PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA) (Estd. under the Panjab University Act VII of 1947—enacted by the Govt. of India)

SYLLABI

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B.A./B.Sc. (Ho o! "#) Co! "#\$

SEC%ND YEAR

(SE&ESTER ' THIRD AND (%URTH)

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1.	Persian	7
5.	Arabic (Kept in Abeyance)	8
5.	French	9
7.	Hindi	11
3.	Punjabi	13
9.	German	17
10.	Defence & Strategic Studies	21
11.	History	25
12.	Political Science	32
13.	Economics	40
14.	Sociology	50
15.	Philosophy	54
16.	Psychology	60
17.	Geography	64
18.	Public Administration	70
19.	Ancient Indian History, Culture & Archaeology	79
20.	Police Administration	87
21.	Music (Vocal & Instrumental)	91
2	Home Science (Kent in Abov(132 08/226(e)) Tf 60 12 0 Td [() 40/16(v) T] /D8 1	2 Tf 100 02 0 T18 Tf 27

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English

Sanskrit

Urdu

OUTLINES OF TESTS, SYLLABI AND COURSES OF READING IN VARIOUS SUBJECTS FOR B.A./B.Sc. (HONOURS) SECOND YEAR (SEMESTER SYSTEM) i.e. THIRD SEMESTER NOVEMBER/DECEMBER 2020 AND FOURTH SEMESTER APRIL/MAY 2021, EXAMINATIONS.

ENGLISH

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-2021

SEMESTER-III

 $16^{\mbox{th}} \ \ \mbox{and} \ 17^{\mbox{th}} \ \ \mbox{Century Literature}$

Max. Marks : 100 Theory : 90 marks Internal Assessment : 10 marks

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URDU

B.A. (HONOURS) SECOND YEAR EXAMINATION,

URDU

SEMESTER-IV

Theory: 90 marks Internal Assessment: 10 marks

Time: 3 Hrs.

PAPER II : Essay (Literary)

Unit - I

Fort William College Ki Adabi Khidmat 25 Marks

Unit – II

Urdu Zaban ki Ibtida aur Irtiqa 20 Marks

Unit – III

20 Marks Dabistan Luckhnow ki Khusiyat

Unit -IV

Dabistan Delhi ki Khusiyat 25 Marks

PERSIAN

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER -III

Paper: I Marks: 100 Time: 3 Hrs.

History of Persian Literature

i) Ghaznzvid Period

Books Recommended:

- 1. Literary History of Persia by Dr. E.G. Brown Part II.
- 2. She `ul` Ajam by Shibli Part I, II & III.

PERSIAN

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER -IV

Paper: II Marks: 100

Time : 3 Hrs.

History of Persian Literature

1. Ereteqaye Zaban-o-Adabiyat-e-Farsi be Ahde Moghal dar Hind.

Books Recommended:

- 1. Literary History of Persia by Dr. E.G. Brown Part II.
- 2. She `ul` Ajam by Shibli Part I, II & III.

ARABIC B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-2021 (KEPT IN ABEYANCE)

FRENCH

SEMESTER-III

3rd Semester: APPLIED GRAMMAR AND DRAMA

Max. Marks : 100 Theory : 90 marks Internal Assessment : 10 marks Time : 3 Hours

a) Drama

Comprehension, explanation and literary appreciation of the prescribed text. 50 Marks

Courses of Reading:

Molière, Le Bourgeo s Gent o e-(Edition Boards).

Gramı	mar:	40 Marks
1.	Applied Grammar .	15 Marks
2.	Essay in French: subject or theme to be taken from the given text.	10 Marks
3.	Precis or analysis of a given text	15 Marks
N.B.	1. The latest syllabus will be followed and question paper should be of B.A.II (Hons.) level.	

For the information of private candidate:

2. Choice in questions should be given.

1. The theory paper would be proportionately marked out of 100 as there is no internal assessment.

FRENCH

SEMESTER-IV

4th Semester: PROSE, APPLIED GRAMMAR & Viva-voce

Max. Marks : 100
Theory : 60 marks
Internal Assessment : 10 marks
Time : 3 Hours

Applied Grammar 25 Marks

Prose: 35 Marks

La Symphonie Pastorale, André Gide

Comprehension, explanation and literary appreciation of the prescribed text.

Courses of Reading:

La y p on e Pastora e, André Gide (Edition Bordas) ou Nouveaux Classiques Larousse.

La Grammaire pour bien écrire, Bescherelle, Hatier, 1987.

Viva-Voce: 30 Marks

(a) Dictation of an unseen passage of about 200 words based on the Vocabulary and grammar covered upto B.A.II.

10 Marks

(b) Oral questions and answers on a given text (unseen).

10 Marks

(c) General questions and reading

- 10 Marks
- N.B: 1. All unseen passages shall be based on the vocabulary and grammar covered till the end of 3rd & 4th Semester courses.
 - 2. All questions are to be asked and answered in French.
 - 3. The latest syllabus must be followed.
 - 4. Choice in questions must be given.
 - 5. Question paper will be set according to B.A. II (Hons.) level.

For the information of private candidate:

- 1. Viva is compulsory.
- 2. The theory paper would be proportionately marked

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B.A. /B.SC.(HONOURS) SECOND YEAR (SEMESTER SYSTEM) 2020-2021 SYLLABUS

GERMAN

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

SEMESTER -III

Summary

Max. Marks : 100 marks(Total) Paper-I (Theory) : 90 marks Internal Assessment : 10 marks Time : 3 hours

Paper-I (Theory): 90 marks (Total)

Note se of dictionary is a owed

Characterization /Literary questions (2 out of 3) on the prescribed novel "Der Richter und sein Henker" (Dürrenmatt) i. : 60 Marks

ii. Questions on text comprehension from the prescribed text-book : 30 Marks

"Lagune-2" Chapers 1-17 upto page 87 (5 out of 6 questions to be

attempted)

Internal Assessment: 10 marks (Total)

Continous Evaluation

Attendance

Note

1.

GERMAN

SEMESTER -IV

Summary

Max. Marks : 100 marks(Total)
Paper-I (Theory) : 90 marks
Internal Assessment : 10 marks
Time : 3 hours

Paper-I (Theory): 90 marks (Total)

Note se of detionary is a owed

i. Characterization /Literary questions (2 out of 3) on the prescribed : 60 Marks drama "Biedermann und die Brandstifter" (Max Frisch)

ii. Questions on text comprehension from the prescribed text-book : 30 Marks "Lagune-2" Chapers 18-34 (5 out of 6 questions to be attempted)

Internal Assessment: 10 marks (Total)

- Continous Evaluation

- Attendance

Note

- 1. The mode of evaluation for Internal Assessment is to be followed as per University guidelines.
- 2. For private candidates, Internal Assessment will be calcultated proportionately to the marks obtained by the candidate in written examination.

Prescribed Textbooks:

- i. "Lagune-2" Kursbuch (2006 Edition) by Hartmut Aufderstraße a.o. Chapters 18-34.
- ii. "Biedermann und die Brandstifter" (Max Frisch)

Supplementary book:

i. "Lagune-2" Arbeitsbuch by Hartmut Aufderstraße a.o. Chapters 18-34.

Max. Marks :100 marks(Total)
Paper-I (Theory) : 90 marks
Internal Assessment : 10 marks
Time : 3 hours

PAPER-II: ESSAY AND TRANSLATION(Theory): 90 marks

Note se of detionary is a owed

i. Translation of an unseen text/s from German into English.
 ii. Translation of an unseen text/s from English into German
 iii. Essay writing in German (about 250 words)
 iii. 20 Marks

i. Der Klimawandel

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DEFENCE & STRATEGIC STUDIES

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-2021

SEMESTER-III

Outlines of Tests, Syllabi and Courses of Reading

Note There will be one theory paper of 90 marks. The internal assessment will be of 10 marks. The theory paper will have one compulsory short answer type question containing 15 questions of 2 marks each covering the entire syllabus. The candidates will be required to attempt any 10 short answer type questions. In addition, there will be four sections of the question paper. The candidate will be required to attempt one question from each of these sections carrying 17½ marks each.

PAPER: AREA STUDIES-PAKISTAN-I

Max. Marks : 100
Theory : 90 Marks
Internal Assessment : 10 Marks
Time : 3 Hours

Total Teaching Periods: 75

SECTION-I

- 1. Military Geography of Pakistan: Its strategic importance, economic and industrial resources.
- 2. People and their characteristics.

SECTION-II

- 3. Outlines of history leading to the Birth of Pakistan.
- 4. Political Developments in Pakistan since 1947.
- 5. Role of Military in Pakistan's Politics.

SECTION-III

- 6. Foreign Policy of Pakistan (Basic Determinants).
- 7. Foreign Policy of Pakistan with regard to U.S.A. & Russia.

SECTION-IV

8. Pakistan's Foreign relations with its neighbours with particular reference to Afghanistan, India and Iran.

Books Recommended:

- 1. Akhtar, Jamna Das, Po Ara Conspiracies in Pa Istan, Delhi: Punjabi Pustak Bhandar, 1969
- 2. Britanninca., e New Encyc oped a Britannica, Chicago, II: Encyclopedia Britannica, Inc, 2005.
- 3. Burke, S.M., Pa stan s Fore n Po xy: An Historical Analysis. [S.I.: s.n. Print]
- 4. Callerd, Keith B., Pakistan A Political Study, London: Allen & Unwin, 1957.
- 5. Chopra, Surendra, *Perspectives on Pa Istan s Fore In Po xy*, Amritsar: Guru Nanak Dev University Press, 1983.
- 6. Cohen, Stephen P., e Pa stan Ar y, Berkeley: University of California Press, 1984.
- 7. Johnson, Allan G., Privie e Power and Difference, Boston, Mass: McGraw-Hill, 2006.
- 8. Khaliq, Sheikh Abdul, Pa stan Peace and ar, London: Regency Press, 1973.
- 9. Moon, Penderel, *D.v. de and u.v.*, Delhi: Oxford University Press, 1998.
- 10. Sahni, Naresh Chander, *Po xxa tru e In Pa xtan*, Jullundur City: New Academic Pub. Co., 1969, Print.
- 11. Sayeed, Khalid B., Pa stan e For at we P ase 4, London: Oxford University Press, 1968.
- 12. Sidhu, K.S., Pa stan K etr Ad yayan; Publication Bureau, Punjabi University Patiala, 1987.
- 13. Stephens, Ian. Pa stan New Yor: Praeger, 1963.
- 14. Tayyeb Ali, and A Tayyeb. *Pa stan* London [etc.] Oxford University Press, 1966.
- 15. Tinker, Hugh. Ind a and Pa stan. New York: Frederick. A. Praeger, 1968.
- 16. Williams, L.F. Rushbrook. e tate of Pa stan. London: Faber, 1966.
- 17. Ziring, Lawrence. Pa stan In e went et Century, Karachi [u.a.]: Oxford University Press, 1998.
- 18. Ziring Lawrence, e Ayub K an Era Karachi: Paramount Publishing, 2009.

- 3. Costa, Benedict D & e ber ent of Pa stan, Ludhiana: Kalyani Publisher,: 1972.
- 4. Dasgupta, C. ar and D p o acy In Kas r, 1947-48. New Delhi: Sage, 2002.
- 5. Feldman, Herbert. evo ut on In Pa stan. London: Oxford U.P., 1967, Print.
- 6. Feldman, Herbert. e End and e Be nnn. London: Oxford University Press, 1975.
- 7. Gupta, K.R., Ind a Pa stan e at ons who pecha efernce to Kas h, New Delhi: Atlantic Publishers & Distributors, 2003.
- 8. Hackett, James T., e M. tary Ba ance . Oxfordshire: Routledge, 2011.
- 9. Johri, Sita Ram. The Indo-Pak Conflict of 1965. Luckhnow: Himalaya Publications, 1967.
- 10. Kaul, Brij Mohan. Confrontation With Pakistan, Delhi: Vikas Publications, 1971.
- 11. Khaliq, Sheikh Abdul, Pakistan, Peace and War, London: Regency Press, 1973.
- 12. Lachhman Singh., Indian Sword Strikes In East Pakistan. New Delhi: Vikas, 1979.
- 13. Mankekar, D. R. Pakistan Cut To Size, New Delhi: Indian Book Co, 1972. Print.
- 14. Mankekar, D.R. Twenty two Fateful Days. Bombay: Manaktalas, 1967. Print.
- 15. Nath, Rajendra. Military Leadership In India. New Delhi, India: Lancers Books, 1990.
- 16. Palit, D.K. The Lightning Campaign. New Delhi: Thomson Press (India), 1972.
- 17. Sahni, Naresh Chander, Po tka tru e n Pa ttan, Jullundur City: New Academic Pub. Co, 1969.
- 18. Sen. Lionel Protip. ender as e read Kas r Confrontations 4 4, Bombay: Orient Longmans, 1969.
- 19. Sethi, Surinder Singh. e Dec we ar E er ence of a New Nation. New Delhi: Sagar Publications, 1972.
- 20. Sidhu, K.S. Pa stan K etr Ad yayan: Publication Bureau, Punjabi University Patiala, 1987.
- 21. Sinha, S.K. Operations escue, New Delhi: Vision Books, 1977.
- 22. Ziring, Lawerence. *e Ayub K an Era*. Karachi: Paramount Publishing, 2009.

HISTORY

SYLLABUS OF B.A. (HONOURS) SEMESTER III/IV, 2020-21

Note The Honours programme outlined below is intended to encourage an in depth study of some aspects of society and culture in broad periods and significant epochs in Indian History, and wherever possible, to also provide a comparative perspective. The programme intends to supplement and complement the general course, adding specialized study.

Explanation:

- 1. Each essay type question would cover about one-third or one-half of a topic detailed in the syllabus.
- 2. The paper-setter would avoid repetition between different types of question within one question paper.

Recommended readings:

- 1. P.N.Prabhu, Hndu och Or an vation, Popular Prakashan, Bombay, 1979.
- 2. R.S.Sharma, urdas in Ancient India, Motilal Banarasidas, Delhi, 1980.
- 3. K.Roy, Ed. o en n Ear y Indian oceties, Manohar, New Delhi, 1999.
- 4. A.S. Altekar, *Education in Ancient India*, The Indian Book shop, Benaras, 1937.
- 5. S. Ratnagar, *nderstand n Haraappa*, Tulika, New Delhi, 2001.
- 6. A.L. Basham, e onder at as Ind a, Rupa, Calcutta, 1992.
- 7. R.G. Bhandarkar, an navn ann and Mnor en ous ystes, Indological Book House, Varanasi, 1965.
- 8. P.Brown, History of Indian Arc Aecture, Vol. I Taraporevavala, Bombay 1965.
- 9. S.K. Saraswati, urvey of Indan cu pture, Munshiram Manoharlal, New Delhi, 1975.
- 10. D.Barrett & B Grey, Indan Pantin Skira, Lausanne, 1963.

UNIT II

- 3. Mystical Dimensions of Islam: Organisation of the Chishti and Suhrawardi orders, with reference to their beliefs and practices.
- 4. Landmarks in Persian Historiography: The historical works of Ziauddin Barani and Abul Fazl.

UNIT III

- 5. State Intervention in the Socio-Religious Sphere: Akbar's liberal policy; his *Ibadat K ana* debates, the *a zar* and breach with orthodox ulama; introduction of *au M II a J* and social reforms
- 6. Muslim Revivalist Movements: Salient features of the Mahdawi movement; socio-religious ideas of Sheikh Ahmad Sirhindi and their impact.

UNIT IV

- 7. Development of Literature: the devotional writings of Tulsidas, Ravidas and Namdev; the contribution of Malik Muhammad Jaisi; Abdur Rahim Khan-i-Khanan and Ras Khan.
- 8. Fine Arts in Mughal India: the development of architecture, painting and music during the sixteenth and seventeenth centuries.

Recommended Readings:

- 1. KM As raf Life and Conditions of the People of Hindustan Second Edition, Munshiram Manoharlal, New Delhi, 1970.
- 2. Satish Chandra *Med eva Ind a Fro u tanate to t e Mu a s*, Parts I & II, Haranand Publications (Rep.), New Delhi, 2003.
- 3. Peter Hardy *Historians of Medieva India tudies in Indo Mus I Historica run*, First Indian Edition, Munshiram Manoharlal, New Delhi 1997.
- 4. Harbans Mukhia Historians and Historia rap y Durin te ein of A bar, Vikas Publishing House, New Delhi 1976.
- 5. Khaliq Ahmad Nizami: e Jon and Po ntea aga nenttttd HananH ntn J J

POLITICAL SCIENCE

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

Outlines of Test

Semester-III Option (i) : International Relations 1917-1945

OR

Option (ii) : Colonialism and Nationalism in Modern India

Semester-IV Option (i) : Western Political Thought

OR

Option (ii) : Comparative Politics

Syllabus and Courses of Reading:

Semester-III

OPTION (I) : INTERNATIONAL RELATIONS 1917-1945

Max. Marks : 100 Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hrs.

OR

OPTION (ii) COLONIALISM AND NATIONALISM IN MODERN INDIA

Max. Marks : 100
Theory : 90 Marks
Internal Assessment : 10 Marks
Time : 3 Hrs.

Objectives:

The paper aims at enabling the students about the n

Suggested Readings:

1. Sumit Sarkar : Modern India (Madras : Macmillan, 1995).

2. Bipan Chandra : Essays on Colonialism (Delhi : Orient Longman, 2000).

3. Thomas Pantham et al (ed.) : Modern Indian Political Thought (Delhi : Sage, 1986).

4. Gail Omvedt : Dalit Visions - The Tract of the Times (Delhi : Orient Longman,

2002).

5. Radha Kumar : History of Doing (Delhi : Kali for Women, 1995).

6. Paul Brass : The Politics of India Since Independence (Delhi : Foundation

Books, 1992).

7. V.R. Mehta and Thomas

Pantham, ed.

: Political Ideas in Modern India, Thematic Exploration (Delhi :

Sage, 2006).

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POLITICAL SCIENCE Semester-IV

OPTION (i) WESTERN POLITICAL THOUGHT

Max. Marks : 100
Theory : 90 Marks
Internal Assessment : 10 Marks
Time : 3 Hrs.

Objectives:

This paper aims to introduce to the students the major themes of western political thought. This will be done by undertaking an indepth study of the key thinkers of this tradition.

INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES:

e sy abus as been dwided into four units

There shall be 9 questions in all. The first question shall be short answer type containing 15 short questions spread over the whole syllabus and each to be answered in about 10 to 20 words. The candidate is required to attempt any 9 short answer type questions i.e. 2 marks each. It shall carry 18 marks and shall be

Reference Books:

1. Ernest Barker : Gree Po trea eory P ato and Hts Predecessors (London:

Methuen, 1978).

2. Mulgan, R. : Ar stot e s Po * ca eory (Oxford : Clarendon, 1977).

3. Plamenatz, John Man and ockty 2 Vols. (New York: Longman, Latest Edition).

4. Quentin Skinner : Mac r 4 4 4 t t 4 4 4 n

OR

OPTION (ii) COMPARATIVE POLITICS

Max. Marks : 100 Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hrs.

Objectives:

The objective of the course is to familiarize students with recent debates and theories concerning advanced industrial as well as developing societies and this will be undertaken in a comparative framework.

INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES:

e sy abus as been dwded nto four un ts

There shall be 9 questions in all. The first question shall be short answer type containing 15 short questions spread over the whole syllabus and each to be answered in about 10 to 20 words. The candidate is required to attempt any 9 short answer type questions i.e. 2 marks each. It shall carry 18 marks and shall be a compulsory question. Rest of the paper shall contain 4 \mathbf{units} . Each unit shall have two questions and the candidates shall be given internal choice i.e. the candidates shall attempt one question from each Unit -4 in all of 18 marks each.

Unit-I : Approac es to Co parat ve Po tes

- (a) Political Sociology.
- (b) Political Economy.

Unit-II : eor les of Deve op ent

- (a) Modernisation and Development Theories.
- (b) Alternative Third World perspective on development.

Suggested Readings:

1. Andrew Heywood : *Po tes* (London: Macmillan, 1997).

2. Mary Mank Sworth and : *e Encyc opaed a of Govern ent and Po tes* (London : Mourice Kogan (ed.) Routledge, 1992).

3. Rod Hague, Martin Harrop : Co parative Govern ent and Polics An Introduction (London: Macmillan, 1998).

4. Gabriel Almond, G. : Co parat ve Po xxs oday (Delhi : Pearson Education, 2005).

Bingham Powell, Kaare
Strom and Russel J. Dalton

5. Ronald H. Chilcote : eor es of Co parative Po tics e earc for a Paradi

econs dered (Boulder: Westview Press, 1994).

ECONOMICS

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

SEMESTER-III

The candidates are required to study one paper out of the following three papers:

- I Economics of Agriculture.
- II History of Economic Thought.
- III Economics of Population.

Paper-I: ECONOMICS OF AGRICULTURE

Max. Marks : 100
Theory : 90 Marks
Internal Assessment : 10 Marks
Time : 3 Hours

INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES:

e sy abus as been dwded nto four un is

There shall be **9** questions in all. All questions carry equal marks. The first question shall be short answer type containing 12 short questions spread over the whole syllabus and each to be answered in about 25 to 30 words. The candidate is required to attempt any 9 short answer type questions i.e. 2 marks of each. It shall carry 18 marks and shall be **Compulsory** question. Rest of the paper shall contain **4** units. Each unit shall have **two** questions and the candidates shall be given internal choice i.e. the candidates shall attempt one question from each Unit – 4 in all.

Unit-I

Econo ves of A reu ture Its nature and scope, Interdependence between agriculture and industry. Nature and problems of agricultural development in developing countries.

Unit-II

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Recommended Readings:

1. Eicher, C. & Witt, L. : Agriculture in Economic Development, Vera & Co., Bombay (1970)

2. Frankel, Francis R. : India's Green Revolution-Economic Gains and Political Costs,

(1971) Oxford University Press, Bombay

3. Joshi, P.C. (1975) : :Land Reforms in India, Allied, Bombay, Part II, Sections I & II

4. Khusro, A.M. (1968) : Readings in Agricultural Development, Allied, Bomb

Essential Readings:

Aggarwal, A. S. N. (1972)

ECONOMICS

Semester-IV

The candidates are required to study one paper out of the following three papers:

- I Industrial Economics.
- II Economics of Public Enterprises.
- III Theory of Statistics.

Paper-I: INDUSTRIAL ECONOMICS

Max. Marks : 100
Theory : 90 Marks
Internal Assessment : 10 Marks
Time : 3 Hours

INSTRUCTIONS FOR THE PAPER-SETTER AND CANDIDATES:

e sy abus as been divided into four units

Supplementary Readings:

1. Bhalla, G. S. (1968) : Financial Administration of Nationalised Industry in

U.K. and India, Meenakshi, Meerut.

2. Gupta, K. R. (1978) : Issues in Public Enterprises, S. Chand & Co., New

Delhi.

Paper- III : THEORY OF STATISTICS

Max. Marks : 100

UNIT - IV

Lar e and s a sa p es: Tests of significance based on Normal, 't' 'F' and 'Z' distributions. Testing the significance of means, proportions, correlation and regression coefficients and their interpretation. Elementary Knowledge of Analysis of Variance (one-way and two -way classification) and Analysis of Covariance.

Non Para etræ ests: Chi-square test and sign test.

ua ty Contro Elementary Knowledge of quality Control and its simple application.

RECOMMENDED READINGS

1.	Croxton, F.E. & Cowden, D.J. (latest edition)	:	Applied General Statistics, Prentice Hall London and Prentice Hall of India.
2.	Gupta , S.C. &Kapoor, V.K. (1996)	:	Fundamentals of Applied Statistics, Sultan Chand & Sons, New Delhi
3.	Gupta, S.P. (1980)	:	Statistical Methods, Sultan Chand & Sons, New Delhi
4.	Kapoor, J.N. & H.C.Saxena (1976)	:	Mathematical Statistics, S. Chand & Co .Pvt. Ltd., New Delhi
5.	Mills, F.C. (1955)	:	Statistical Methods, Henry Hold & Co, New York
6.	Speigal, M.R. (1961)	:	Theory and Problems of Statistics
7.	Wonnacott, T. & Wonnacott, R. (1977)	:	Introductory Statistics for Business and Economics, John Willey & Sons.
8.	Yule, G.U. & Kendall, M.G. (1950)	:	An Introduction to Theory of Statistics (for theory of attributes)
		CLIDDI	EMENICA DV DE A DINGC
		SUPPL	LEMENTARY READINGS
1.	Carmal, P.H. (latest edition)	SUPPL	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London
1. 2.			Applied Statistics for Economics, Sir Issac Pitman and Sons
	(latest edition)	:	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London
2.	(latest edition) Chou, Ya-Lun (1975)	:	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London Statistical Analysis, Hold, Rinehart and Winston, New York.
2. 3.	(latest edition) Chou, Ya-Lun (1975) Freund, J.E. (1964) Freund, J.E. & William,	:	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London Statistical Analysis, Hold, Rinehart and Winston, New York. Mathematical Statistics, Prentice Hall
2. 3. 4.	(latest edition) Chou, Ya-Lun (1975) Freund, J.E. (1964) Freund, J.E. & William, F.J. (1979)	: : : : : : : : : : : : : : : : : : : :	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London Statistical Analysis, Hold, Rinehart and Winston, New York. Mathematical Statistics, Prentice Hall Modern Business Statistics, Prentice Hall, Englewood
 2. 3. 4. 5. 	(latest edition) Chou, Ya-Lun (1975) Freund, J.E. (1964) Freund, J.E. & William, F.J. (1979) Grant, R.L. (1996)	: : : : : : : : : : : : : : : : : : : :	Applied Statistics for Economics, Sir Issac Pitman and Sons Ltd., London Statistical Analysis, Hold, Rinehart and Winston, New York. Mathematical Statistics, Prentice Hall Modern Business Statistics, Prentice Hall, Englewood Statistical Quality Control, McGraw Hill Book

SOCIOLOGY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

SEMESTER -III

SOCIAL THOUGHT (Compulsory)

Max. Marks : 100 Theory : 90 Marks Internal Assessment : 10 Marks

Time :

B.A. /B.SC.(HONOURS) SECOND YEAR (SEMESTER SYSTEM) 2020-2021 SYLLABUS

Essential Readings:

PHILOSOPHY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

SEMESTER – III

Paper: CONTEMPORARY WESTERN PHILOSOPHY & CONTEMPORARY INDIAN THOUGHT AND CULTURE

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D-107282252(xD)=39412005(xD=41101569(hD)6594536(e)-6.0241()-3.01205(f)q6..0723(n)6.0241(l)-1.78252(s)3.45915(t)0.89126(i)]T89126(o)-6..0723(n)6.0241()3 Max. Marks : 100

90 Marks Theory Internal Assessment 10 Marks Time 3 Hours

Aims and Objectives:

The aim of this paper is to acquaint students with the theories of different western contemporary philosophers and the problems of language, perception, meaning and truth, science and God; and to familiarize the students with Indian thought and culture according to Contemporary Indian thinkers.

INSTRUCTIONS FOR THE PAPER-SETTER AND THE CANDIDATES:

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There shall be 9 questions in all. The first question sha(t)0.89126(i)]TJ 200.04 0 Td [(o)-18.0723(n)6.0241()-87.3493j42-6.0241()

Unit-IV

- Sri Aurobindo
- Swami Dayanand Saraswati
- Swami Vivekananda.
- Tagore

Essential Readings:

- 1. Ayer A.J.,(1982) Philosophy in the 20th: Unwin.
- 2. Narvane V.S., (1967), M

PHILOSOPHY

$\boldsymbol{SEMESTER-IV}$

Paper: STUDY OF A SPECIAL PHILOSOPHER

Max. Marks : 100

Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hours

Aims and Objectives:

The aim of this paper is to make students study a philosopher indepth amongst the options offered.

OR

Option (iii): IMMANUEL KANT

Unit-I : A –priori and A –posteriori judgements.

Unit-II : Nature of Space and Time.

Unit-III: Function of Categories and Significance of Antinomies.

Unit-IV : Refutation on the various proofs for the existence of God.

OR

Option (iv): UPANISHADS

(Chandogya, Mandukya and Isa)

Unit-I : Mandukya's Treatment of 'Aum'. Symbol of Immanent and Transcendent aspects of

Atman.

Unit-II : Philosophy of Being as instructed by Uddalaka Aruni in Chandogya Upanishad.

Unit-III : Nature of Atman in Isa Upanishad.

Unit-IV: Views of Upanishads on Brahman, Soul and World.

OR

Option (v): SARTRE: Being and Nothingness

Unit-I : Being-in-itself and Being-for-itself.

Unit-II : Facticity.

Unit-III : Freedom, responsibility and badfaith.

Unit-IV: Being for Others, Existence of Others, the problem of embodiment.

OR

Option (vi): NAGARJUNA

Unit-I : Concept of Sunya.

Unit-II : Sunyata and Pratiyasamutpada.

Unit-III : Logic and Reality.

Unit-IV : Dialectical System.

Option (vii): SAMKARA

Unit-I : Theory of Causation.

Unit-II : Prakriti as a Ultimate Cause.

Unit-III : Parinamavada Vs. Vivartavada.

Unit-IV : Refutation of Prakritikaranavada.

OR

Option (viii): PATANJALI

Unit-I : Language and meaning.

Unit-II : Word-meaning relationship.

Unit-III : Purpose of grammar.
Unit-IV : Sabda as a Pramana.

Essential Readings:

- 1. B.Jowetth(Tr. Ploto's Dialogues(1937), Plato-Republic, Theatetus, Cratylus In: New York: Random
- 2. Banarasi Dass(1956), Samkara, Brahmasutrabhasya: Tarka Pada (First four Sutras, Thibaut, Sacred Books of the East, Delhi: Motilal Banarasi Dass.
- 3. Howells Christina (1992), Cambridge Companion to Sartre e., Cambridge University Press, 1992.
- 4. Kemp Smith (Tr.) Norman (1952), Kant-Critique of Pure Reason: London, Macmillan.
- 5. Patanjali : Mahabhasya, Chaps. I & II Gita Press, Gorakhpur, 1927
- 6. Republic, Hackett Publishing Company, Indian Polish, 1992, U.S.A.
- 7. Sartre J.P.(1993), Being & Nothingness: Washington Square Press, 1993.
- 8. Sedley D.N.(2003), Cratylus in Plato's Dialogues, Plato, Cambridge University Press:, Cambridge, U.K..
- 9. Stcherbatsky Theo (2003), Nagarjuna-Madhyamika Karika, Stcherbatsky Theo: Conception of Buddhist Nirvana Delhi: Bharatiya Vidya Prakashan
- 10. Waterfield Penguine Robin H. (2004) Theatetus, Plato, Robin H. Waterfield, Penguine Books, London
- 11. Washington John(1956), Aristotle-Metaphysics Ed. & Tr. By John Washington and with an introduction by Sir David Ross: London: Dentsons).

Suggested Readings:

- 1. C.Lodge Rupert (1956), The Philosophy of Plato: London.
- 2. Chattopadhyaya (2000), The Philosophy of Sankara's Advaita Vedanta: Sarop of Sons.
- 3. Gosling J.C. B(1973) Plato, Routledge &an Paul

PSYCHOLOGY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER-III

PAPER: SOCIAL PSYCHOLOGY

Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hours

Objectives:

(I) Social Psychology course emphasizes the relationship between society and individuals. It also enables the students in understanding group dynamics, role of attitudes and leadership behaviour in the society.

(II) Pedagogy of the Course Work:

80 % Lectures (including expert lectures).

20 % assignments, discussion and seminars and tests.

INSTRUCTIONS FOR THE PAPER-SETTER AND THE CANDIDATES:

There shall be 9 questions in all. Five questions are required to be attempted. The first question shall be Short Answer type containing 12 short questions spread over the whole syllabus and the students are required to attempt nine short answer type questions in about 25 - 30 words each. Each short question will carry 2 marks, totalling 18 marks, and shall be compulsory question. Rest of the paper shall contain 4 Units. Each Unit shall have two essay type questions and the candidates shall be given internal choice i.e. the candidates shall attempt one question from each Unit –4 in all.

Unit I: Introduct on Nature of Social Psychology, Methods of Research in Social Psychology.

Unit II: Att *tudes Concepts, Formation of Attitudes, Theories of Attitude Change; Measurement of Attitudes.

Unit III: Leaders p Functions of Leaders, Theories of Leadership (Trait Theories, Behavioural Theories, Fiedler's Contingency Model).

Unit IV: Applications of Social Psychology: Pro Social behavior, Bullying, Ragging.

Books Recommended:

Suggested Readings:

1. Baron, R.A. and Byrne, D. (2003) : Social Psychology : Understanding Human Interaction,

New Delhi: Prentice Hall of India.

2. Robbins, S.P. (1998) ZZZZZZZZZZ : Organizational Behaviour, New York : Prentice Hall of India.

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PSYCHOLOGY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER IV

Paper: RECENT PERSPECTIVES OF PSYCHOLOGY

Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hours

Objectives:

- (I) This course aims at helping the students to appreciate the basic assumptions, principles and historical roots of modern scientific psychology. It will also help them to understand main theoretical perspective in psychology.
- (II) Pedagogy of the Course Work:

80 % Lectures (including expert lectures).

20 % assignments, discussion and seminars and tests.

INSTRUCTIONS FOR THE PAPER-SETTER AND THE CANDIDATES:

There shall be 9 questions in all. Five questions are required to be attempted. The first question shall be Short Answer type containing 12 short questions spread over the whole syllabus and the students are required to attempt nine short answer type questions in about 25 - 30 words each. Each short question will carry 2 marks, totaling 18 marks, and shall be compulsory question. Rest of the paper shall contain 4 Units. Each Unit shall have two essay type questions and the candidates shall be given internal choice i.e. the candidates shall attempt one question from each Unit -4 in all.

Unit- I: E ot ona Inte ence

GEOGRAPHY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER-III

Paper-I: THE NATURE OF GEOGRAPHY

Max. Marks : 100 (Terminal Exam : 90 Marks) Internal Assessment : 10Marks Time : 3 Hours

Objectives:

- 1. To introduce the students to the philosophical and methodological foundations of the subject and its place in the world of knowledge.
- 2. To familiarise them with the major landmark

Notes

- 1. A compulsory question containing 15 short answer type questions shall be set covering the whole syllabus. The students shall attempt any 10 parts in about 25-30 words each. Each part will carry 2 marks (total 20 marks).
- 2. The whole syllabus will be divided into 4 units. Eight questions will be set out of the whole syllabus, 2 from each unit. The students will be required to attempt one question from each unit and each question will carry 17.5 marks. These will be in addition to the compulsory question at Serial Number 1.

GEOGRAPHY

B.A. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER IV

Any one o t e o ow n_{\sharp} opt ona courses

Option (i): POPULATION GEOGRAPHY (An Elementary Course)

OR

Option (ii): URBAN GEOGRAPHY (An Elementary Course)

Option (i): POPULATION GEOGRAPHY (An Elementary Course)

Max. Marks : 100 Theory : 90 Marks Internal Assessment : 10 Marks B.A. /B.SC.(HONOURS) SECOND YEAR (SEMESTER SYSTEM)

PUBLIC ADMINISTRATION

SEMESTER-III

PAPER-I: ADMINISTRATIVE THOUGHT

Max. Marks: 100
Theory: 90 Marks
Internal assessment: 10 Marks
Time: 3 Hours

Objective of the Paper:

The objective of the paper is to give the student an understanding of select ancient, classical, neo-classical and modern administrative thinkers and their contribution to administration.

INSTRUCTIONS FOR PAPER-SETTERS AND CANDIDATES

For Private/University School of Open Learning (USOL) students, who have not been assessed earlier for the internal assessment, the marks secured by them in the paper will proportionately be increased in lieu of the internal assessment.

The Paper-Setter must put a note in question paper in this regard.

The candidate shall attempt 5 questions in all (one compulsory and one each from four units). The first compulsory question shall comprise of 12 short-answer type questions, covering the whole syllabus, to be answered in 25-30 words each, out of which the candidate would be required to attempt any 9. Each question will carry 2 marks. Rest of the paper shall contain 4 units, each unit having two questions, out of which the candidate would be required to attempt one. Each quest c 0 wo183-6.0241(1)124

Essential Readings

Bertram, M. Gross.(1964). e Mana n of Or an sations e Ad n strat we tru e .London: Mac Millan Publishers.

Fred W, Rigg.(1964). Ad natration in Developin Countries. Boston Houghton.

George, C.S.(1974). History of Mana e ent ou t New Delhi: Prentice Hall.

Hooja, R & Arora, R. K. (2007). Ad Instrative eories . Jaipur: Rawat Publicaion.

Katariya,S.(2011). Ad natrat ve n ers . New Delhi: National Publishing House Jaipur.

Maheshwari ,S.R.(2003) . Ad natrat ve n ers .New Delhi: MacMillan.

Prasad & Prasad.(2007). Ad natrative in ers. New Delhi: Sterling Publishers, Reprint.

Sapru, R.K.(1996). eor es of ad natration . New Delhi: S. Chand.

Simon, A. Herbert. (1976). 3rd Ed. Ad n strat ve Be av our A tudy of Dec son Ma n Process n Ad n strat ve Or an sat on . New York: Macmillan.

Sudha, G.S.(2004). Mana e ent of History in ers. Jaipur: R.B.S.A. Publishers.

Further Reading

Barnard, C. (1974). e Functions of t e Executive. London: Oxford University Press.

Pugh, D. S. (1984). 2nd Ed. Or an sat on eory .Harmondsworth :Penguin Books.

Rabin, J. & Others. (2007). 3rd Ed. *Handboo of Pub & Ad natration* New York: Marcel Dekker.

Silverman, D.(1970). e eory of Or an sat on . London: Heinemann.

Unit-III

New Technology for the Development of Agriculture Marketing of Agriculture Produce Agriculture Finance and Rural Indebtedness

Unit-IV

Role of NABARD in Agricultural Development Agricultural Education and Research World Trade Organisation and Agriculture

Essential Readings

Chaudhary, P. (1972). ead n s n Ind un A r tu tura Deve op ent. London: George Allen & Unwin. Ghosh, R.N.(1977).

INSTRUCTIONS FOR PAPER-SETTERS AND CANDIDATES

For Private/University School of Open Learning (USOL) students, who have not been assessed earlier for the internal assessment, the marks secured by them in the paper will proportionately be increased in lieu of the internal assessment.

The Paper-Setter must put a note in question paper in this regard.

The candidate shall attempt 5 questions in all (one compulsory and one each from four units). The first compulsory question shall comprise of 12 short-answer type questions, covering the whole syllabus, to be answered in 25-30 words each, out of which the candidate would be required to attempt any 9. Each question will carry 2 marks. Rest of the paper shall contain 4 units, each unit having two questions, out of which the candidate would be required to attempt one. Each question will carry 18 marks.

UNIT-I

Industrialization – Meaning, Objectives and Rationale

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Further Readings

Dhar, P.K. (2007). Indun Econo y Its Grown D. ens. ons New Delhi: Kalyani Publishers. Govt. of India. (2002). P eand

Unit-II

Organization and functions of Union Ministry of Home Affairs Police Administration at State level Police Administration at District level

Unit-III

Police Personnel Administration in India: Recruitment and Training of Police Personnel at Centre (IPS) and State level (SPS)
Service conditions and Discipline in Police Services

Unit-IV

The Concept and Need of Community Policing. Concept & Importance of E-Governance in Police.

Attitudinal Change in Police: Concept, Significance and Methods.

Essential Readings

Chaturvedi, J.C. (2006). Po & Ad notration and Invest at ion of Cr v. e. New Delhi: Isha Books. Ghosh, S.K. & Rustamji, K.F.M. (1993,1994,1995). Encyc opaed a of Po & n Inda, Vol. I-III. New Delhi: Light and Life Publishers.

Gupta, A. (2007). *e Po &e n Br & Ind u*A New Delhi:Bureau of Police Research and Development.

James, V.D. (1998). Nationa Po ce Co soon Issue ntn f Po opns ce

Unit IV

Policy Monitoring and Evaluation; Criteria for Evaluation; Problems in Policy Evaluation

Essential Readings

Birkland, Thomas A. (2005) .An introduction to the Policy Process: Theories , Concepts and Models of Public Policy Making M.E.Sharpe

Dye, Thomas (2002) Understanding Public Policy (New Delhi:Pearson Education Singapore (P) Ltd.,

Henry, Nicholas (2015) Public Administration and Public Affairs, (New Jersey: Prentice Hall, Twelfth Edition.

Mathur, Kuldeep (2013). Public Policy and Politics in India: How Institutions Matter? (Oxford,

Manon, Vineetha (2014) Public Policy and Administration, Wisdom Press, New Delhi,

Sapru, R.K. Public Policy: Art and Craft of Policy Analysis (New Delhi: Prentice Hall of India, learning 2nd Edition.)

Furthur Readings

Anderson, J. E. (2005). *Pub & Po & Ma & n* ed . New York: Houghton Mifflin Co.

Ayyar, V. R.V. (2009) Pub & Po & Ma n n Inda. New Delhi: Pearson.

Frank. F, Miller, G. J., & Sidney, M.S. (2007). Handboo of Pub & Po &y Ana ys & eory Po &&s and Met ods, Boca Raton, Florida: CRC Press.

Nagel . S.S. (1991 Pub & Po & Goa's Means and Met ods. New York: St. Martin Press.

Rabin J., Hildreth, W., & Miller, G. (2007). *Handboo of Pub & Ad natration* rd ed Florida: Taylor & Francis Group.

ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

B.A. (HONOURS) SECOND YEAR (SEMESTER SYSTEM) EXAMINATION, 2020-21 SEMESTER-III

Note The students shall have to opt for one paper for Semester III examination out of the following two papers:

OUTLINESOFTEST

UNIT-II

- 3. Origin and development of caste system.
- 4. Slavery in ancient India.
- 5. Stages of life four asramas.

UNIT-III

- 6. Family life and law of inheritance.
- 7. Development of education in ancient India.
- 8. Dress, ornaments, foods and drinks.

UNIT-IV

- 9. Position of women in ancient India.
- 10. Institution of marriage.

Essential Readings:

1. Altekar, A.S. : e Poston of o en n Hindu Critation Motilal Banarsidass, Delhi, 1991.

2. Altekar, A.S. : Education in Ancient India rpt. Gyan Publishing House, New Delhi 2009.

3. Banerji, S.C. : oc ety in Ancient India D.K. Print World, NewDelhi, 1997.

4. Basham, A.L. ed. : Cu tura History of India

Paper-II: ECONOMIC IDEAS AND ECONOMIC LIFE FROM THE EARLIEST TIMES TO 1000 A.D.

Max.Marks : 100

Theory : 90 Marks Internal Assessment : 10 Marks Time : 3 Hours

Objective:

1. The main objective of this paper is to familiarize the students with economic ideas as contained in the secular and non-secular literature of our country. It will also make a survey of the economic life in ancient India to help the students to underst and economic institutions of those times.

2. Pedagogy of the Course Work:

The students should be given an idea of the chronology, authorship and contents of thtud. of thp: il

UNIT-IV:

- 7. Trade and Commerce in ancient India.
- 8. Guild System.
- 9. Trade routes and transport.

Essential Readings:

1.	Gopal, Lallanji:	Econo & L.fe in Nort ern India (700to1200 A.D.) Motilal Banarsidass, Delhi,1965.
2.	Maity, S.K. :	Econo & L.fe in Nort India in the Gupta Period Motilal Banarsidass, Calcutta, 1970.

3. Majumdar, B.P. : och and Econo & History of Nort Inducation of N Nna 4 I 4 K4

ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY

UNIT-III:

- 5. Administrative Organisation under the Kushanas.
- 6. Administrative Organisation under the Guptas.

UNIT-IV:

- 7. Administrative Organisation under the Pushyabhutis.
- 8. Administrative Organisation under the Cholas.

Essential Readings:

1. Altekar, A.S. : tate and Govern ent in Ancient India Motilal Banarsidass, Delhi, 2002

.

2. Devhuti, D. : Hars a A Po **ca tudy Oxford University Press New Delhi, 2001.

3. Ghoshal, U.N. :

Paper IV: HISTORY OF ART AND ARCHITECTURE (EARLIEST TIMES TO C. 1000 A.D.)

Total Marks : 100
Theory : 90
Internal Assessment : 10
Total : 3 Hours

Objectives:

The main objective of the paper is to acquaint the students with the development in field of art and architecture of ancient India. The couse shall help students to learn about our heritage.

Pedagogy of the Course Work:

Besides gie3

UNIT-IV:

Sculpture

(a) Early Period – Mauryan, Sunga and Kushanas.

(b) Gupta and Early Medieval – Gupta, Pala and Chola.

Essential Readings:

1. Agrawala, P.K. : Gupta e p e Arc Mecture Prithvi Prakashan Varanasi, 1968.

2. Agrawala, V.S. : Gupta Art U.P Historical Society Lucknow, 1948.

3. Agrawala, V. S. : *Ind an Art* Prithvi Prakashan Varanasi, 1965.

4. Brown, Percy : Indan Arc secture Budd st and Hadu Perod D.B. Taraporevala

Sons, Bombay, 1971.

5. Dehejia, Vidya : Ear y Budd st oc e p es A C rono o ca tudy Thomson

and Hudson Ltd., London, 1972.

6. Gangoly, O.C. : out Indun Bronzes Nababharat Publishers, Calcutta, 1978.

7. Harle, J.C. : Gupta cu pture Munshiram Manoharlal, New Delhi, 1996.

8. Huntington, S. : e Art of Anc ent Ind a Budd at H ndu Jan Weather Hill,

Tokyo, 1985.

9. Kramrisch, Stella : Ind un cup ture o s Motilal Banarasidas, Delhi, 1981

10. Krishna Deva : e p es of Nort Ind u National Book Trust India, New Delhi, 2000

Essential Readings:

1. Ray, Niharranjan : Maurya and un a Art Indian Studies, Calcutta, 1965

2. Rowland, R. : e Art and Arc **Lecture of Ind a Penguin Books, London, 1953

3. Saraswati, S.K. : urvey of Ind an cupture nd ed Munshiram Manoharlal, New

Delhi, 1975.

4. Srinivasan, K.R. : e p es of out Ind u National Book Trust, India, New Delhi, 1998.

POLICE ADMINISTRATION

B.A. (HONOURS) 3rd Semester EXAMINATION, 2020-21

SEMESTER-III

Semester III: Police Administration and Crime

(A) Course Objectives:

Unit- II

POLICE ADMINISTRATION

B.A. (HONOURS) 4th Semester EXAMINATION, 2020-21

SEMESTER-IV

Paper: Correctional Administration

(A) Course Objectives:

The Prime objective of this course is to familiarize the students with the meaning, nature, scope and principle of correctional administration. In addition the efforts are made to discuss with the students, Prison administration along with the alternative non-institutional methods of Probation and Parole elaborately.

(B) Pedagogy of the Course Work:

90 per cent of the Course Content would be delivered through Lecture Method and rest 10 per cent would comprise of :

- i. Internal Test-5%;
- ii. Academic activities (Seminar, Project, Assignment)-3%;
- iii. Attendance-2%

(C) Instructions for Paper Setters and Candidates:

- The maximum marks for the paper will be 100. The question paper will be of 90 marks and internal assessment of 10 marks.
- Time allowed will be 3 hours.
- There shall be 9 questions in all.
- The first question shall be compulsory and be short answer type containing 12 short questions spread over the whole syllabus and to be answered in about 25 to 30 words. The candidate is required to attempt any 9 short answer type questions carrying 2 marks (9x2 = 18 marks).
- Rest of the paper shall contain 4 units. Each unit shall have two questions and the candidates shall be given internal choice i.e. the candidates shall hav6(i)()'/R309 9.96 Tf -3.72 -117.1084(h)6.0241(a)-13.8307(v6(i)1.78252(

Unit-IV

Prison Reforms in India.

Open Prisons: Concept, Origin and Advantages.

Prisons and Human Rights.

Essential Readings

1. Paranjpe, N.V. : Criminology and Penology, Central Law

Publication, Allahabad, 2008

2. Ahuja, R. : Criminology, Rawat Publication, Jaipur,

2008

3. Abadinsky, Howard : Organized Crime, Wordsworth-Thomson

Learning Academy Resources Centre, C.A.,

2003

4. Davies, Martin : Prisoners of Society: Attitudes and After-Care.

5. Singh Deipa, Singh K P : Criminology, Penology and Victimology, The

Bright Law House, New Delhi, 2013

Further Readings

1. Abadinsky, Howard : Organized Crime, Wordsworth- Thomson

Learning Academy Resources Centre, C.A.

2003

2. Hassine, Victor : Life without Parole: Living in Prison Today,

Roxbury Publishing Company, California,

2004.

3. Carrbine, Eamonn. et.al. : Criminology: A Sociological Introduction,

Routledge, London, 2005.

4. Pollock, Joyceiyn M. : Prisons and Prison Life: Costs and

Consequences, Roxbury Publishing Company,

California,2004.

5. Pachauri, S.K : Prisoners and Human Rights, A.P.H.

Publishing Corporation, New Delhi, 1999.

6. Paluch (Jr.), James A. : A Life for a Life-Life Imprisonment:

America's Other Death Penalty, Edited by Bernard, Thomas J. & Johnson, Robert, Roxbury Publishing Company, California,

2004.

7. Sharma, S.D. : Creative Activities and the Law: Human Rights

Approach, Deep & Deep Publications, 2007.

MUSIC (VOCAL AND INSTRUMENTAL)

UNIT-II

- 1. Detailed Study of Ghrana/Baaj of the following:
 - (a) Khayal Gayan
 - (b) Sitar Vadan.
- 2. A study of the following:-Thumri, Misarkhani, Zafarkhani Gat and Sadra
- 3. Brief Knowledge of the following:-Nada, Swara, Shruti, Nyas, Vadi, Sambadi and Vivadi Swar.

UNIT-III

- 1. Shudha Vikrat Swaas of Bharat and Pt.Srinivas
- 2. Study of Shruti, Chatur-Sarana or Bharat and Sharngdev
- 3. Importance of Laya and Tala

UNIT-IV

Paper-II: Practical (Choice & Viva)

45 Marks

Internal Assessment : 05 Marks Time : 45 Minutes

(a) Choice (Solo performance): 22.5 Marks(b) Practical Test: 22.5 Marks

(i) Tuning : 5 Marks

(ii) Capacity to play Talas on Tabla : 2.5 Marks

(iii) Capacity to play Harmonium : 2.5 Marks

(iv) Viva : 12.5 Marks

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Talas	: Jhaptal and Teental on Tabla.	7.5 marks
(i)	One slow Khayal with extempore Alaps and Tanas in any of the detailed Ragas.	
	OR	
	One slow Gat with extempore Alaps and Toras in any of the detailed Ragas.	
(ii)	Two fast khayals or two fast gats with elaboration in each of the prescribed Ragas.	5 marks
(iii)	Ability to recite Dhamar, Adachautal and Deepchandi talas in single.	2.5 marks.
(iv)	Tuning of your instrument.	2.5 marks
(v)	Capacity to play on Tabla the Talas prescribed in the course.	2.5 marks
	(i) (ii) (iii) (iv)	OR One slow Gat with extempore Alaps and Toras in any of the detailed Ragas. (ii) Two fast khayals or two fast gats with elaboration in each of the prescribed Ragas. (iii) Ability to recite Dhamar, Adachautal and Deepchandi talas in single. (iv) Tuning of your instrument.

2.5 marks

(vi) Capacity to play on the Harmonium any raga from the choice.

PAPER-A: THEORY

UNIT-I

- 1. Detailed study of Gram
- 2. Detailed study of Murchhna

UNIT-II

- 3. Role of Electronic Media in Indian Classical Music
- 4. Music and Fine Arts

UNIT-III

- 1. A study of the following:-Sitarkhani Gat , Dhun, Chaturang, Dadra
- 2. Brief knowledge of the following with illustrations:-Zamzama, Jod Alap, Mulki, Avirbhav & Tirobhav.
- 3. A study of present raga Lakshan

UNIT-IV

- 1. Notation of Detailed Ragas and Talaas
 - A) i) Notation of Khayal /Gat
 - ii) Notation of Tala prescribed in the syllabus:Tivra, Jhumra, Punjabi Theka

Non detailed Ragas

- B) i) Kedar
 - ii) Dash

UNIT-V

The ninth question of unit V is compulsory & it consists of 13 short answer questions (covering entire syllabus i.e. theory and practical) out of which students have to attempt 09 questions of carry 01 marks each.

Paper-B: Practical (Choice & Viva)

45 Marks

Internal Assessment : 05 Marks Time : 45 Minutes

(a) Choice (Solo performance)

: ()9./26(n)6.024.(-6.0241(u)6.024.(-6.0241(u)6.)-3.01205

(i)

(ii)

(iii)

(iv)

Books Recommended:

Sangeet swarit : Dr. Ramakant Dwivedi
 Sangeetanjali : Pt. Onkar Nath Thakur
 Abhinav Geetanjali : Pt. Ramashray Jha

4. Sanchar Aur Sanchar Madhyam : Dr. Chandra Prakash Mishra

5. Pillars of Hindustani Music : B.R. Deodhar

6. Sangeet Visharad : Basant

Raag Parichay
 Harish Chandra Srivastav
 Sangeet Prabodhika
 Dr. Parmanand Bansal

9. Raag ka Udbhav Evam Vikas :

HOME SCIENCE

	•					B.A./B.Sc.	(Honours)	Second	year	nas	been
KEF	T IN AB	EY.	ANCE	for the se	essio	n 2020-21					

PHYSICS

B.Sc. (HONOURS) SECOND YEAR (3^{rd} and 4^{th} Semester) EXAMINATION, 2020-21

General Instructions for teachers, students and paper setters:

1. There will be two papers in each of the Semesters IS33 0 0 52(1)0.891Td(t)-45.7825

Unit II

PHYSICS

SEMESTER-IV

Paper III: Statistics and Numerical Techniques

Unit I

Statistics and Probability: Measures of central tendency, Arithmetic mean, median, mode, Geometric mean, Harmonic mean, Quartiles, deciles and percentiles.

Measures of dispersion : Standard deviation, mean deviation, semi-interquartile range, coefficient of variation, Moments, Skewness and Kurtosis.

Linear Correlation and Regression for Two Variables only.

Conditional probability, probability distributions, Mathematical expectation, Probability and Combinatorial analysis

(Book 1)

Counting Statistics and Error Prediction: Characterization of Data, Binomial, Normal and Poisson distributions and their applications, Estimation of the Precision of a Single Measurement, Measure of consistency of observed fluctuations with expected Statistical fluctuation, chi square, Error Propagation, Distribution of time intervals between successive random events.

(Book 2)

Unit II

Numerical Techniques:

Solution of Algebraic and Transcendental Equations: Bisection Method, Secant Method, Newton-Raphson Method.

Interpolation: Finite difference interpolation with equal intervals, Newton' Forward and Backward Interpolation Formulae, Interpolation with unequally spaced points, Lagrange's interpolation formula, Extrapolation.

Numerical integration by Trapezoidal, Weddle's and Simpson's rules, Romberg integration.

Unit-II

Elementary Concepts II:

(05 Lectures)

Terms of mean, medium, precision and accuracy in chemical analysis, types of errors in analysis, determining accuracy of methods, improving accuracy of analysis, data treatment for series involving relatively few measurements, least square curve fitting, propagation of errors, significant figure convention, standard deviations, confidence limits.

Theory of volumetric and gravimetric methods of analysis, primary and secondary standards, theory of indicators and their selection for titrations, precipitation methods, optimum conditions for precipitation, steps involved in gravimetric analysis, important organic precipitants.

Unit-III

Acid-Base Equilibria:

(05 Lectures)

Acids and bases, ionization equilibria for weak monobasic acids, bases and related salts, acid base titration reagents and indicators for neutralization titrations, neutralization titrations for a strong acid with a

Unit-IV

Pericyclic Reactions II:

(05 Lectures)

(4+2) and (2+2) cycloadditions, exo and endo isomers, Examples Bicyclo (2, 2, 1) heptane and Bicyclo (2, 2, 2,) octane systems. Intramolecular Diels Alder reaction.

atrop x earran e ents Woodward and Hoffmann rules, Frontier Molecular orbital for 1, 3; 1, 5 and 1, 7 shifts. Examples including vitamin D_2 formation from 7-dehydro cholesterol (Provitamin D_3).

BOTANY

B.Sc. (HONOURS) SECOND YEAR EXAMINATION, 2020-21

Third Semester

		Time	Theory	Int Assess.	Max Marks
Theory Paper-A:	Plant Physiology	3 hrs.	36	04	40
Theory Paper-B:	Development of Plants and their Utilization – I	3 hrs.	36	04	40
One practical pertaining to entire syllabus included in both theory papers		3 hrs.	18	02	20
Fourth Semester					
Theory Paper-A:	Plant Ecology	3 hrs.	36	04	40
Theory Paper-B:	Development of Plants and their Utilization – II	3 hrs.	36	04	40
One practical pertaining to entire syllabus included in both theory papers		3 hrs.	18	02	20
		Total			200

Note

- 1. The number of teaching hours for theory and practical per session shall be 60 hrs. and 100 hrs. respectively.
- 2. There will be a two theory papers (A & B) in each semester. Each paper will consist of 9 questions. Question No. 1 will be compulsory and will consist of 8 parts (one mark each) comprising 4 MCQ and the rest 4 parts will be of fill-in the blanks covering the entire syllabus in both the theory papers A & B. The remaining 8 questions in papers A & B shall include two questions from each unit. Candidates shall be required to attempt one question from each Unit. Question No. 1 will carry 8 marks and the rest of 8 questions will be of 7 marks each.

SEMESTER -III

Paper -A: PLANT PHYSIOLOGY

Objective: The main objective of this paper is to make the students aware about various functions and metabolisms of plants. The course material of this paper would enable the students to understand gradual aspects of growth and development in plants along \boldsymbol{w}

Suggested Readings:

- 1. Copleand, R. A. Enzymes: A Practical Introduction to Structure, Mechanism and Data Analysis, VCH Publishers, New York, 1996.
- 2. Dryer, R.L. and Lata, G.F. Experimental Biochemistry, Oxford University Press, New York, 1989.
- Galston, A.W. Life Processess In Plants, Scientific American Library, Springer-Verlag, New York USA, 1989.
- 4. Hooykaas, P.J.J., Hall M.A. and Libbenga, K.R. (eds.) Biochemistry and Molecular Biology of Plant Hormones, Elsevier, Amsterdam, The Netherlands, 1999.
- Hopkins W.G. Introduction to Plant Physiology: John Wiley and Sons. Inc., New York, USA, 1995.
- Moore, T.C. Research Experiences in Plant Physiology: A Laboratory Manual, Springer-Verlag, Berlin, 1974.
- 7. Moore, T.C. Biochemistry and Physiology of Plant Hormones (2nd edition), Springer-Verlag, New York, USA, 1989.
- 8. Salisbury. F.B. and Ross, C.W. Plant Physiology (4th edition), Wadsworth Pulishing Co., California, USA, 1992.
- 9. Srivastava, H.N. Plant Physiology, Biochemistry & Biotechnology, Vol. V, Pradeep Publications, Jalandhar, India, 2013.
- 10. Taiz, L. and Zeiger, E. Plant Physiologyy (5th edition), Sinauer Associates, Inc., Publishers, Massachusetts, USA, 2010.
- Wilson, K. and Goulding, K.H. (eds.). A Biologist's Guide to Principles and Techniques of Practical Biochemistry, Edward Arnold, London, U.K., 1986.

Suggested Labortary exercises for Third Semester

- 1. To study the permeability of plasma membrane using different concentrations of organic solvents.
- 2. To study the effect of temperature on permeability of plasma membrane.
- 3. To extract enzymes and study their activity, e.g. amylase, lipase, acid phosphatase, catalase, peroxidase.
- 4. Effect of the following factors on enzyme activity:

 pH, temperature, enzyme and substrate concentration, heavy metals.
- 5. To extract and separate chloroplast pigments by solvent method and demonstrate fluorescence in chloroplast extracts.
- 6. To determine the osmotic potential of vascular sap by plasmolytic method.

- 7. To determine the water potential of given tissue (any tuber).
- 8. To determine stomatal Index, stomatal frequency and percentage of leaf area open through stomata. Also study the effect of ABA on stomatal closure.
- 9. Effect of carbon dioxide concentration on the rate of photosynthesis.
- 10. To demonstrate that oxygen is evolved during photosynthesis.

Paper -B: DEVELOPMENT OF PLANTS AND THEIR UTILIZATION-I

Objective: This paper deals with internal structure of various plant parts, their growth and development patterns. It gives an insight into plant domestication and role of wild plants in ecosystem functioning.

Teaching Methodology: Teaching methodology includes series of lectures, making use of charts, transparencies, LCD, Models, slides, practical demo

- 3. Cutter, E.G. Plant Anatomy: Experiment and Interpretation, Part II, Organs, Edward Arnold, London, 1971.
- 4. Esau, K. Anatomy of Seed Plants, 2nd Edition, John Wiley and Sons, New York, 1977.
- 5. Fahn, A. Plant Anatomy, 2nd Edition, Pergamon Press, Oxford, 1974.
- 6. Fuller, K.W. and Gallon, J.R. Plant Products and New Technology, Clarendon Press, Oxford, New York, 1985.
- 7. Mauseth, J.D. Plant Anatomy, The Benjamin/Cummings Publishing Company Inc., Menlo Park, California, USA, 1998.
- 8. Nair, M.N.B. Wood Anatomy and Major Uses of Wood, Faculty of Forestry, University Putra Malaysia, 43400 Serdang, Selangor D.E. Malaysia, 1988.
- 9. Raghvan, V. Development Biology of Flowering Plants, Springer-Verlag, New York, 2000.
- 10. Raven, P.H., Evert, R.F. and Eichhorn, S.E. Biology of Plants,5th Edition, W. H. Freeman and Co., Worth Publishers, New York, 1999.
- 11. Srivastava, H.N. Structure, Development and Reproduction in Flowering Plants, Vol. IV, Pradeep Publications, Jalandhar, India, 2007.
- 12. Goyal, J.P., Saini, Aruna. Angiosperms, Structure, Development and Reproduction, Trueman Company, Jalandhar, India, 2006.
- 13. Singh, V., Pande, P.C and Jain, D.K. Structure, Development and Reproduction in Angiosperms, Rastogi Publications, Meerut, India, 2012.

Suggested Laboratory Exercises:

- 1. Study in the field of a large variety of herbaceous and perennials, both monocotyledonous and dicotyledonous, aquatic, mesophytic, xeromorphic plants, succulents, climbers, twiners, parasites, and trees with varied canopy architecture. Field diary to be prepared.
- 2. Morphology and anatomy of stems, roots and leaves using stained hand sections of permanent slides (tapioca, carrot, radish, onion, garlic, turnip, potato, etc.)
- 3. Study of vascular cambium in stem and root. Secondary growth. Examples of cambial variants and resultant secondary structures.
- 4. Preparation of world maps to show Vavilov's centres of origin of cultivated plants and Zhukovsky's concept of mega centres.
- 5. Preparation of maps showing the centres of primary diversity of important economic plants that originated in India and region of cultivation of plants introduced from the New World, Europe, Central Asia, Australia, Malaysia, China.

Max. Marks:

20

Guidelines for Botany Practical Examination:

	Practical:	18	
	Int. Assessment:	2	
	Time:	3 hrs.	
Q.1. Write procedure and precautions for Physiology experiment A. Perforobservations calculation if any and results. Show the experiment to the	•	ord	5
Q.2. Write illustrated morphological note on specimens B & C.			4
Q.3. Idenitfy slides D & E giving at least two identifying features for each	1.		4
Q.4. Practical Note book.			2
Q.5. Viva-Voce			3

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BOTANY SEMESTER-IV

PAPER-A: PLANT ECOLOGY

Objective: This paper deals with the role of environment in causing structural and functional variations in plants. It provides a broad idea about concept of population, community, ecosystem, ecological succession and role of plant indicators in environment monitoring.

Teaching Methodology: Teaching methodology includes series of lectures, making use of charts, transparencies, LCD, Models, slides, practical demonstrations, extension lectures from experts, field visits, discussions, quiz competitions etc. In practical, students would be provided with fresh/preserved materials for their morphological and anatomical studies making use of microscope and binoculars and hands-on tools/equipment etc.

UNIT- I

Introduction : Holocoenotic nature of environment; limiting factors; ecological amplitude triggering factors (soil, water, atmosphere).

Ecological Adaptations: Concept, ecads, ecotypes and ecoclines; adaptations in relation to soil oligotrophy; adaptive significance of photosynthetic pathways.

Population : Concepts; density and pattern; idealized plant life history; population growth; carrying capacity; population regulation; r and k selection; population interactions.

UNIT- II

Community: Community characteristics and their measurement, species diversity (alpha, beta and gamma), niche.

Ecosystem : Concept, components and organisation, energy flow; ecological efficiencies; cycling of C, N and P; characterization and structure of ecosystem; the biotic and abiotic components, their interrelationship; the processes within ecosystem, the trophic organisation; autotrophy, heterotrophy, parasitism, detritus, decomposition.

Ecological Succession : Mechanism and types; nature of climax; food chains and food webs; ecological pyramids.

UNIT-III

Flow of Energy and Materials: Flow of energy and materials within ecosystem; models of energy

UNIT-I

A General account of wheat, rice, maize, sorghum, bajra, potato and sugarcane. **Legumes :** Chickpea (Bengal gram), red gram (arhar) – a general account.

UNIT-II

Vegetable Oil Sources: Mustard, groundnut, soyabean and coconut –a brief account.

Plant Fibres: Cotton, jute and coir.

Timber and Firewood Species : A general account of use of following trees:

ectona Da ber a A b z a Euca yptus Cedrus A

Suggested Laboratory Exercises

- 1. Study of vegetative and reproductive morphology and anatomy of wheat, rice, maize, sorghum, bajra, potato and sugarcane. Study of starch grains in these plants (except in sugarcane). Epidermal structure of sugarcane stem and leaves. Tests for sucrose.
- 2. Study of vegetative and floral morphology, and pod development in chickpea and red gram.
- 3. Study of structure of oil storing tissues in sectioned seeds of mustard, groundnut and soyabean, and coconut endosperm, using micro-chemical tests.
- 4. Study of wood anatomy of ring-porous, diffuse porous woods using hand sections or prepared slides. Understanding of wood anatomy using T.S., T.L.S. and R.L.S. in five timber yielding species (ectona Da ber u A b z u Euca yptus Cedrus Acac u orea er na u Man fera Azad vac ta or any other depending on the location of the institution). Preparation of a list of 10 fire wood species in your region and their properties.
- 5. Study of 10 whole plants (live or from herbarium specimens) used as resources of drugs: (Op u, auvo fu Ad atoda E b va officina s er ma u be rva G ycyrr va P y ant us a arus P fraternus), A u sat vu Atropa be adonna A oe barbadense or any other important plants of your area.
- 6. Study of laticiferous system in the stem of *Hevea bras Jens s* familiarization with whole plants (fresh or herbarium specimens of *Cy bopo on* sp., *Euca yptus Jas nu Geranu and et ver u* (or any other local sources of essential oils).
- Study of Azadirachta, Artemisia annua, Chrysanthemum cinerarifolium (pyrethrum) from live specimens. Sources of dyes: Curcuma longa (turmeric), Bixa orellana (annatto), Crocus sativus, Butea monosperma (palash), Indigo fera (indigo) and Lawsonia inermis (mehndi). Extraction of pigments.
- 8. Prep4(C)4.35041(u)6.0241meu

ZOOLOGY

B. Sc. (HONOURS) SEMESTER - III

PAPER I: ENVIRONMENTAL BIOLOGY-I

Max. Marks : 40
Theory Exam : 36 marks
Internal Assessment : 4 marks
Time : 3 hrs.

Note: Nine questions are to be set. Question No.1 is compulsory consisting of short answer type questions covering the whole syllabus. It will have 8 parts of 1mark each. Two questions are to be set from each Unit. One question is to be attempted from each Unit. In all, Five questions are to be attempted including compulsory one. 50% of the questions are to be split up into 2-4 sub-parts.

UNIT-I

- 1. **Environment :** Introduction and components.
- 2. **Ecological Concepts :** Ecosystem: Types food chains, food web, energy flow.

UNIT-II

- 3. **Biogeochemical cycles**
- 4. **Ecological succession**

UNIT-III

- 5. **Pollution: Types** Air, water, land, thermal and noise pollution.
 - (a)

Suggested Readings:

1. Odum, E.P. :

UNIT-III

5. **Proteins**: Classification, structure of amino acids, primary, secondary and tertiary structure of proteins, structure of hemoglobin and lysozyme.

UNIT-IV

6. **Nucleic Acids**: DNA. What genes are made of? Detailed structure of DNA Molecule, replication, RNA - various types, transcription, translation and involvement of RNAs in protein synthesis.

Books Recommended:

1.	Alberts, B., Bray, D., Lewis, J., Raff, M., Watson, J.D.		Molecular Biology of the Cell, Robert, K. & Garland Publications, New York, 1983
2.	DeRobertis, E.M.F. Jr.		Essentials of Cell and Molecular Biology, Halt Saunders, Japan, 1981
3.	DeRobertis, E.D.P. & DeRobertis, E.M.F.		Cell and Molecular Biology, 8 th edition, Halt Saunders, Tokyo, 1987.
4.	Gardner, E.J., Simmons, M.J. & Snustad, D.P		Principles of Genetics, John Wiley & Sons, New York, 2004.
5.	Power, C.B.		Cell Biology, Himalayan, Publishing House, Bombay, 1981
6.	Schleif, R.		Genetics and Molecular Biology, Addison-Wesley, Reading U.K, 1986
7.	Villee, C.A., Selomon, E.P. & Davis, P.W,	:	Biology, Saunders College Publishing, New York, 1985
8.	Watson, J.D.	:	Molecular Biology of the Gene, 4 th Edition, Vols. I & II, Narosa Book, New Delhi, 1987.
9.	Barry, J.M.	:	Molecular Biology, Genes and Chemical Control of Living Cells, Prentice Hall, Inc., New Jersey, 1964.

PRACTICALS

SEMESTER-III

Practical's based on both theory papers.

- 1. Estimation of D.O. of the given water sample (normal and polluted).
- 2. Estimation of total alkalinity of water sample (normal and polluted).
- 3. Estimation of chlorine of water sample (normal and polluted).
- 4. Estimation of Hardness of water sample (normal and polluted).
- 5. Estimation of NO3 of water sample (normal and polluted).
- 6. Estimation of PO4 of water sample (normal and polluted).
- 7. Analysis of the variations in protein contents in different organs of an animal procured from slaughter house.
- 8. Analysis of the species variations in amino acids requirements.
- 9. Demonstration of carbohydrate and proteins in a cell (Cytochemically).
- 10. Prepare a Project on national parks/sanctuaries/biosphere reserves.

The scheme for the conduct of Practical Examination.

ZOOLOGY

B. Sc. (HONOURS) SECOND YEAR EXAMINATION, 2020-21 SEMESTER-IV

PAPER I: ENVIRONMENTAL BIOLOGY-II PAPER II: MOLECULER BIOLOGY-II

Max. Marks : 40

Theory Exam. : 36 marks
Internal Assessment : 4 marks
Time : 3 hrs.

Note: Nine questions are to be set. Question No.1 is compulsory consisting of short answer type questions

covering the whole syllabus. It will have 8 parts-06.83030(k) e629.573901566(EQSI 8v8EQ7((u)]TJ 20g6.78252(1205())]TJ 1

Books Recommended:

1 Alberts, B. Bray, D., Lewis, J., Raff, : Molecular Biology of the Cell, Garland M., Robert, K. and Watson, J.D. Publications, New York, 1983.

2 DeRobertis, E.M.F. Jr. Essentials of Cell and Molecular Biology, Halt-:

Saunders, Japan, 1981.

3 DeRobertis, E.D.P. and DeRobertis, : Cell and Molecular Biology, 8th Edition, E.M.F.

Halt Saunders, Tokyo, 1987.

4 Gardner, E.J., Simmons, M.J. : Principles of Genetics, John Wiley and Sons,

New York, 2004.

Cell Biology, Himalayan Publishing House, 5 Power, C.B. :

Bombay, 1981.

6 Genetics and Molecular Biology, Addison-Schleif, R.

Wesley, Reading U.K., 1986.

7 Villee, C.A., Selomon, E.P. and Davis, : Biology, Saunders College Publishing,

P.W.

and Snustad, D.P.

Watson, J.D. 8 : New York, 1985.

The scheme for the conduct of Practical Examination.

Based on Theory Papers I & II of B.Sc. (Honours) IV Semester

Max. Marks 20

Practical Exam. 18 marks Internal Assessment 2marks

I. Record biota in the given sewage samples. Draw labeled sketches & demonstrare these to the examiner.

II. Examine water sample for biotic communities from particular zone of lake, sketch and demonstrate.

(3)

III. Identify the given chart/diagram. Write a brief note on it.

B.A. (Honours) MUSIC (INDIAN CLASSICAL DANCE), 2020-21

SEMESTER-III

General Instructions:-

- 1. In case of the private candidates, there will be no internal assessment and the marks obtained in the external assessment of the practical examination shall be proportionately increased.
- 2. There would not be more than eight students in one section in practical examination.
- 3. There would be upto eight students in one section in practical class.
- 4. In all, nine questions will be set from the whole syllabus. The question paper will be divided into five units. First four units will contain two questions each, out of which the candidates are to attempt one question from each unit, the ninth question of fifth unit is compulsory and is consists of 13 short answer questions (covering entire syllabus i.e theory & practical) out of which students have to attempt 09 questions of 01 marks each.
- 5. No electronic Instruments will be allowed for lehra in practical examination.
- 6. While sending the syllabus to paper setter in theory, the syllabus prescribed for the practical paper should also be sent.

Paper-A: THEORY (Duration 45 minutes, 02 theory periods per week) : 45 Marks **Paper-B: PRACTICAL** (Duration 45 minutes, 06 theory periods per week) : 45 Marks

Paper-A Theory Maximum Marks: 50 marks

Theory : 45 marks
Int. Assessment : 05marks
Time : 3 Hours

Unit-I

1. Define the following terms: Stuti, Thaat, Tehai, GDeB (B) 1778((B)-7.6314()-1243.98(.6992c0.89126(2i)0.89126

Unit-V

1. The ninth question of unit V is compulsory & it consists of 13 short answer questions (covering entire syllabus i.e. theory and practical) out of which students have to attempt 09 questions of carry 01 marks each.

Paper-B Practical

Maximum Marks: 50 marks
Theory: 45 marks
Int. Assessment: 05marks
Time: 20 minutes

- 1. Teentala: Tatkar in Ekgun, Dugun, Chaugun layakaries with two tihaies.
- 2. Teentaal, Ektala & Jhaptala: Thaat-2, Amad-2, Tihai-2, Tukras-2, Tisarjati paran-1, , kavit-1
- 3. Gat Nikas: Thaat and Mataki
- 4. Practical demonstration of Rajasthani dance
- 5. Practical knowledge of Asamyukta Mudras.
- 6. Ability to play Nagma in teentala
- 7. Recitatio5m

B.A. (Honours) MUSIC (INDIAN CLASSICAL DANCE), 2020-21

SEMESTER-IV

General Instructions:-

- 1. In case of the private candidates, there will be no internal assessment and the marks obtained in the external assessment of the practical examination shall be proportionately increased.
- 2.

Unit-V

The ninth question of unit V is compulsory & it consists of 13 short answer questions (covering entire syllabus i.e. theory and practical) out of which students have to attempt 09 questions of carry 01 marks each.

Paper-B Practical

Maximum Marks: 50 marks
Theory: 45 marks
Int. Assessment: 05marks
Time: 20 minutes

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Books Recommended

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