droughts and floods, climatic classification by Koppen and Thornthwaite; soil types and distribution; Major minerals (iron ore, mica, Copper, manganese, bauxite and atomic minerals) - distribution, production and utilization; distribution and production of coal, mineral oil and hydel power; irrigation, agricultural regions, green and white revolution and agro-climatic regions. Industrial localization with reference to iron and steel, cotton textile, sugar, cement and chemical, and paper industries, Industrial regions; foreign trade.

Regional Geography of World: Concept of regions in geography; Types and Classification of regions, Criteria of delimitation and characteristics of natural, cultural, economic and political regions. **Asia** Structure; relief; drainage; climate; natural vegetation and soils; spatial



distribution of population; economic base; Regional studies of south, south -east, east and west Asia. **Europe:** Physical, economic and demographic characteristics; Regional studies of British Isles, Eastern, Western and Mediterranean realm. **North /South America and Australia:** Physical, economic and demographic set up; Regional studies of USA, Canada, Brazil and Australia.

History of Geographical Thought: Meaning and scope of geography; Changing philosophy, Approaches to the study of geography Contributions of Greek, Roman, Indian, Chinese, Arabs, Period of Dark Ages & Renaissance, Contributions of German, French, British, American and Russian, Dichotomies in geography, Fundamental concepts in physical, human, economic and settlement geography.

Practical: Statistical Techniques - Mean, Median Mode, Mean & Standard Deviation, CV, Correlation, Regression, Chi-square & Students' test, nearest neighbor, quadrat count, mean centre, standard distance, drainage & transport network. Projection: Conical Two standard, Bonnes', Polyconic, Cylindrical - Mercator & Equal Area, Zenithal - Equidistant Polar & Stereographic. Mapping - Choropleth, Isopleth, Proportional Circle, Dot method. Graphical Representation: Hythergraph, Climograph, Histogram Scatter graph, Bar graph. Surveying: Plane Table, Prismatic, Indian Clinometer & Telescopic Alidade.



PSYCHOLOGY (24)

- Section I : BASIC PSYCHOLOGY PROCESS
- Section II : PSYCHOLOGICAL STATISTICS
- Section III : PSYCHOPATHOLOGY
- Section IV : PSYCHOLOGY AND SOCIAL PROCESSES
- Section V : DEVELOPMENT PSYCHOLOGY
- Section VI : PERSONALITY RESEARCH AND MEASUREMENT
- Section VII A : CLINICAL PSYCHOLOGY IN SCHOOL SETTING

OR

- SECTION VII B : ORGANISATIONAL BEHAVIOUR



STATISTICS (25)

Probability Theory: Random experiments, Sample space, events, algebra of events, axiomatic definition of probability, probability spaces, relationship of axiomatic and classical probability, role of frequency ratios, properties of probability measure, subadditivity, Boole's inequality, probability of union of events, matching problem, repeated birthday problem, occupancy problem, statistics of physical particles, conditional probability and associated probability space, Bayes theorem, independence of events.

Random variables as functions, induced probability measure via inverse mapping, induced probability distribution, distribution functions, distribution functions and their properties, probability mass function (pmf) of discrete random variables, probability density function (pdf) of continuous random variables,

Random vector, marginal and conditional distributions, independence of random variables

Mathematical expectation, moments, factorial moments, moment generating function, probability generating function, Expectation of jointly distributed random variables, marginal and conditional expectation, correlation, Chebyshev's inequality, Markov's inequality, functions of random variables.

Bernoulli distribution, binomial distribution, Poisson distribution, derivation of Poisson distribution as a limiting case of binomial distribution, geometric distribution, negative binomial distribution, hypergeometric distribution, multinomial distribution, uniform distribution, normal distribution and its relationship with the binomial and Poisson distribution, Cauchy distribution, bivariate normal distribution and its marginal and conditional distributions.

Statistical Methods: Measures of central tendency, dispersion, moments, skewness and kurtosis. Simple linear regression, method of least squares, correlation coefficient, correlation ratio, intraclass correlation, rank correlation, fitting of some nonlinear curves. Multiple regression, multiple and partial correlation for three variables. Analysis of Categorical Data, consistency, independence and association of attributes, coefficient of contingency.

Statistical Inference: Random sample from a given pdf or pmf, Functions of random variables and their distributions Sufficiency, factorization theorem, consistency, Unbiasedness, Estimation method of maximum likelihood, method of moments. Statistical Tests of Hypothesis-Fundamental concepts including the power function, p values, Neyman and Pearson Lemma, most powerful (MP) and uniformly most powerful (UMP) tests, Applications of χ^2 , t, F and z distributions in tests of significance, Likelihood ratio test, Unbiased test, Neyman Pearson Lemma for randomized tests, Randomized test for binomial and Poisson distributions. Completeness and sufficiency, Rao-Blackwell theorem, Lehman Scheffe theorem, one parameter exponential family and its completeness, Cramer- Rao inequality, Best linear unbiased estimator.

Sampling Theory: Simple random sampling and Stratified sampling, Sample surveys versus complete enumeration, Non sampling errors, Simple random sampling with and without replacement, simple random sampling for attributes, Stratified random sampling, advantages of stratification, methods of allocation. Use of auxiliary information: Ratio,



regression and product method of estimation, Systematic sampling, Cluster sampling with equal clusters.

Vital Statistics: Crude, death rates, infant mortality rates, standardized death rate, complete and abridge life table - construction and uses, mortality rate and probability of dying, use of survival tables. Measurement of fertility - crude birth rate, general fertility rate, total fertility rate, gross reproduction rate, net reproduction rate, population growth and logistic model for population projection.

Design of Experiments : One-way ANOVA, two-way ANOVA with single observation per cell and equal number of observations per cell. Randomization, Replication, Local Control, Completely randomized design CRD), Randomized block design (RBD) , Latin square design (LSD), 22 and 23 factorial experiments.

Nonparametric Statistics : Order statistics, Distribution of maximum, minimum and r-th order statistic, Joint distribution of r-th and s-th order statistic, distribution of range, distribution free confidence intervals for quantiles and distribution free tolerance intervals, Sign test, Wilcoxon test, Median test, Run test.

Index number: Price relatives and quantity or volume relatives. Link and chain relatives, computation of index numbers, Laspeyre's, Paasche's, Marshal - Edgeworth's and Fisher's index numbers, chain base index number, consumer price-index numbers. Tests for index-numbers: Time and Factor reversal tests.

Time Series: Components of time series, additive and multiplicative models, methods of determination of trend, growth curves, analysis of seasonal component and seasonal indices.

Statistical Quality Control : Causes of variation in quality, control limits, charts for attributes, np chart, p-chart, c-chart, Charts for variables- X- and R charts.



M.Com. (MASTER OF COMMERCE) (26)

Statistics, Business Organisation and Management, Income Tax, Cost Accounting, Financial Accounting, Business Law, Company law, Business Finance, Computer & Business Communication, Auditing, Goods and Service Tax (GST), Marketing, Human Resource Management, Insurance, Banking, Business environment and Economics.



MASTER OF PHYSICAL EDUCATION (M.P.Ed.) (31)

1. Introduction, Foundation and Management of Physical Education

- 1.1 Aims and objectives of Education and Physical Education and Contribution of Physical Education.
- 1.2 Biological, Psychological and Sociological Principles and their Application in Physical Education.
- 1.3 Different Schools of Philosophy and their relevance to Physical Education.
- 1.4 Meaning, Phases, Nature and Importance of Management.
- 1.5 Location, Preparation, Layout and Maintenance of Play Fields Construction, care and Maintenance of Gymnasium and Swimming Pool.
- 1.6 Equipments in Physical Education Criteria of selection, procedure of purchase, care and maintenance of equipments.
- 1.7 Intramural and Extramural Programmes.
- 1.8 Budget for Physical Education- Budget making and accounting.

2. Health Education

- 2.1 Definition of Health and Description of its components.
- 2.2 Definition, Scope and Principles of Health Education.
- 2.3 Health Problems in India.
- 2.4 School Health Programme
- 2.5 Nutrition, Assessment of Nutrition, Classification of Food, Balance Diet.

3. Anatomy, Physiology and Physiology of Exercise

- 3.1 Essential properties of Living Matter.
- 3.2 Cell, Tissues, Organs and Systems- Structure and Function
- 3.3 Study of following systems and processes with a view to understand the effect of exercise on Different systems of the Body.
 - 3.3.1 Cardio- Vascular System
 - 3.3.2 Respiratory System
 - 3.3.3 Nervous System
 - 3.3.4 Metabolism and Temperature Regulation
 - 3.3.5 Sensory System

4. Educational Methods and Educational Technology

- 4.1 Teaching Technique in Education
- 4.2 Principles of Teaching, Commands and Class Management
- 4.3 Lesson Planning- Physical Education and Coaching Lessons
- 4.4 Tournaments- Knockout, League, Combination and Challenge types.
- 4.5 Audio- Visual aids- values, criteria for selection and suggestion for use.
- 4.6 Presentation Techniques in Physical Education.
- 4.7 Micro Teaching, Simulation Teaching.
- 4.8 Definition of Components of an Instruction System, Advantages of System approach.



5. Educational Psychology

- 5.1 Growth and Development, types of learning, principles of learning, Learning use.
- 5.2 Factors of learning and theories of learning.
- 5.3 Individual Differences
- 5.4 Personality (Meaning & Memory)
- 5.5 Memory & Types of Memory.

6. Kinesiology and Corrective Physical Education 6.1 Types of Joints & Muscles.

- 6.2 Major Terminologies of Fundamental Movements.
- 6.3 Location and Action of Major Muscles.
- 6.4 Motor Unit and all & Non- Law.
- 6.5 Reciprocal Innervation.
- 6.6 Equilibrium and Friction.
- 6.7 Prevention of Injuries.
- 6.8 Massage
- 6.9 Postural Deformities
- 6.10 Therapeutic Exercises
- 6.11 Rehabilitation of Sport Injuries.

7. Test & Measurements

- 7.1 Test, Measurements, Evaluation, Statistics, Their Meaning
- 7.2 Measures of Central Tendency, Measures of Variability.
- 7.3 Percentile and correlation
- 7.4 Criteria of Test Selection
- 7.5 Motor Fitness tests, Skill Tests of different Games & Sports

8. Sports Training

- 8.1 Meaning, Definition and Principles of Sports Training
- 8.2 Definitions, types and factors of training load.
- 8.3 Meaning and Classification of speed, strength and endurance.
- 8.4 Training method of speed, strength and endurance.
- 8.5 Definition and method of teaching training.
- 8.6 Meaning, types & importance of periodization.

9. General Knowledge/ Awareness with special reference to Major Games/Sports (AIU/ IOC listed); Reasoning etc.



MASS COMMUNICATION (32)

1. General awareness including constitutional matters, current affairs, public debates on matter of polity, economy, science & technology. Awareness of International Development and their impact of Indian society.
2. Exposure to issue and debates covered by print media, television news channels and radio. General understanding of Indian Art, Culture, National movements and Cinema.



M.A. THEATRE & FILM (33)

No prescribed syllabus. Questions are based on general awareness about film and theatre.



BIOCHEMISTRY (34)

General Chemistry: Properties of s, p, d, f block elements. Activity series. Acids, bases and buffers. Osmotic pressure. Thermodynamics. Colloidal state and membrane phenomenon. Solutions. Mechanisms of organic reactions. Properties of aliphatic and aromatic compounds. Stereochemistry. Concept of free radicals.

Bio-physical techniques: Basic Principles of Chromatography, electrophoresis, spectroscopy and their applications.

The Living system: Origin of life, Cell and cell organelles, General introduction to microbial and plant world, chordates and non-chordates. Environmental biology.

Biomolecules: Classification, Structure, and functions of Carbohydrates, Proteins, Lipids, Nucleic acids and Vitamins. Fundamental concepts of nutrition.

Enzymes: Classification, properties, kinetics and regulation of enzymes. Allosteric enzymes, isozymes and immobilization.

Genetics and Molecular Biology: Laws of inheritance, linkage, crossing over and chromosome mapping, Mutation, Cell cycle, Cell division. DNA as genetic material,

replication, transcription, translation and gene regulation. Genetic engineering. Use of virus and bacteria in gene cloning.

Metabolism and Clinical Biochemistry: Glycolysis, Krebs cycle, oxidative phosphorylation, gluconeogenesis, p-oxidation, transamination, urea cycle, in-bom errors and regulation of metabolism. Diagnostics markers of diabetes, lipid disorders, liver and kidney function. !

Human Physiology: Digestion, respiration, blood and immune system, excretion, reproductively physiology, muscle contraction, nerve transmission. Acid-base balance. Hormones.

Plant physiology: Photosynthesis, photorespiration, nitrogen fixation, senescence, plant harmones.



AGRICULTURAL BOTANY(35)

- Historical, symptomology, properties and nature of plant viruses, modes of transmission of plant viruses. General principle of control of viral diseases in plants. A knowledge of the common viral diseases of potato tobacco, Hibiscus, cucurbits, beans and banana. Historical, broad outlines of morphology, reproduction, nomenclature and classification of plant pathogenic bacteria. History of Mycology, Taxonomy and nomenclature of fungi. Origin and phylogeny of fungi. Different, systems of classification and their basis. Structure and life history of the chief representatives of fungi. History of plant pathology. Dissemination of diseases, modes of infection symptomology, physiology of parasitism, mechanism of disease resistance, fungicides and their action.
- Cell structure and function, cell wall, nucleus, mitochondria, golgi apparatus, chloroplasts and other cell organelles, their structure and function. Cell division : mitosis and meiosis. Polyploidy: Nature and classification of Polyploidy. Heridity and environment, laws of heredity; Linkage, crossing over and mapping of chromosomes. The nature of gene and factors affecting mutation. History of plant breeding, its present status and scope. Mode of reproduction in crop plants. Heterosis and its application.
- Regional soils of India in relation to crops and their production. Secondary effects on micro flora. Physical nature of soils and water relation of soils. Concept of water requirement of crops and the critical period of water requirement of plants and its significance in crop production.
- Formation of usar soils and their measurement. Control of alkalinity and salinity. Physiology of flowering, photoperiodism, verbalization and their impact on crop production. Seed formation, longevity and multiplication. Physiology and biochemistry of herbicides. Physiology of propagation. Physiology of fertilization, fruit growth and ripening. Mineral nutrition, uptake and translocation of solutes. Mutually beneficial and toxic influences of plants. Physiological role of some major and minor elements such as N, R K, Ca, Mg, B, Mo, Mn, Zn.
- A study of the botany of important weeds associated with the crop plants of U.P Methods of preventing introduction and spread of weeds. Principles and procedures of weed control Growth, inhibiting, and promoting chemicals and their composition. Soil microorganisms and their role in production. Principles, and practices of dry farming, special problems in dry farming mixed cropping and strip cropping in agriculture in India. Agronomic practices in relation to soil acidity and alkalinity.
- Soil nitrogen losses and its restoration, Phosphorous deficiency and soil fertility. Fixation of nutrients in soil. Soil potassium in relation to soil fertility and plants growth and development. Plant production problems and methods. C/N ratio as a function of growth and development. The problems of non-irrigated soils. Tillage and its influence on plant growth. Horticulture- importance and present position. Origin, history, breeding and production technology of important fruits such as Mango, Banana. Citrus, Guava. Papaya, Grape. Pineapple, Litchi, Pomegranate, Ber, Apple, Pear and Walnut with special reference to climate, soil, propagation, cultivars, nutrition, irrigation and other orchard management practices. History of gardening of India. Styles of gardening, their principles and practices with special reference to Mughal, Japanese and English gardens. Frequency distribution, mean, median and mode. Standard deviation. Test of significance : t, F and chi-square tests. Experimental design basic principles, completely randomized. Randomized block, Latin square and Split-plot designs and their analysis.



AGRICULTURAL CHEMISTRY AND SOIL SCIENCE(36)

Theory of acid and bases, pH and its determination, buffers, oxidation, reduction, catalytic reaction, colloids & their properties, Humus and clays.

Carbohydrates nomenclature, classification, proteins-classification, physical & chemical properties. Liquids classification and properties.

Soil texture & structure. Soil moisture & its movement. Soil chemistry : weathering of rocks & minerals, profile development. Soil forming processes, exchangeable properties of soil, organic matter-properties and its fractions. Reclamation of Soils. Quality of irrigation water. Soil fertility-macro & micro nutrients.

Manures & fertilizers-classification, mode of action & utilization. Uptake of nutrients.

Pesticides & residual toxicity.

Enzymes classification & their mechanism of action.

Metabolism of carbohydrates, lipids & proteins.

N-fixation, Phytohormones & vitamins.



AGRICULTURAL ZOOLOGY & ENTOMOLOGY(37)

1. General introduction to animal kingdom and various phyla with special reference to agricultural and economic importance. Agricultural importance of phytonematodes, snails, slugs, earthworms, crabs, birds, and mammals, their distribution, habit and life cycle.
2. Identification of poisonous snakes of India. Symptoms of snake bite and its antidotes. Life history and control of animal vectors of human diseases and important parasites of man and animals.
3. Local fishes of economic importance, planning and implementation of fish farming, knowledge of crustacean and molluscan fisheries. Rat damage to crops and plantations. Methods of its control.
4. Classification of Phylum Arthropoda upto classes: general characters and examples. Position of insects in animal kingdom. Study of characters of insect orders of economic importance. Life history, rearing methods of some useful insects viz. honeybee, silk worm and lac insects.
5. Insect morphology integument and its structure, regions, sclerites. segmentation of head : Its appendages, structure and function : modification of antennae and mouth parts of insects. Study of insect thorax and its appendages including genitalia.
6. Anatomy of grasshopper, digestive, respiratory, excretory, circulatory, reproductive, nervous system and sense organs. Post embryonic development of insect, ecdysis, instars. metamorphosis, types of larvae and pupae. Pest management: principle of integrated Pest management, concept, and procedure. Physical, mechanical, chemical, biological, and legislative control of insects. Insecticide poisoning and its antidotes. Concept and importance of wild life conservation in relation to ecology and environment.



MATERIALS SCIENCE (38)

Eligibility : Candidate should be B. Sc. With Physics or Chemistry as one subject in III year.

Provided he/she has Mathematics as one subject at least upto II year.

Mathematical Functions, Simple Integration & Differentiation, Differential equations, Curve of simple functions, Scalar and Vector products. Vector Differentiation, Gradient, Divergence and Curl. Vector integration. Theorems of Gauss. Stoke's and problems based on these.

Thermodynamics, Kinetic Theory of Gases, Conduction of Heat and Radiation.

Motion under central forces, Mechanics of nonrigid bodies, Elastic properties, Fluid Mechanics.

Electrical Circuits: AC, DC and transient behavior.

Semiconductor Electronics including photonics and digital electronics. One dimensional motion in non dispersive media, Ultrasonics.

Electrostatics in free space and in dielectric media, Electric Current, Magnetostatics, Time varying fields, Electromagnetic waves in free waves, Physical optics.

Atomic Physics, X-ray, Vibration and Rotational spectroscopies, UV-visible spectroscopies, NMR

Need of quantum mechanics, observables and operators, Schrodinger equation and its simple applications upto hydrogen like atoms.

Crystal Structure, Reciprocal Lattice, Interatomic forces and classification of solids, Free electron theory and band gap of solids, Electrical and Magnetic properties of Materials.

Chemical Bonding, Valence bond theory, Molecular orbital theory.

Properties of s and p blocks. Transition and inner transition elements. Coordination compounds, Complex Formation.

Fundamentals of Organic Chemistry, Stereo Chemistry of Carbon Compounds, Isomerism, reaction mechanisms, Chemistry of Fundamental groups.

Chemical Kinetics : Zero, First, Second and Third order reactions, Chemical Equilibria.

Electrochemistry, reversible electrodes, Electrode reactions, Nernst Equation, Determination of Cell E.M.F., Concentration Cells, Acid-Base Concepts.

Photochemistry : Lambert-Beer law, Jablonski Diagram.



BIOINFORMATICS (39)

Eligibility Criterion:

The Course for M.Sc. in Bioinformatics will be open those student who have passed the B.Sc. Examination of this University or any other University recognized by this University with the following combinations with 55% of the marks.

- (a) Zoology, Botany, Chemistry
- (b) Zoology, Chemistry, Biochemistry
- (c) Botany, Chemistry, Biochemistry
- (d) Mathematics, Physics, Chemistry
- (e) Mathematics, Physics, Computer Science
- (f) Mathematics, Physics, Statistics

Those who have passed B.Sc. with Molecular Biology, Cell Biology, Microbiology, Biotechnology, Biophysics, Biochemistry, Structural Biology, as one of the subjects can also apply.

Syllabus for Admission Test: The syllabus for the admission test will be of graduation level for above mentioned subjects/combinations.



M.Sc. IN ENVIRONMENTAL SCIENCES (40)

Earth Sciences: Structure and composition of Environment- Atmosphere, Hydrosphere and Lithosphere, Earth Processes, Hydrological cycle and Global water balance, Types of Rocks and Weathering of Rocks, Soil formation and Soil profile, Soil erosion & Conservation of soil, Mineral and Power Resources in India, Biogeochemical Cycles, Metrology, Natural Disasters, Major man-induced disaster: Bhopal and Chernobyl Disaster.

Physical and Chemical Sciences: Mechanics, Gravitational force, Thermodynamics, Quantum physics, Electrostatics, Nuclear physics, Optics, Electromagnetic waves, Sound.

Inorganic chemistry- Atomic structure, Periodic table, s, p, d and f block elements, Chemical bond, Chemical Kinetics, Acids and Bases, Oxidation and Reduction, Coordination chemistry. Organic chemistry-isomerism, Nomenclature, Name reactions, Mechanism of organic reactions, Hybridization, Chemical bonding, Aromatic compounds. Buffering capacity, Essential and trace elements in living systems. Toxicity of Heavy metals

Biological sciences: Plant and Animal kingdom-classification, Characteristics of various groups, Morphology, Anatomy, Adaptations, Cell biology, Molecular biology, Structure and functions of biomolecules, Genetics, Microbiology, Biotechnology, Photosynthesis, Respiration, Nitrogen metabolism, Protein synthesis, Growth hormones, Enzymes, Structural and functional aspects of Digestive, Respiratory, Circulatory, Muscular, Excretory, Reproductive, Endocrine and Nervous system of animals, Economic botany and Plant diseases

Ecology and Environment Biosphere, Organizational levels of biosphere, Ecosystem: Structure and Types, Food Chain and Energy Flow, Population and Community Ecology, Biodiversity and its Conservation.

Mathematics and Statistics- Matrix, logarithms, Differential and Integral Calculus, Trigonometry, Sequence and Series, Probability. Mean, Mode and Median, Standard deviation, Correlation, Regression.

Environmental Studies: Natural resources- Water, Soil, Food, Energy, Forests, Minerals, Environmental Pollution, Global environmental problems, Social issues related to environment.



TEXTILE AND APPAREL DESIGN (41)

Design- Types of Design, Principles of Design, Element of Design-Line texture, Colour.

Fashion- Fashion cycle, theories of fashion.

Teaching in pattern making- Drafting, draping, pattern.

Fitting- Associated problems

History & scope of Apparel Design in India.

Terminology of fabric cutting & sewing

Drafting's of - frock, Romper, Women's garments, Men's garments.

Properties of textile fibers.

Textile chemistry- Natural fibers, man made fibers, yarn construction, Fabric finishes, Dyes types.

Traditional textile of India - Chikankari, Zardosi, Kanthas of Bengal, Kashmiri kasheeda, Muslins of Dhaka, Amru and Himru of Hyderabad, Baluchari, kanchi varams, chanderi's , phulkari, patola.

Removal of stain - Cotton, Silk, and synthetic fabric soap manufacturing.

Laundry & dry cleaning - Soap making, types of bleaches.

Printing methods- Resist, block, and Screen printing.



M. Sc. Design and Innovation in Rural Technology (42)

Unit-1

A general introduction to Fungi including importance and reproduction Bacteria, Plant viruses: Introduction and their economic importance. An elementary knowledge of soil, water, sewage, milk, food and air bacteria. Introduction of industrial microbiology. Algae: a general introduction with their importance.

Unit-II

A brief account of Bentham & Hooker system of classification, General introduction of following families with their economic importance:

Poaceae, Leguminosae, Orchidaceae, Brassicaceae, Moraceae, Cucurbitaceae, Asteraceae, Solanaceae, Rubiaceae, Apiaceae, Liliaceae etc.

Different types of fruit with reference to their marketing. Broad outline of morphology & anatomy of vegetative and reproductive organs of angiosperms, cell wall structure, tissue and tissue systems.

Growth and growth hormones, Photosynthesis and Respiration, Nitrogen assimilation and fixation. Climate, weather and different plant communities including hydrophytes, mesophytes, xerophytes, mangroves, epiphytes and parasites

Unit-III

Concept and scope of genetic engineering, role of enzymes. GM crops and their importance Different plant diseases and their management. Integrated pest management (IPM), major human diseases caused by bacteria and fungi. Tissue culture and their applications. A general introduction of horticulture, floriculture, apiculture and sericulture.

An introduction to Bee-keeping, pearl culture and tasar culture.

Unit-IV

Different models of rural development, Sustainable development, Different schemes of central government. Agriculture and economic development, Agro-forestry.

Concept of society, Adult & Non-formal Education, Sanitation programme and implementation, Government Health insurance schemes, bank insurance, smart card for BPL families.

Kharif, Rabi and Zaid Crops. Factors affecting the cultivation and production of crops.

Unit-V

Civil Society and NGO Management, NGOs as Society, NGOs as non-profit company, NGOs as Trust.

Entrepreneurship, Movement in India, role of entrepreneurship in economic development, need for rural entrepreneurship.

Computer hardware and software, operating system, GIS, Remote sensing.

Land resources: Land as a resource. Dry land, land use classification, and degradation.



M.Sc. (APPLIED GEOLOGY) (43)

(Candidate has to attempt any two papers from following 03 papers and merit will be based on sum of marks obtained in attempted 02 papers)

MATHEMATICS

Elementary Symbolic Logic : Sets-Algebra, cartesian product, Relation, Functions, Injective and Surjective MAPS; Inverse Functions.

Number System : Natural numbers, Integers, Integer modulo-N division algorithm, Euclidean Algorithm, Prime factorization.

Real-Number System : Complex Numbers, Real Sequence, Convergence of Infinite Series, Limit and Continuity of Functions of one Variable, Properties of continuous function in closed intervals. Differentiability and its application.

Differential Equations : Differential equations of first order, Linear differential equations with constant coefficients.

Functions of Several Variables : Limits, Continuity, Partial Derivatives, Differentiability, Gradient, Divergence, Curl, Line Surface and Volume Integrals.

Linear Algebra : Vector Spaces, Bases and Dimensions, Rank of Linear Transformations, Matrices, Matrix Representation of Linear Maps, Determinants, Rank of Matrices, Eigenvalues, Eigenvector, Cayley-Hamilton theorem, Diagonalisation of Matrices with distinct eigen values. Sequences and series of functions of a real variable, uniform convergence Riemann-integral of a Bounded function, convergence of Improper Integrals.

Statistics & Probability : Basic concepts and Bayes theorem.

PHYSICS

Mechanics and Elementary Relativity theory : Motion of systems of particles, Linear and angular momentum, Rotational Motion, Moment of inertia.

Non-rigid bodies : Stress and strain, Elastic moduli, Generalised Hook's law.

Fluid Mechanics : Ideal and viscous fluids, Equation of continuity, Rotational and Irrotational flows, Bernoulli's Theorem, Poiseuille's Equation, Stoke's Law.

Special theory of Relativity : Galilean Transformation, Postulates of Special Theory, Lorentz transformation, Relativistic Dynamics.

Thermal Physics : Zeroth law of Thermodynamics, Concept of temperature, First law of Thermodynamics, Simple Applications, Reversible and Irreversible Processes, Second law of thermodynamics, Carnot's cycle, Entropy, Temperature Entropy Equation, Thermodynamic potentials, Joule-Thomson effect, Kinetic theory of gases, Conduction and Radiation of heat.



Optics : Corpuscular and Wave Theory of Light, Interference, Diffraction, Fresnel's Theory, Fraunhofer's Diffraction, Resolving Power of Prism, Polarization, double Refraction, Production and Detection of elliptically and circularly polarized Light, Basic Ideas of stimulated Emission, Lasers.

Wave-Motion, Electrostatics, Magneto statics : Oscillations-Simple Harmonic and Damped Oscillations, Forced Oscillations, Wave Motion in Non-Dispersive media, Wave Equation, Progressive Wave Solution, Acoustic Impedance, Energy Density, reflection and Transmission of Plane Waves, Coulomb's Law, Gauss's Law, Electric Dipole, Dielectrics, Ampere's Law, Biot-Severt's Law, Vector potential, Divergence and Curl of B, Magnetic Material and Magnetization, Time Varying Fields, Displacement Current, Curl of H, Faraday's Law, Self and mutual inductance, Electromagnetic waves in free space, Maxwell's Equations.

Atomic & Nuclear Physics : Bohr-Sommerfield model, Characteristics of Continuous X-Rays, Space quantisation, Bohr Magneton, Larmor Precession, Diamagnetism, Paramagnetism, Ferromagnetism and Antiferromagnetism. Quantum Concept : Photoelectric effect, Compton effect, deBroglie waves, Heisenberg's uncertainty principle, One-Dimensional Schrodiner's wave equation. Nuclear Physics : Natural Radioactivity, Fission and fusion, Liquid Drop Model.

Electrical Circuits and Basic Semiconductor Electronics : Circuit parameters, Kirchhoffs laws, Norton's and Thevenin's theorems, Charging and discharging of condenser, Growth and decay of current in R-L circuits, Balance and sensitivity conditions for A-C bridge,

Semiconductor materials, Diodes and Transistor, Measuring instruments, multimeters and CRO, Digital Electronics.

GEOLOGY

The Planet Earth: Origin of the solar system and the Earth; Geosphere and the composition of the earth; Shape and size of the earth; Earth -moon system; Formation of continents and oceans; Dating rocks and age of earth; Energy in the earth systems; Volcanism and volcanic landforms; Interior of earth; Earthquakes; Earth's magnetism and gravity, Isostasy; Elements of Plate tectonics; Orogenic cycles.

Geomorphology: Weathering and erosion; transportation and deposition due to wind, ice, river, sea, and resulting landforms, Structurally controlled landforms.

Structural Geology: Concept of stratum; contour; Outcrop patterns; Maps and cross Sections; Dip and Strike; Classification and origin of folds, faults, joints, foliation and lineation, unconformities; Shear zones.

Palaeontology: Major steps in the evolution of life forms; Fossils; their modes of preservation and utility; Morphological characters, major evolutionary trends and ages of important groups of animals-Brachiopoda, Mollusca, Trilobita, Echinodermata; Gondwana plant fossils; Elementary idea of vertebrate fossils in India.



Stratigraphy: Principles of stratigraphy; Litho-, chrono- and biostratigraphic classification; distribution and classification of the stratigraphic horizons of India from Achaean to Recent.

Mineralogy: Symmetry and forms in common crystals classes; Physical properties of minerals; Isomorphism and Polymorphism, Classification of minerals; Structure of silicates; Mineralogy of common rock-forming minerals; Modes of occurrence of minerals in rocks. Transmitted polarized light microscopy and optical properties of uniaxial and biaxial minerals.

Petrology: definition and classification of rocks; igneous rocks-forms of igneous bodies; Crystallization of magma; classification, association and genesis of igneous rocks; sedimentary rocks-classification, texture and structure; size and shape of sedimentary bodies. Metamorphic rocks-classification, facies, texture and properties.

Economic Geology: Properties of common economic minerals; General properties of formation of mineral deposits; physical character; Mode of occurrence and distribution in India both of metallic and non-metallic deposits; Coal and petroleum Occurrences in India.

Applied Geology : Ground water Hydrology; Mineral exploration, elements of Mining Geology and Environment Geology; Principles of Engineering Geology.



M.Sc. Food and Nutrition (44)

I. Physiology

1. Structure and organization of: Cells, Tissues, Muscular System, Cardio-vascular system, lymphatic system, Digestive system, Excretory system, Urinary system, Nervous system, Endocrine system, Reproductive system.

II. Normal and Therapeutic Nutrition

1. Food Groups, Balanced Diet, recommended Dietary Allowances, Basal Metabolic Rate, Body Mass Index, Nutrients, Vitamins, Minerals, Water.
2. Life cycle Nutrition: Infancy, Pre-school, School going, Adolescence, Adulthood, Geriatric, Pregnancy and Lactation.
3. Nutritional/Dietary treatment during diseases: Protein Calorie Malnutrition, Deficiency diseases, Fevers, Overweight and underweight, Gastro-intestinal tract diseases, Diabetes, Liver and Gall bladder diseases, Kidney diseases, Cardiovascular diseases.

III. Food Science

1. Types, Classification, Nutritive value and use of : Cereals, Pulses and Legumes, Vegetables and Fruits, Milk and milk products, Meat, Fish and Poultry, Eggs, Oil seeds
2. Concept and use of: Sprouting, Pasteurization, Food Preservation, Food Additives

IV. Biochemistry

1. Structure and General properties of: Carbohydrates, Lipids, Proteins, Nucleic acids
2. Chemistry and Metabolic functions of: Vitamins, Minerals, Enzymes and Hormones
3. Metabolism of : Carbohydrates, Lipids, Proteins

V. Food Microbiology

1. Classification of microbes, General study of prokaryotes, Yeast, Moulds and fungi
2. Distribution of micro-organisms in the air, Water, Soil, Milk, Fruits and vegetables etc.
3. Bacteria , Virus, protozoa and Fungi associated diseases
4. Food poisoning and food infection
5. Microorganisms in fermentation and decay



Women's Studies (45)

Women's Studies is a multidisciplinary subject. Multiple choice questions will be set from all areas of Women's Studies including the History of Women's Studies in India as well as in the West as well as current advancements in Women's Studies. Important institutions related to Women's Studies and Women's Empowerment, International as well as Indian legislation related to Women eg: Prevention of Sati, Domestic Violence, Sexual Harassment, Triple Talaq etc., the role of MHRD and UGC in the development of Women's Studies. Questions will also be set on the Feminist Movement in India as well as in the West, the three waves of Western Feminism, various kinds of Feminism, Eco Feminism. The candidate must have a knowledge of issues and people related to Women's Empowerment and Welfare in India, the Women's Movement in India both before and after Independence, India National Policies and Agencies concerning Women's Development, eg. *Sva Shakti*, *Swayam Siddha*, STEP, NCW, Ministry of Women and Child Development etc. Questions will also be asked on the efforts made by the United Nations at the International level eg., CEDAW, International Women's Day, Women's Conferences from Mexico to Beijing. In addition to all this the candidate must have a knowledge of Women and Development, Gender and Development, Women and Literature, Women and Cinema, Women and Science, Women and Sports, LGBT, Women's Associations like WIA, NCWA, AIWC, important women from all fields at the international and National level, Feminist Research and Feminist Research Methodology.



M. TECH. IN EARTH SYSTEM SCIENCE (ESS) (46)

Statistical Distributions, Probability, Curve fitting, Correlation, Regression, Mean, Variance, Analysis of variance, Significance tests, Fundamentals of computers and programming, Knowledge of different operating systems, Numerical Methods, Ordinary and Partial Differential Equations, Basics of Atmosphere and Ocean, Weather and Climate, Composition and structure of atmosphere, Thermodynamics of the atmosphere, Laws of thermodynamics, Heat budget, Properties of seawater, Temperature, Salinity, Density, Conductivity, Indian Monsoon, Ecological Principles, Molecules and their interaction relevant to Biology.



MASTER IN DEVELOPMENT STUDIES (47)

The programme has a provision of the lateral entry after three years. Those students of the Centre's Integrated Programme who have obtained 6.0 CGPA in case of General and OBC category and 5.5 CGPA in case of SC and ST shall be automatically enrolled in the Master in Development Studies Programme. Remaining vacant seats shall be filled-in through the AU PGAT 2022.

Eligibility criteria for the remaining seats have been determined as follows: Minimum 50% marks or equivalent grade in High School and Higher Secondary/Intermediate and 55% or equivalent grade in Bachelor of Social Work / B.Com. / B.A. in Economics / B.Sc.(Ag.) / Bachelor in Development Studies/Globalization and Development Studies/Bachelor in Business Administration / Management / Bachelor degree in Rural Development/Bachelor of Planning from a recognized University and minimum 50% score in PGAT.

Syllabus:

- A. Theories & perspective of development and globalization
- B. International politics and relations
- C. Global economic order
- D. Corporate sector and Globalization
- E. Globalization and tribal & rural societies
- F. Science and Technology in Global era
- G. Mass Media & Information & Communication Technology (ICT), Sustainable development and Environmental issues
- H. Basic Computer Skills
- I. Idioms & phrases
- J. Foreign words



MFA (MASTER OF FINE ARTS) (48)

Theory: (conducted by the University)

Syllabus:

- Aesthetics & Art Appreciation (Indian and Western)
- History of Indian Art (Pre-history to Modern)
- History of Western Art (Pre-history to Modern)
- Folk, Tribal and current trends in Art Scenario

Practical : (conducted by the Department)

For admission in M.F.A in Painting candidate has to appear in Practical Test of 100 marks. Life Drawing, **Time: 180 minutes of 100 marks** in charcoal/Pastel/Water colour (The Practical test will be conducted by the Department . For

Practical test half imperial size paper will be given. The candidates are advised to contact the Head, Visual Arts Department for Practical Test.)

Interview: 50 Marks (conducted by the Department)



M. Sc. Biotechnology (49)

Biomolecules-structure and functions; Biological membranes, structure, action potential and transport processes; Enzymes- classification, kinetics and mechanism of action; Basic concepts and designs of metabolism (carbohydrates, lipids, amino acids and nucleic acids) photosynthesis, respiration and electron transport chain; Bioenergetics.

Viruses- structure and classification; Microbial classification and diversity (bacterial, algal and fungal); Methods in microbiology; Microbial growth and nutrition; Aerobic and anaerobic respiration; Nitrogen fixation; Microbial diseases and host-pathogen interaction.

Prokaryotic and eukaryotic cell structure; Cell cycle and cell growth control; Cell-Cell communication, Cell signaling and signal transduction.

Molecular structure of genes and chromosomes; Mutations and mutagenesis; Nucleic acid replication, transcription, translation and their regulatory mechanisms in prokaryotes and eukaryotes; Mendelian inheritance; Gene interaction; Complementation; Linkage, recombination and chromosome mapping; Extra chromosomal inheritance; Microbial genetics (plasmids, transformation, transduction, conjugation); Horizontal gene transfer and Transposable elements; RNA interference; DNA damage and repair; Chromosomal variation; Molecular basis of genetic diseases.

Principles of microscopy-light, electron, fluorescent and confocal; Centrifugation- high speed and ultra; Principles of spectroscopy-UV, visible, CD, IR, FTIR, Raman, MS,NMR; Principles of chromatography- ion exchange, gel filtration, hydrophobic interaction, affinity, GC,HPLC, FPLC; Electrophoresis; Microarray.

History of Immunology; Innate, humoral and cell mediated immunity; Antigen; Antibody structure and function; Molecular basis of antibody diversity; Synthesis of antibody and secretion; Antigen-antibody reaction; Complement; Primary and secondary lymphoid organ; B and T cells and macrophages; Major histocompatibility complex (MHC); Antigen processing and presentation; Polyclonal and monoclonal antibody; Regulation of immune response; Immune tolerance; Hypersensitivity; Autoimmunity; Graft versus host reaction.

Major bioinformatics resources and search tools; Sequence and structure databases; Sequence analysis (biomolecular sequence file formats, scoring matrices, sequence alignment, phylogeny); Data mining and analytical tools for genomic and proteomic studies; Molecular dynamics and simulations (basic concepts including force fields, protein-protein, protein-nucleic acid, protein-ligand interaction)

Restriction and modification enzymes; Vectors; plasmid, bacteriophage and other viral vectors, cosmids, Ti plasmid, yeast artificial chromosome; mammalian and plant expression vectors; cDNA and genomic DNA library; Gene isolation, cloning and expression ; Transposons and gene targeting;



DNA labeling; DNA sequencing; Polymerase chain reactions; DNA fingerprinting; Southern and northern blotting; In- situ hybridization; RAPD, RFLP; Site-directed mutagenesis; Gene transfer technologies; Gene therapy.

Totipotency; Regeneration of plants; Plant growth regulators and elicitors; Tissue culture and Cell suspension culture system: methodology, kinetics of growth and, nutrient optimization; Production of secondary metabolites by plant suspension cultures; Hairy root culture; transgenic plants; Plant products of industrial importance.

Animal cell culture; media composition and growth conditions; Animal cell and tissue preservation; Anchorage and non-anchorage dependent cell culture; Kinetics of cell growth; Micro & macro-carrier culture; Hybridoma technology; Stem cell technology; Animal cloning; Transgenic animals.

Chemical engineering principles applied to biological system, Principle of reactor design, ideal and non- ideal multiphase bioreactors, mass and heat transfer; Rheology of fermentation fluids, Aeration and agitation; Media formulation and optimization; Kinetics of microbial growth, substrate utilization and product formation; Sterilization of air and media; Batch, fed-batch and continuous processes; Various types of microbial and enzyme reactors; Instrumentation control and optimization; Unit operations in solid-liquid separation and liquid-liquid extraction; Process scale-up, economics and feasibility analysis.

Engineering principle of bioprocessing - Upstream production and downstream; Bioprocess design and development from lab to industrial scale; Microbial, animal and plant cell culture platforms; Production of biomass and primary/secondary metabolites; Biofuels, Bioplastics, industrial enzymes, antibiotics; Large scale production and purification of recombinant proteins; Industrial application of chromatographic and membrane based bio-separation methods; Immobilization of biocatalysts (enzymes and cells) for bioconversion processes; Bioremediation-Aerobic and anaerobic processes for stabilization of solid / liquid wastes.

Tissue culture and its application, Micropropagation. Meristem culture and production of virus-free plants. Anther and microspore culture. Embryo and ovary culture. Protoplast isolation. Protoplast fusion-somatic hybrids, cybrids. Somaclones. Synthetic seeds. In vitro germplasm conservation. Cryopreservation. Organelle DNA, Satellite-and repetitive DNAs. DNA repair. Regulation of gene expression. Recombinant DNA technology-cloning vectors, restriction enzymes, gene cloning. Methods of gene transfer in plants. Achievements and recent developments of genetic engineering in agriculture. Development of transgenics for biotic & abiotic stress tolerance, bioethics, terminator technology, nanotechnology, DNA fingerprinting, gene silencing.

Also some questions of the level of 10+2 in the subjects: Physics, Chemistry, Mathematics and Biology.