



ਭੇਰਾ ਘਰ ਮੇਰਾ ਅਸੀ
ESTD. 1875



GOVERNMENT MOHINDRA COLLEGE PATIALA

(Affiliated to Punjabi University, Patiala)



NAAC ACCREDITED GRADE A+ CYCLE-I

NAAC REACCREDITED GRADE A (CGPA 3.86) CYCLE-II

AISHE CODE: C-22146

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INTERNAL QUALITY ASSURANCE CELL

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**GOVERNMENT MOHINDRA
COLLEGE,
PATIALA**

Supporting Documents/Additional Information

Title **1.2.1 Syllabus**

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Syllabus for Add-On-Course

**Certificate Course in Agro Services – Ist year
Add-on-course (2016, 2017, 2018- Examinations)**

Theory Paper

Lecture to be delivered: 50

(Each of 45 minutes duration)

Pds/week: 3

Time Allowed: 3 Hours

Maximum Marks: 60

Pass marks 35% of the subject, theory and practical separately.

INSTRUCTIONS TO THE PAPER SETTER

Paper should be divided into five sections A, B, C, D&E. Section A, B, C & D shall have two questions each. Students must attempt at least one question from each part. Fifth section E shall have 10 short – answer type questions of two marks each covering the entire syllabus. Students will attempt all the ten questions of Section E. Question of section A, B, C and D will carry 10 marks each. The answers of short questions should be given in 2-3 lines.

INSTRUCTIONS TO THE CANDIDATES

Candidates are required to attempt one question each from the sections A,B,C and D of the question paper and the entire section E.

Title of Paper – **Basics of Agro Services**

Section-A

1. Meaning, scope and importance of Agro-services in India. Cultural and economic aspect of agro-services with respect to the state of Punjab.
2. Types of services required for the improvement of existing agricultural practices in order to secure economic sustainability. Elementary knowledge about sericulture, apiculture, Fishery, Poultry, Dairy, Agro-forestry, Social forestry and Organic Farming.

Section-B

3. Soil Profile, composition and classification of soil , physical properties of soil, study of soil maps with respect to Punjab.
4. Fertility status of soils, soil deficiency with respect to Macro and micronutrient components.

Section-C

5. Water resources for agriculture and their availability. Natural water resources, rain water and their harvesting and conservation.
6. Water irrigation systems in India: Surface irrigation, subsoil irrigation, surface and drip irrigation.

Section-D

7. Fertilizers, their role in soil fertility and crop yield: Inorganic and Organic fertilizers. Bio-fertilizers. Green manuring. Farm-yard manure. Vermiculture.
8. Pollution of soil, surface and ground water due to over use of fertilizers and pesticides and remedial measures.

Books Suggested for Reading:

1. Handbook of Agricultural Sciences. S.S Singh, P.Gupta, A.K. Gupta, Kalyani Pub.
2. Handbook of Agriculture. I.C.A.R. New Delhi.
3. Vigyanak Dhanga Nal Kheti. Brish L Bhan Bujarak. Sangam Pub.
4. Principles of Agronomy. T. Yellamanda Reddy & G. H Sankara Reddy, Kalyani Pub., Ludhiana.
5. Modern Agriculture: Forage Production, Agro forestry, Dry farming. Prof. I. D. Tyagi, Jain Brothers, New Delhi.
6. Handbook of PAU, Ludhiana

PRACTICAL PAPER- Ist Year

Lectures to be delivered: 75
(each of 45 minutes duration)
Pds/week: 3

Maximum Marks: 40

Time Allowed: 3 Hours

Pass marks 35% the subject, theory and practical separately.

There will be five questions of 5 marks each in the practical paper out of 1-5 components of the syllabus given below:

1. Analysis of different types of soils of Punjab for the presence of N₂, K, P etc by soil analysis kit.
 2. Testing of pH and water holding capacity of different types of soils.
 3. Seed viability test by Tetra-zolium chloride method.
 4. Determination of moisture contents of seeds of wheat, rice, gram and maize.
 5. Analysis of different types of water samples for pH, total solids, presence of microbes by water testing kit.
-
6. Major Project work on techniques of Mushroom cultivation/Organic farming/Apiculture/Fish farming/ Vermiculture.
07
 7. Viva-voce 04
 8. Practical Note Book 04

**Syllabus for Diploma in Agroservices- II yr
Add-on-course (2016, 2017, 2018- Examinations)**

Theory Paper

Lectures to be delivered: 50
(each of 45 minutes duration)
Pds./week: 3

Maximum Marks: 60

Time Allowed: 3 hours

Pass marks 35% of the subject, theory and practical separately

INSTRUCTIONS TO THE PAPER SETTER

Paper should be divided into five sections A, B, C, D & E. Section A, B, C & D shall have two questions each, students must attempt at least one question from each part. Fifth section E shall have 10 short-answer type questions of two marks each covering the entire syllabus. Students will attempt all the ten questions of section E. Question of section A, B, C & D will carry 10 marks each. The answers of short questions should be given in 2-3 lines.

INSTRUCTIONS TO THE CANDIDATES

Candidates are required to attempt one question each from the sections A, B, C & D of the question paper and the entire section E

Title of Paper-Crop Production and Management

Section-A

1. Cultivation practices, improved varieties, major pests and diseases including their management in case of wheat and rice.
2. Cultivation practices, improved varieties, major pests and diseases including their management in case of Sunflower and mustard.

Section-B

3. Cultivation practices, improved varieties, major pests and diseases including their management in case of Cauliflower, Potato.
4. Cultivation practices, improved varieties, major pests and diseases including their management in case of - Mango, Citrus and Guava..

Section-C

5. Cultivation practices, improved varieties, major pests and diseases including their management in case of Barseem, Jowar and Bajra.
6. Cultivation practices, improved varieties, major pests and diseases including their management in case of Sugarcane and cotton.

Section-D

7. Post harvest management with particular reference to major cereals, vegetables, fruits and fodder crops in Punjab.
8. Pesticides with their relevance in management of pests and diseases, ill effects with particular reference of bio- magnification and other environmental hazards.

Books

1. Handbook of Agricultural Sciences. S. S. Singh, P. Gupta, A. K. Gupta. Kalyani Pub.
2. Handbook of Agriculture. I. C. A. R. New Delhi.
3. Vigyanak Dhanga Nal Kheti. Brish Bhan Bujarak. Sangam Pub.
4. A text book on Pomology (Fundamentals of Fruit growing). T. K. Chattopadhyay. Kalyani Pub., Ludhiana.
5. Principles of Agronomy. T. Yellamanda Reddy & G. H. Sankara Reddy. Kalyani Pub., Ludhiana.
- 6.. Modern Agriculture: Forage Production, Agro forestry, Dry Farming. Prof. I. D. Tyagi. Jain Brothers. New Delhi.
7. Packages and Practices of Rabi and Kharif Crop. PAU. Ludhiana.
8. Handbook of PAU, Ludhiana.

**Syllabus for Diploma in Agroservices-II yr
Add-on-course (2016, 2017, 2018- Examinations)**

Practical Paper

Lectures to be delivered: 75
(each of 45 minutes duration)
Pds./week: 3

Maximum Marks: 40

Time Allowed: 3 hours

Pass marks 35% of the subject, theory and practical separately.

There will be five questions of 5 marks each in the practical paper out of 1-7 components of the syllabus given below:

1. Acquaintance with major seasonal crops of Punjab including their identification.
2. Study of methods of sowing and caring, irrigation and harvesting of major cereal, vegetable and fruit crops with particular reference to Punjab.

3. Study of important diseases in wheat and rice.

4. Study of important diseases in cauliflower and potato.

5. Study of important diseases in mango, guava and citrus.

6. Study of important diseases in sugarcane and cotton.

7. Study of different types of fertilizers and pesticides (organic and inorganic) frequently used in Punjab.

8. Project report on a visit to nursery/ sugar mill/ cold storage.

07

9. Viva

04

10. Practical Note book

04

**Syllabus for Advanced Diploma in Agroservices- III year
Add-on-course (2016, 2017, 2018- Examinations)**

Theory Paper

Lecture to be delivered : 50
(each for 45 minutes duration)
Pds./week: 3

Maximum Marks:60

Time allowed: 3 hours

Pass marks 35% of the subject,theory and practical separately.

INSTRUCTIONS TO THE PAPER SETTER

Paper should be divided into five sections A, B, C, D and E. Section A, B, C & D shall have two questions each. Students must attempt at least one question from each part. Fifth section E shall have 10 short answer type questions of two marks each covering the entire syllabus. Students will attempt all the 10 questions of section E. Questions of section A, B, C & D will carry 10 marks each. The answer of short questions should be given in 2-3 lines.

INSTRUCTIONS TO THE CANDIDATE

Candidates are required to attempt one question each from the section A, B, C & D of the question paper and the entire section E.

Title – Agribusiness

Section – A

1. Economics and basic knowledge of farm implements- ploughs, spray pumps, tractors. Harvesters and threshers – harvest combines ,reapers, chaff cutters, sugarcane crushers.
2. Food preservation and processing with particular reference to canning and marketing.

Section-B

3. Poultry and piggery- a brief account including economics.
4. Aquaculture with particular reference to fish farming, Blue revolution, commonly cultured fishes and economics of pisciculture and marketing in Punjab.

Section-C

5. Apiculture, commonly domesticated species, pollination services and bee products (honey, bee-wax, royal jelly); economics of bee keeping and marketing.
6. Mushroom cultivation- species cultivated, techniques and economics of mushroom cultivation and marketing.

Section-D

7. Dairy farming with particular reference to White revolution- quality milk production, preparation of milk products- yoghurt, cheese, ghee; economics of dairy establishment and marketing.
8. Agrifinance – sources of finance, formulation of project proposals for financial assistance and various loan schemes for farmers of Punjab. Crop insurance.

BOOKS

1. Handbook of Agriculture sciences. S. S. Singh, P. Gupta, A. K. Gupta, Kalyani pub.
2. Elements of Farm Machinery. A. C. Srivastva, Oxford and IBH Pub. Co. Pvt. Ltd.
3. Home Preservation of fruits and vegetables. P. A. U. Ludhiana pub.
4. Handbook of agriculture. I. C. A. R. New Delhi.
5. Vigyanak Dhanga Nal Kheti. Brish Bhan Bujarak. Sangam publishers
6. Handling and storage of food grains. S. N. Pungale.
7. Principles of Agriculture engineering- Vol. I Michael and Ohja.
8. Technology of food preservation. Derodier AVI Publications.
9. The Biochemistry of fruits and their products. A. C. Hulme. Academy Pess London.
10. Handbook of P. A. U. Ludhiana.
11. Dairy Farming, Published by PAU, Ludhiana.
12. Bee Keeping, Published by PAU, Ludhiana.
13. Mushroom Cultivation, Published by PAU, Ludhiana.
14. Gahrelu Padhar Te Anaj Ate Beej De Sambhal, PAU, Ludhiana Pub.
15. Ghar Vich Fala Ate Sabjiya Di Sambhal, PAU, Ludhiana Pub.

**Syllabus for Advanced Diploma in Agroservices- III year
Add-on-course (2016, 2017, 2018- Examinations)**

Practical Paper

Lecture to be delivered: 75
(each of 45 minutes duration)
Pds./week:3

Maximum Marks :40

Time allowed: 3 hours

Pass marks 35% of the subjects, theory and practical separately.

There will be five questions of 5 marks each in the practical paper out of 1-8 components of the syllabus given below:

1. Acquaintance about statutory for marketing of quality food products (MRP, Contents, Label, Batch Number, date of manufacture, expiry date etc.)
2. Preparation of squash, syrups and pickles.
3. Preparation of jam and marmalades.
4. Canning of fruits and vegetables
5. Drying and dehydration of fruits and vegetables.
6. Preparation of Mushroom spawn.
7. Testing of milk for water content and SNF.
8. Testing of honey for purity.
9. A visit to PAU /milk industry/ mushroom cultivation farm/apiary-project report. 07
10. Viva-voce
04
11. Practical note book . 04

Community College ,Govt Mohindra College Patiala

Programme Name: Diploma in Green House Technology under Community College Scheme

The aim of this course is to create skilled work force required in Agriculture sector by giving strong fundamental knowledge and the most modern job-oriented practical training.

Eligibility Criteria: 10+2 in any discipline from the recognized Board with not less than 50% marks in the aggregate.

Level of Programme: Undergraduate Diploma

Duration: One Year (Two Semesters of 6 Months Each)

Programme Credits: 60

(A-Application Oriented Course, E-Elective, F-Foundation, I-Internship/Projects etc.)

Diploma in Green House Technology
(To take effect from the admissions of 2015)
Ordinances

1. The course is covered under the Community College Scheme of the Ministry of Human Resources development Government of India .
2. The duration of the course leading to the diploma in Green House Technology shall be One year and three months and shall be divided into two semesters followed by one month training. The examination for the first semester shall ordinarily be held in the month of May/June and for the second semester in the month of Nov/Dec, or on such dates as may be fixed by the Community College .
3. There will be intake of 50 seats in each semester.
4. Every candidate shall pay his examination fee for each Semester at the time of admissions to the course, along with other charges, i.e. tuition fee etc., as fixed by the Board of Management of the Community College..
5. The Principal of the Government Mohindra College Patiala shall forward copy of Certificate to the controller of Examinations, a list of the students who have satisfied the requirements of the regulations and are qualified in the examination.
6. The last date for receipt of admission application form and fee, with and without late fee, shall be as fixed by the Board of Management of Community College.
7. The Minimum qualification for admission to the First Semester of the course shall be :
10+2 in any discipline from the recognised Board with not less than 50% marks in the aggregate.
8. The admissions to the Programme will be based solely on the basis of merit or by the Entrance Test to be conducted by the College under the supervision of BOM.
9. Every Candidate shall be examined in the subjects as laid down in the syllabus prescribed from time to time. 20% marks in each paper, excluding project and viva voce shall be assigned for internal assessment.
10. Project and viva-voce will be assessed internally on 100% basis.
11. The Principal of the Government Mohindra College Patiala will preserve the records on the basis of which the internal assessment awards have been prepared for inspection. If needed by the university, up to six months from the date of declaration of the results.
12. The first and second semester examinations shall be open to a student who-
 - (i) has been on the rolls of the Government Mohindra College Patiala during first and second semester respectively; and
 - (ii) has attended not less than 75% of the lectures delivered in each course
 - (iii) has obtained at least 30% marks in mid-semester examination conducted by the college
13. The medium of instructions and examination shall be English/Punjabi.
14. The minimum number of marks to pass the examination in each semester shall be-
 - (i) 35% in each paper in the final Examination separately as well as jointly with internal assessment;
 - (ii) 35% in Project and Viva-voce
 - (iii) 40% in the aggregate of (i) and (ii) above
15. Grace Marks shall be given @ 1% of the aggregate marks of the external examination for each semester (only the marks of external examination will be counted for the purpose of calculating the grace marks and marks obtained in internal assessment will not be counted.) A candidate may avail of the grace marks either in the aggregate or in one or more papers as may be to his/her advantage. Grace marks shall, however, be given only for passing the examination or for earning the higher division and not for passing the examination with distinction.
16. A candidate who has failed to clear all the prescribed papers of all the two semesters with in four academic sessions from the date of his admission shall be required to leave the course.
17. The internal assessment awards of a candidate who fails in the examination shall be carried forward to the next examination.
A candidate who fails in the examination may appear in the next consecutive examination as an ex-student of the Government Mohindra College Patiala.
18. As soon as is possible after the termination of the examination, the Coordinator shall publish list of the candidates who have passed.
19. Successful candidates shall be classified as under:
 - (i) Those who obtain 75% or more of the total aggregate marks in all the semester examination taken together - First Division with Distinction
 - (ii) Those who obtain 60% or more if the aggregate marks but less than 75% marks in all the semester examinations taken together— First Division.
 - (iii)_ Those who obtain below 60% of the aggregate marks in all the semester examinations taken together---Second Division.

SYLLABI for Diploma in Green House Technology

Note:

1. Examination in each subject will be of 3 hours duration
2. Maximum Marks for External/written examination is 70 Marks and internal assessment is 30 marks except for Punjabi papers.

Instructions for the paper setters:

IF THERE ARE TWO UNITS: Set 10 questions in all. Five questions from each unit. The students are required to answer five questions in all selecting at least 2 questions from each unit.

IF THERE ARE FOUR UNITS: Set 10 questions in all. Two or three questions from each unit. The students are required to answer five questions in all selecting at least one question from each unit.

SCHEME OF EXAMINATION

Semester	Name of the Course	Credit Hours	Maximum Marks	Ext	Int
Semester-1	Communication Skill and Personality development	90	100	70	30
	Functional Punjabi	45	50	35	15
	Climate Change in Horticulture Production	90	100	70	30
	GREEN HOUSE STRUCTURE OPERATION AND MANAGEMENT	90	100	70	30
	Training/Project Report	180	50	25	25
Total			400		
Semester-II	English Language as a Business Communication Skill	90	100	70	30
	Punjabi Compulsory	45	100	35	15
	GAP for HORTICULTURAL CROPS	90	100	70	30
	PROTECTED CULTIVATION OF FRUIT, VEGETABLE AND FLOWER CROPS	90	100	70	30
	Training /Project Report	180	50	25	25
Total			400		

Semester-1

Paper 1

English; Communication Skills and Personality Development Time Allowed: 3 Hrs. Max. Marks: 100 Period per week : 6
External Assessment: 70 Pass percentage : 35% Internal Assessment: 30

Instructions for Paper-Setters/Examiners The question paper covering the entire course shall be divided into three sections as follows:

SECTION-A

It will consist of essay type questions. Four questions shall be set by the examiner from Unit-I of the syllabus and the candidate shall be required to attempt two. Each question shall carry 10 marks; total weight of the section shall be 20 marks.

SECTION-B

It will consist of essay type questions. Four questions shall be set by the examiner from Unit-II of the syllabus and the candidate shall be required to attempt two. Each question shall carry 10 marks; total weight of the section shall be 20 marks.

SECTION-C

It will consist of 12 very short answer questions from entire syllabus. Students are required to attempt 10 questions up to five lines in length. Each question shall carry 3 marks; total weight of the section shall be 30 marks

UNIT-I

Communication: Meaning, Importance, and Process, Objectives of Communication, Effective Communication, Means/ Media and Types of Communication, Channels of Communication, Barriers to Communication, Voice Training, Importance of Feedback. Interview, Report Writing, Speeches and Presentations, Documentation, Preparation of Extempore speech, Group Discussion, Debates, Declamation; Stage Confidence. Business Correspondence: Definition, Importance Business letters: Essential features, Parts and Layout, Types: Purchase order letter, Enquiry Letter, Quotation Letter, Acceptance Letter, Refusal Letter, Follow Up Letter and Cancellation of order letter.

UNIT-II

Personality Development, Types of personality, Dynamics of Personality, Personality Traits, Influences on Personality, Personality Analysis through body language and Individual habits, Physical Aspects of personality, Emotional Stability, Memory Training, Mind and mental development, Mental Blocks, Manners and Art of Living.

Suggested Books: 1. The Written Word by Vandan R.Singh 2. Business Communication by M.K. Sehgal, Vandana Khetarpal 3. A Course in Communication Skills by Duttetal 4. Succeeding through Communication by Subhash Jagota 5. Personality Development and Soft Skills by Prof. Achhru Singh & Dr. Dharminder Singh Ubha

Paper 2

Time Allowed: 3 Hrs.

Functional Punjabi-I

Max. Marks: 50

Period per week : 6

External Assessment: 35

Pass percentage : 35%

Internal Assessment: 15

f;b/p; s/ gkm g[;seK Gkr^TL **eEk oZR**, ;zgh tfonkw f;zx ;zX{ ns/ vkH pbd/t f;zx uhwk Gkr^n L (1) fBpzX^ouBk L ;wkie, tksktoD ns/ ;fGnkuko ft;a/ Bkb ;pzXs.

(2) **ftnkoeDL** (i) gzikph X[Bh^ftT[As, ;to, ftzniB, T[ukoB nZR, T[ukoB ;EkB s/ T[ukoB ftXh nB[;ko X[BhnK dk torheoD. (ii) Ppd^Pq/DhnK ns/ o{gKsoBL BkT, gVBkT, ftP/PD, fefonk, fefonk ftP/PD, ;zpzXe, :ie, gqPB ;{ue Ppd. Gkr JL Gkr^T ns/ Gkr^n d/ ftneod tkb/ Gkr ftu'A ;zy/g T[soK tkb/ gqPB.

nze tzv ns/ g/go ;?No bJh jdkfJsk 1H f;b/p; d/ ;ko/ GkrK ftu'A gqPB g[ZS/ ikDr/. 2H g/go B{z fszB GkrK T, n ns/ J ftu tzfvnk ikt/rk. 3H Gkr T ftZu^A

(i) fe/ ;ejkDh dk ftPk^t;s{\$;ko\$B/yeK d/ :rdkB iK ejkDh ebk (fszB ftZu^A fJZe) 5 nze

(ii) gkso ;zpzXh ikDekoh. (gzi ftZu^A d') 2%3 & 6 nze

4H Gkr n^1 fe/ ftP/ s/ fBpzX fbyD bJh fejk ikt/rk. (fszB ftZu^A fJZe) & 4 nze 2 d/ d'tK GkrK ftu'A fJe^fJe gqPB g[ZfSnk ikt/rk ns/ ftfdnkoEh B/ d'tK ftu'A fJe gqPB eoBK j'tkrk. 5 nze 5H Gkr ^J eEk oZR ns/ ftneod tkb/ Gkr ftZu^A ;zy/g T[~soK tkb/ 15 (gkm g[;se eEk oZR) ftZu^A 7 ns/ ftneod ftZu^A 8) gqPB g[ZS/ ikDr/. ftfdnkoEh B/ ;ko/ gqPBK d/ ;zy/g T[~so d/D/ j'Dr/. jo/e gqPB dk 1 nze j't/rk. 15% 1 & 15 nze

jkfJe gkm^;wZroh 1H joehos f;zx, Gk;ak ftfrnkB ns/ gzikph Gk;ak, pkjoh gpfb;aoia, fdZbh, 1973H 2H pbd/t f;zx uhwk, gzikph Gk;ak ftfrnkB ns/ ftneod (seBheh ;apdktbh dk ft;ak e^a), gzikph :{Bhtof;Nh, gfNnkbk, 2000H 3H p{Nk f;zx pokV, gzikph ftneod L f;XKs s/ ftjko, u/sBK gqek;aB, b[fXnkDk, 2008H 4H gq/w gqek;a f;zx, f;XKse Gk;ak ftfrnkB, wdkB gpfb;aoia, gfNnkbk, 2002H 5H gq/w gqek;a f;zx, gzikph Gk;ak dk ;q's s/ pDso, gzikph :{Bhtof;Nh, gfNnkbk, 1996H 6H gq/w gqek;a f;zx, o{g ftfrnkB, wdkB gpfb;aoia, gfNnkbk, 2002H 7H i'frzdo f;zx g[nko ns/ j'o, gzikph Gk;ak dk ftneod, (... ns/ ...), gzikph Gk;ak nekdwh, ibzXo. 8H ;[yftzdo f;zx ;zXk, gzikph Gk;ak ftfrnkB, gzikph Gk;ak nekdwh, ibzXo, 1999H 9. y'i gfsqek (rbg ftP/P nze), gzikph :{Bhtof;Nh, gfNnkbkH 10H vkH pbd/t f;zx Xkbhtkb, gzikph ejkDh dk fJfsjk;, gzikph nekdwh, fdZbhH

Paper 3

CLIMATE MANAGEMENT IN HORTICULTURAL PRODUCTION

Time Allowed: 3 Hrs. Max. Marks: 100 Period per week : 6 External Assessment: 70 Pass percentage : 35% Internal Assessment:30

Objectives

To develop understanding about the impact and management of climate in horticultural production.

Theory

UNIT I

Introduction to climate change. Factors directly connected to climate change, average temperature, change in rainfall amount and patterns, rising atmospheric concentrations of CO₂, pollution levels such as tropospheric ozone, change in climatic variability and extreme events like receding of glaciers in Himalayas.

UNIT II

Sensors for climate registration and crop monitoring, phyto-monitoring and biosensors, plants response to the climate changes, premature bloom, marginally overwintering or inadequate winter chilling hours, insect pests, longer growing seasons and shifts in plant hardiness for perennial fruit crops, flowering plants and other plant species.

UNIT III

Impact of climate changes on invasive insect, disease, weed, pests, horticulture yield, quality and sustainability, climate management in field production – mulching - use of plastic- windbreak- spectral changes- frost protection. Climate management in greenhouse- heating - vents - CO₂ injection - screens - artificial light.

UNIT IV

Climate management for control of pests, diseases, quality, elongation of growth and other plant processes- closed production systems around the world. Special protected cultivation now and in the future, growth chambers, production in space, biosphere, future aspects of closed production, future greenhouse, use of LED as artificial light, future sensor types etc. clean development mechanism, role of tropical trees.

Suggested Readings

Peter KV. 2008. (Ed.). *Basics of Horticulture*. New India Publ. Agency.

Rao GSLHV, Rao GGSN, Rao VUM & Ramakrishnan YS. 2008. *Climate Change and Agriculture over India*. ICAR.

Rao GSLHV. 2008. *Agricultural Meteorology*. Prentice Hall.

Paper 4
GREEN HOUSE STRUCTURE OPERATION AND MANAGEMENT 2+1

Time Allowed: 3 Hrs. Max. Marks: 100 Period per week : 6 External Assessment: 70 Pass percentage : 35% Internal Assessment:30

Objective

Understanding the principles, theoretical and practical aspects of green house operation and management.

Theory

UNIT I

Greenhouse – World scenario, Indian situation: present and future, Different agro-climatic zones in India, Environmental factors and their effects on plant growth.

UNIT II

Basics of greenhouse design, Types of protected structures – Greenhouses, poly houses, shade houses, rain shelters, poly tunnels etc., Designing and erection of protected structures; Low cost/Medium cost/High cost structures, Economics of cultivation; Location specific designs; Structural components; Suitable crops for protected cultivation.

UNIT III

Environment control – management and manipulation of temperature, light, humidity, air and CO₂; Interaction of light, temperature, humidity, CO₂, water on crop regulation, Heating and cooling systems, ventilation, naturally ventilated greenhouses, fan and pad cooled greenhouses, light regulation and shading.

UNIT IV

Types of ventilation- Forced cooling techniques - Glazing materials – Micro irrigation and Fertigation.

UNIT V

Automated greenhouses, Microcontrollers, waste water recycling, Management of pest and diseases, Integrated Pest Management.

Practical

Designs of greenhouse, low cost poly tunnels, nethouse- Regulation of light, temperature, humidity in greenhouses, media, greenhouse cooling systems, ventilation systems, fertigation systems, special management practices, project preparation for greenhouses, visit to greenhouses.

Suggested Readings

Aldrich RA & Bartok JW. 1994. *Green House Engineering*. NRAES, Riley, Robb Hall, Cornell University, Ithaca, New York.

Bhattacharjee BS. 1959. *Rose Growing in Tropics*. Thackarspink & Co.

Laurie A, Kiplingr DD & Nelson KS. 1968. *Commercial Flower Forcing*. McGraw-Hill.

Mears DR, Kim MK & Roberts WJ. 1971. *Structural Analysis at an Experimental Cable-supported Air Inflated Green Houses*. Trans. ASAE.

Paul V Nelson. 1991. *Green House Operation and Management*. Bali Publ.

Pradeepkumar T, Suma B, Jyothibhaskar & Satheesan KN. 2007. *Management of Horticultural Crops*. Parts I, II. New India Publ. Agency.

Training/Project Report

Semester 2

Paper 5

ENGLISH LANGUAGE AS A BUSINESS COMMUNICATION SKILL

Internal assessment ;30Marks (Based on practical examination conducted internally on the basis of Group discussion, Public speaking skills, presentation skills and assignment work.)

Theory 70Marks:

Based on :

1. Grammar: 10 MARKS
2. Essay: 20 Marks
3. Comprehension:15
4. Business Correspondence: 15 Marks
5. Report Writing : 10 Marks

Objective of the Course: To impart basic skills of communication in English through intensive practice to the Students of Diploma in Green House Technology so as to enable them to function confidently and effectively in that language in the professional sphere of their life.

Strategies for Course Execution

- The topics must be conveyed through plenty of examples. Lecture classes must be conducted as lecture-cum-tutorial classes.
- It is a course that aims to develop skills. It is therefore “practical” in orientation. Plenty of exercises of various kinds must be done by the students both inside and outside the classroom.
- The teacher must not depend on a single or a set of two or three text books. He must choose his materials from diverse sources.
- Keeping in view the requirements of his students , the teacher may have to prepare some teaching and exercise material.
- For practice in listening , good tape recorders can be used if the more advanced facilities (for example , language laboratory) are not available. In fact they can be used very fruitfully.
- The teacher must function as a creative monitor in the class-room.
- Minimum time should be spent in teaching phonetic symbols , stress , intonation , etc. The aim should be to enable the students to find out for himself the correct pronunciation of a word from a learner’s dictionary. In teaching speaking, emphasis should be on clarity , intelligibility and reasonable fluency rather than on “ correct “ pronunciation of words. Classroom presentation and group discussion sessions should be used to teach speaking.

Some Key Concepts :

Communication as sharing; context of communication; the speaker / writer and the listener / reader; medium of communication; barriers to communication; brevity, clarity and appropriateness in communication.

Writing :Selecting material for expository, descriptive , and argumentative pieces, business letters; formal report; summarizing and abstracting ; expressing ideas within a restricted word limit; paragraph division; the introduction and the conclusion; listing reference material; use of charts, graphs and tables ; punctuation and spelling; semantics of connectives, modifiers and modals; variety in sentences and paragraphs.

Reading Comprehension : Reading at various speeds (slow , fast , very fast) ; reading different kinds of texts for different purposes (for example , for relaxation , for information , for discussion at a later stage , etc.) ; reading between the lines. Speaking Achieving desired clarity and fluency ; manipulating paralinguistic features of speaking (voice quality , pitch , tone , etc.) pausing for effectiveness while speaking ; task-oriented , interpersonal , informal and semiformal speaking ; task-oriented, interpersonal , informal and semiformal speaking; making a short , classroom presentation.

Group Discussion : Use of persuasive strategies including some rhetorical devices (for emphasizing , for instance; being polite and firm; handling questions and taking in criticism of self; turn-taking strategies and effective intervention ; use of body language.

Telephonic Conversation. Listening Comprehension Achieving ability to comprehend material delivered at relatively fast speed; comprehending spoken material in Standard Indian English, British English and American English ; intelligent listening in institutions such as an interview in which one is a candidate.

Syllabus Details:

1. **Grammar** – Structure of sentences – Active / Passive Voice – Direct / Indirect Narration (5 lectures)
2. **Essay** – Descriptive – Comparative – Argumentative – Thesis statement- Structure of opening / concluding paragraphs – Body of the essay (10 lectures)
3. **Reading Comprehension** – Global – Contextual – Inferential (8 lectures)
4. **Business Correspondence** – Letter Writing – Formal. Drafting. Biodata- Resume'- Curriculum Vitae (10 Lectures)
5. Writing various kinds of business letters (e.g. Letters of enquiry and answers to queries, letters of reference, sales letter, letters of complaints and answers to complaints, collection letters and replies, letters relating to legal transactions, follow-up letters, D. O. letters within and outside the office, letters relating to placing of orders and compliance with orders). (10 Lectures).
6. **Report Writing** – Structure , Types of report – Practice Writing (8 lectures) Communication / Public Speaking skills, Features of effective speech, verbal-nonverbal (7 lectures) Group discussion – principle – practice (6 lectures)

Suggested Readings :

1. Saunders, Alta Gwinn. Effective Business English. 3ed. New York, Macmillan, 1957.
2. Binham Philip. Executive English. London, Longman Group, 1968-70.
3. Blundell J. A & Middle Miss, NMG. Career: English for the Business and Commercial World Pt.2: Developments 2v. Oxford, OUP,1982.
4. Carrad, H.L.English and Commercial Correspondence. 3ed. London: Cassel, 1964.
5. Jasmin S. & Bright J.S. Business Letter Writing. New Delhi: Universal, n.d
6. King F.W.& Ann Cree D. Modern English Business letters: Commercial Correspondence for Foreign Students. London: Longman Group, 1962.
7. Kane T.S. The Oxford Guide to Writing. New York: OUP, 1983.
8. Ghose P.C. Commercial English and Correspondence. Calcutta: World Press, 1957.

Paper-7

Time Allowed: 3 Hrs. Max. Marks: 100 Period per week : 6 External Assessment: 70 Pass percentage : 35% Internal Assessment:30

PROTECTED CULTIVATION OF FRUIT, VEGETABLE AND FLOWER CROPS 1+1

Objective

To impart latest knowledge in growing of fruit, vegetable and flower crops under protected environmental condition. Understanding the principles, theoretical aspects and developing skills in protected cultivation of vegetable and flower crops.

Theory

Crops: Fruit: Strawberry,
Vegetable: Tomato, Capsicum, Cucumber, Melons and Lettuce
Flower: Rose, Chrysanthemum, Carnation, Gerbera, Anthurium, Orchids

UNIT I

Importance and scope of protected cultivation of vegetable and flower crops; principles used in protected cultivation, energy management, low cost structures; training methods; engineering aspects.

UNIT II

Regulatory structures used in protected structures; types of greenhouse/polyhouse/nethouse, hot beds, cold frames, effect of environmental factors, viz. temperature, light, CO₂ and humidity on growth of different fruits, vegetables and flowers, manipulation of CO₂, light and temperature for fruit, vegetable and flower production, fertigation.

UNIT III

Nursery raising in protected structures like poly-tunnels, types of benches and containers, different media for growing nursery under cover.

Containers and substrates, soil decontamination, layout of drip and fertigation system, water and nutrient management, weed management, physiological disorders, IPM and IDM.

UNIT IV

Regulation of flowering and fruiting in fruits viz. strawberry, vegetable crops viz. Tomato, Capsicum, Cucumber, Melons, Lettuce and Flowers viz. Rose, Chrysanthemum, Carnation, Gerbera, Anthurium, Orchids and technology for raising them, training and staking in protected crops, varieties and hybrids for growing fruit, vegetables and flowers in protected structures.

Crop regulation by chemical methods and special horticultural practices (pinching, disbudding, deshooting, deblossoming); Mulching, Staking and netting, Photoperiod regulation.

UNIT V

Harvest indices, harvesting techniques, post-harvest handling techniques, Precooling, sorting, grading, packing, storage, quality standards for fruit, vegetable and flowers grown in protected structures.

Problem of growing fruits, vegetables and flowers in protected structures and their remedies, insect and disease management in protected structures; soil-less culture, use of protected structures for seed production.

Practical

Study of various protected structures, practices in design, layout and erection of different types of structures, practices in preparatory operations, soil decontamination techniques, practices in environmental control systems, practices in drip and fertigation techniques, special horticultural practices, determination of harvest indices and harvesting methods, postharvest handling, packing methods, project preparation, visit to commercial established greenhouse/polyhouse/net house/shade house in the region.

• Suggested Readings

- Anonymous 2003. *Proc. All India Seminar on Potential and Prospects for Protective Cultivation*. Organised by Institute of Engineers, Ahmednagar. Dec.12-13, 2003.
- Bhattacharjee SK. 2006. *Advances in Ornamental Horticulture*. Vols. I-VI. Pointer Publ.
- Bose TK & Yadav LP. 1989. *Commercial Flowers*. Naya Prokash.
- Bose TK, Maiti RG, Dhua RS & Das P. 1999. *Floriculture and Landscaping*. Naya Prokash.
- Chadha KL. 1995. *Advances in Horticulture*. Vol. XII. Malhotra Publ. House.
- Chandra S & Som V. 2000. *Cultivating Vegetables in Green House*. *Indian Horticulture* 45: 17-18.
- Lauria A & Victor HR. 2001. *Floriculture – Fundamentals and Practices*. Agrobios.
- Nelson Paul V. 1978. *Green House Operation and Management*. Reston Publ. Co.
- Prasad S & Kumar U. 2003. *Commercial Floriculture*. Agrobios
- Prasad S & Kumar U. 2005. *Greenhouse Management for Horticultural Crops*. 2nd Ed. Agrobios.
- Randhawa GS & Mukhopadhyay A. 1986. *Floriculture in India*. Allied Publ.
- Reddy S, Janakiram B, Balaji T, Kulkarni S & Misra RL. 2007. *Hightech Floriculture*. Indian Society of Ornamental Horticulture, New Delhi.
- Tiwari GN. 2003. *Green House Technology for Controlled Environment*. Narosa Publ. House.

Paper-8

GAP FOR HORTICULTURAL CROPS 2+0

Time Allowed: 3 Hrs. Max. Marks: 100 Period per week : 6 External Assessment: 70 Pass percentage : 35% Internal Assessment:30

Objective

To impart comprehensive knowledge about the principles and practices of Good Agricultural Practises (GAP) for horticultural crops.

Theory

UNIT I

Genesis of Good Agricultural Practises (GAP)–definition/description, components listed by FAO, frame work.

UNIT II

Management of site history and soil, crop and fodder production, IPM, INM, IWM, irrigation water, crop production and protection. Identification of ways of improving the productivity profitability, and resource efficiency. harvest and post-harvest handling.

UNIT III

Animal production, product certification, animal waste management, animal health and welfare, harvest.

UNIT IV

On farm processing, storage, energy and waste management, human health, welfare, safety, wild life benefits.

UNIT V

Institutions involved in GAP certification. Indian agencies, EUREPGAP (European Retail Producers Group- Good Agricultural Practices), EUREP etc.

Suggested Readings

Peter KV. 2008. *Basics in Horticulture*. New India Publ. Agency.

INDUSTRIAL TRAINING IN GREEN HOUSE OPERATION AND MANAGEMENT 0+3

Objective

To impart first hand comprehensive knowledge and understanding about the principles and practical aspects of green house operation and management.

Training /Report/ viva-voce

Certificate/ Diploma Programme in Office Automation and E-governance

Objective of the Course:

- The major objective of this course is to impart practical training to students with Computer Hardware components, its working and various system applications.
- To impart knowledge about the Internet, web surfing and E-mail
- To train the students in Microsoft Office which has different components like MSWord, MS Excel and Power point.
- To develop knowledge of e-governance and latest global trends in e-governance
- To provide practical training of office automation tools, Internet and internet tools.
- The course also helps the candidates to get acquainted with IT and ITeS.
- The course is highly practice oriented rather than regular class room teaching.

Learning outcomes:

- After completion of this course the students would be able to work in office, handle documents, spreadsheets, make presentations and communicate through internet.

Duration of the course:

- 1) Certificate course: 6 months
- 2) Diploma: 12 months

Eligibility: Any student enrolled in degree program of the college.

Outline of the Course:

Sr. No.	Topics	
Topics covered under Certificate Course are Sr No. 1,2 and 3		
1	GC-OA-01T Data Entry & Computer Application & Computer Application	Credits: 6 (4 Th. 2 Lab)
2	GC-OA-02T Automation Tools GC-OA-02P Automation Tools Lab	Credits: 6 (4 Th. 2 Lab)
3	GC-OA-03T Office Equipment & Secretarial Tasks	Credits: 6
Topics covered under Diploma Course are Sr No. 1,2,3,4,5 and 6		
4	GC-OA-04T Basic Communication skills	Credits: 6
5	GC-OA-05T Office Operations & Office Management GC-OA-05P Office Operations & Office Management Lab	Credits: 6 (4 Th. 2 Lab)
6	GC-OA-06T E-Governance	Credits: 6

Detailed Content

Data Entry & Computer Application

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 4

Pass Percentage: 40%

Section A

Unit I: Computer Memory: Representation of information: BIT, BYTE, Memory, Memory size; Units of measurement of storage; Main memory: main memory organization, RAM, ROM, PROM, EPROM

Unit II: Computer languages: Machine language, assembly language, higher level language, 4GL. Introduction to Compiler, Interpreter, Assembler, System Software, Application Software.

Unit III: Introduction to Internet, WWW and Web Browsers, Creating and using emails and social media platforms, ISP; Knowing the Internet; Web Browsing software's, Search Engines; Understanding URL Domain name

Section B

Unit V: IP Address; Using e-governance website Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails

Unit VI: Word Processing Package: Opening, saving and closing an existing document; renaming and deleting files; Using styles and templates: Introduction to templates and styles; applying, modifying

Unit VII: Using a template to create a document, creating a template, editing a template, organizing templates, examples of style use, Changing document views

Unit VIII: Working with text: select, cut, copy, paste, find and replace, inserting special characters, setting tab stops and indents, Formatting text, formatting paragraphs, Formatting pages: Using layout methods, creating headers and footers, Numbering pages.

Suggested Reading:

1. Pradeep K., Sinha, Computer Fundamentals : Concepts, Systems & Applications- 8thEdition
2. Rajaraman V, Fundamentals of Computers-6th Edition
3. RS Salaria, Computer Fundamentals 1St Edition 2017
4. Archana Kumar, Computer Basics with Office Automation, 2013
5. Angeline D Magdalene Delighta, Exploring of Computer fundamentals and officeautomation I LAP Lambert Academic Publishing

Data Entry & Computer Application Lab

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 2

Pass Percentage: 40%

The programs in lab will be based on the contents covered in the theory syllabus.

Office Automation Tools

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Section A

Unit I: Word processing: Formatting a Document, Using AutoCorrect, Proofing a Document with Spell and Grammar Check, Finding and Replacing Text, Improving the Look of a Document, Inserting Graphics, Inserting Table

Unit II: Adding comments to a document, Creating a table of contents, Creating indexes and bibliographies, Printing a document, Tracking changes to a document. Mail Merge

Unit III: Select, cut, copy, paste, find and replace, inserting special characters, setting tabstops and indents

Unit IV: Creating a table of contents, Creating indexes and bibliographies, Printing a document, Tracking changes to a document

Section B

Unit V: Formatting Text: Using RIGHT, LEFT, and MID functions; format text by using UPPER, LOWER, and PROPER functions

Unit VI: SPREADSHEET PACKAGE: Introduction to Spreadsheets, Using Formulas in Excel, Understanding Cell Referencing in Excel, Editing a Worksheet, Formatting and Printing a Worksheet

Unit VII: Use of Simple Statistical Functions, What-if Analysis and Data Tables in Excel, Working with Graphs and Charts.

Unit VIII: PRESENTATION PACKAGE: Introduction to PowerPoint, Different Views of a Presentation, Editing a Presentation, Adding Special Effects in a presentation.

Suggested Reading:

1. Archana Kumar, Computer Basics with Office Automation, 2013
2. Angeline D Magdalene Delighta, Exploring of Computer fundamentals and office automation I LAP Lambert Academic Publishing
3. Dr. P. Rizwan Ahmed, Office Automation I Margham Publications; 2016th edition

Office Automation Tools Lab

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 2
Pass Percentage: 40%

The programs in lab will be based on the contents covered in the theory syllabus.

Office Equipment & Secretarial Tasks

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 6

Pass Percentage: 40%

Section A

Unit I: Office Machines and equipments: Importance, objectives of office machines, Office Safety and Security: Meaning, importance of office Safety, safety hazards and steps to improve office safety, Security hazards and steps to improve office security

Unit II: Characteristics of Computers, Hardware, Software, Machine Language, Assembly Language and Assembler, High Level Language and Compiler v/s Interpreter.

Unit III: Input Devices: Keyboard, Mouse, Joystick, Track Ball, Touch Screen, Light Pen, Digitizer, Scanners, Speech Recognition Devices

Section B

Unit IV: Optical Recognition devices – OMR, OBR, OCR. Output Devices: Monitors, Impact Printers - Dot matrix, Character and Line printer, Non Impact Printers – DeskJet and Laser printing, Plotter.

Unit V: Measurement of Office Work , Importance, purpose, difficulty in measuring office work. Different ways of measurement, setting of work standards, benefits of work standards.

Unit VI: Techniques of setting standards, Office Manuals: Meaning, need, types of office manuals and steps in preparing of office manuals.

Suggested Reading:

1. Pradeep K., Sinha, Computer Fundamentals : Concepts, Systems & Applications- 8th Edition
2. Rajaraman V, Fundamentals of Computers-6th Edition
3. RS Salaria, Computer Fundamentals 1st Edition 2017
4. Archana Kumar, Computer Basics with Office Automation, 2013
5. Angeline D Magdalene Delighta, Exploring of Computer fundamentals and office automation I LAP Lambert Academic Publishing
6. Dr. P. Rizwan Ahmed, Office Automation I Margham Publications; 2016th edition

Basic Communication Skills

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 6

Pass Percentage: 40%

Section A

Unit I: Understanding Human Communication, Constitutive Processes of Communication, Language as a tool of communication, Barriers to Effective communication, Strategies to Overcome the Barriers

Unit II: Communication: Non-Verbal Communication, Importance of Non-Verbal Communication, Non-Verbal Communication and Cultural influences

Unit III: Listening Comprehension: Difference between Hearing and Listening, Effective Listening Strategies, Listening in Conversational Interaction.

Unit IV: Speaking Skills: Expressions in different Communicative Functions: Asking Questions; Making Requests and suggestions; Expressing Greetings, Apologies and Gratitude Job Interviews, Group Discussions, Presentation Skills

Section-B

Unit V: Reading Comprehension: Introduction, Reading Process, Reading different kinds of Texts, Reading Methods- Using KWL for reading comprehension

Unit VI: Effective Written Communication: Constituents of Effective Writing, Coherence and Cohesion for effective writing

Unit VII: Business correspondence I: Letter writing, Resume/CV, E mails for Communication

Unit VIII: Business correspondence-II: Writing Reports, Describing Tables and Charts, Meetings: Agenda and Minutes

Suggested Readings

1. Koneru, Aruna. Professional Communication. Delhi: McGraw. 8th Ed, 2017
 2. Mahanand, Anand. English for Academic and Professional Skills. Delhi: McGraw, 2013
 3. Rani, D Sudha, TVS Reddy, D Ravi, and AS Jyotsna. A Workbook on English Grammar and Composition. Delhi: McGraw, 2012
- Rizvi, M. Ashraf. Effective Technical Communication. Delhi: McGraw, 2nd Ed. 2017

Office Operations & Office Management

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Section A

Unit I: Office and office Management – meaning of office, function of office, primary and administrative functions, importance of office.

Unit II: Relation of office with other departments of business Organization, Concept of paperless office, virtual office, back and front office, open and private office

Unit III: Definition and elements of office management, duties of an Office Manager

Unit IV: Office forms: Meaning and types of forms used in business organization, advantages

Section B

Unit V: Forms controls, objectives, form designing, principles of forms designing and specimens of forms used in office.

Unit VI: Office Record Management: Meaning, importance of record keeping management Unit VII: Principles of record management and types of records kept in a business organization.

Suggested Reading:

1. Sudhir Andrews, Front Office Management and Operations
2. Judith Read-Smith, Records Management, Published October 14th 1996 by South Western Educational Publishing

Office Operations & Office Management Lab

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 2
Pass Percentage: 40%

The programs in lab will be based on the contents and applications of word processing, spreadsheet and presentation covered in the theory syllabus

E-Governance

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 6
Pass Percentage: 40%

Section A

Unit I: Introduction to E-Government and E-Governance, Difference between E-Government and E-Governance; E-Government as Information System; Benefits of E-Government; E- Government Life Cycle; Online Service Delivery and Electronic Service Delivery; Evolution, Scope and Content of E-Governance; Present Global Trends of Growth in E-Governance

Unit II: Models of E-Governance, Introduction; Model of Digital Governance: Broadcasting / Wider Dissemination Model, Critical Flow Model, Comparative Analysis Model, Mobilization and Lobbying Model, Interactive – Service Model / Government-to-Citizen-to-Government Model (G2C2G)

Unit III: Evolution in E-Governance and Maturity Models: Five Maturity Levels; Characteristics of Maturity Levels; Towards Good Governance through E-Governance Models

Unit IV: E-Government Infrastructure Development, Network Infrastructure; Computing Infrastructure

Section B

Unit V: Data centers; E-Government Architecture; Interoperability Framework

Unit VI: Cloud Governance; E-readiness; Data System Infrastructure; Legal Infrastructural Preparedness

Unit VII: Institutional Infrastructural Preparedness; Human Infrastructural Preparedness; Technological Infrastructural Preparedness

Unit VIII: Security for e-Government, Challenges and Approach of E-government Security; Security Management Model; E-Government Security Architecture

Suggested Reading:

1. Dr. R.K. Dubey, E Governance I.R.K. Publisher & Distributors
2. Shirin Madon, e-Governance for Development

Certificate/Diploma Program in diploma in accounting and taxation

Course Objective:

The knowledge of accountancy along with taxation (direct tax and indirect tax) not only make competent employees but a make better professional. The earning capacity of an account professional is to provide the knowledge of all the aspect of accountancy, taxation and e- filling. The course is designed to fulfil the needs and demands of the industry and also focuson GST, TDS, Income tax and e-filing through practical way.

Learning Outcome:

After completion of this course the students will be equip with innovative thinking, creativity, good interpersonal management skills to meet the unique requirements of Accounting and Taxation sector. The course will help learners to find jobs in the area of Accounting and Taxation related to preparation of tax documentation for individuals; manage budgets and forecasts and preparation of financial reports for corporate entities

Duration of the Course:

- 1) Certificate Course: 6 Months
 - 2) Diploma Course:12 months
- Eligibility:**Minimum Qualification +2

PROGRAMMESTRUCTURE

S.No.	Topics	
Topics covered under the Certificate course are Sr. No. 1, 2 and 3		
CODE	COURSE TITLE	CREDITS
1	Basics of Financial Accounting And Accounting Software	6
2	Basics of Income Taxation	6
3	Basics Of Goods And Service Tax	6
Topics covered under Diploma course are Sr. No. 1,2,3,4,5 and 6		
4	Digitalized Accounting	6
5	Digitalized Goods And Service Tax	6
6	Income Tax and E-Filing	6

COURSE I – BASICS OF FINANCIAL ACCOUNTING AND ACCOUNTING SOFTWARE

Learning Objectives: The course aims to achieve following objectives-

1. To familiarize the students with concepts and applications of accounting principles to select business firms.
2. To equip with the understanding of counting process and preparation of final accounts.
3. To ensure the understanding of the subsidiary books and accounting softwares

Course Content:

Unit -I -Introduction and Accounting Process: Financial Accounting - Meaning - Definition - Functions - Advantages and Limitations - Users of Accounting Information - Principles of Accounting- Concepts and Conventions - Branches of Accounting – Accounting System- Types of Accounts - Accounting Cycle: Journal- Ledger and Trial Balance.

(Including problems)

Subsidiary Books Meaning –Types - Purchases Book - Sales Book - Purchases Returns Book - Sales Returns Book – Bills Receivables Book - Bills Payables Book - Single Column, Two Column, Three Column and Petty Cash Book - Journal Proper. (Including problems)

Unit -II

Depreciation and Final account including adjustments

Unit III

Accounting using Tally: Creation of Company Gateway of Tally Menu Buttons, Features and Continuation; Accounting Group Ledger, Cost Category, Currency.

Voucher and Entry in Books of Accounts: Voucher Types and Classes; Accounts

Vouchers; Reversing Journal; Memorandum Voucher, Optional Voucher, Post-dated Voucher, Selection of voucher type for transactions; Vouchers for income and Expenditure

.Vouchers Entry: Voucher Number and date settings, Voucher entry with more than one debtor credit accounts, Editing and deleting a voucher, Printing of Voucher and Cheque.

Accounting Vouchers- Receipts Vouchers, Payment Vouchers, Purchase Vouchers Sales Vouchers, Contra Vouchers, Journal Vouchers Debit Note, Credit Note, Memorandum Vouchers

Unit -IV

ERP -A Finance Perspective: Role of ERP in Finance, Accounting and Finance Processes: Cash management; Capital budgeting, Features of ERP Financial Module, Benefits of ERP Financial Module, Sage AccpacERP – A Financial ERP Tool, Benefits of ERP in Financial Accounting

Unit -V

Accounting Database Management: Use of MS Excel and other software packages such as QuickBooks India, Zoho Books, MargERP 9+, Vyapar, myBooks.

Suggested Readings

1. Accountancy-I: Haneef and Mukherjee, Tata McGraw Hill Company.
2. Principles & Practice of Accounting: R. L. Gupta & V. K. Gupta, Sultan Chand.
3. Accountancy-I: S.P. Jain & K.L.Narang, Kalyani Publishers
4. Bansal, Enterprise Resource Planning, Pearson
5. Maidasani, Dinesh. *Mastering Tally: Firewall Media*
6. Tally Education Pvt Ltd. *Official Guideto Financial Accounting using Tally ERP9 with GST*
7. *Tally ERP9 book advanced user*, Swayam Publication (www.tallyerp9book.com)
8. Tarang, *Tally ERP9*. Computer World Publications.

COURSE II - BASICS OF INCOME TAXATION

Learning Objectives: The course aims to achieve following objectives-

1. The subject introduces Indian Taxation System
2. It focuses on Basis of Charge, Income from Salary and House Property
3. It provides in-depth understanding of Depreciation and Income from Business and Profession

Course Content:

Unit I - BRIEF HISTORY OF INCOME TAX AND BASIS OF CHARGE

Legal framework, Canons of Taxation, different terms – meaning and definition Finance Bill, Scheme of Income tax. Overview of Direct taxes- Definitions and Basic Concepts of Income Tax: Assessee – Deemed Assessee – Assessee-in-default – Assessment Year – Previous Year – Person – Income – Gross Total Income – Total Income – Income Tax general rule and Exemptions to the Rule – Incomes Exempt from Tax – Agricultural income and its assessment – Tax Evasion Vs. Tax Avoidance.

Unit II- INCOME FROM SALARY AND HOUSE PROPERTY

Salary--Definition of 'Salary' – Characteristics of Salary – Computation of Salary Income: Salary u/s 17(1) – Annual Accretion – Allowances – Perquisites – Profits in lieu of Salary – Deductions u/s. 16 – Problems on computation of Income from Salary.

House Property- Exempted incomes from House Property – Annual Value – Determination of Annual Value for Let-out House and Self-occupied House – Deductions u/s.24 out of Annual Value of Let-out and Self-occupied House Properties – Problems on computation of Income from House Property.

Unit III- DEPRECIATION & INCOME FROM BUSINESS AND PROFESSION , INCOME FROM OTHER SOURCES AND CAPITAL GAIN

Depreciation- Meaning – Conditions for charge of depreciation – Assets used for Business – Block of Assets – Rates of Depreciation – Miscellaneous Provisions about depreciation – Computation of Depreciation

Business and Profession- Provisions and deduction related to Income from Business and profession. Problems on computation of Income from Business and Profession

Income from other sources and Capital gain

Unit IV

Awareness in regards to the Income Tax e-filing portal and other basic terms related to income tax filing return

Unit V

Conceptual knowledge of Form No 49A and 49B and their relevant data fields. Knowledge of different income tax return forms like ITR 1, ITR2, ITR3, and ITR4 and the irrelevant data fields

Suggested Readings

1. income tax law & practice by Gaur & Narang, Kalyani publication edition 2017, 2018
2. Income tax by Dr.H.C.Mehrothra, Sahitya Bhawan publication edition 2017
3. Income tax by Dr Vinod, K Singhania & Monica Singhania, Taxman publication edition 2017
4. Income tax law & practice by Gaur & Narang, puja gaur Rajeev puri Kalyani publication edition 2017, 2018

COURSE III - BASICS OF GOODS AND SERVICE TAX (GST)

Learning Objectives: The course aims to achieve following objectives-

1. To make participants understand the need for GST
2. To understand the implementation of GST
3. To understand the documentation involved in GST

Course Content:

Unit I: Introduction: Overview of Goods & Services Tax -Old Tax System and its Drawbacks - Need for Tax Reforms- Kelkar Committee on Tax Reforms - Constitutional Amendments - Introduction to GST-Concepts -Process of GST Implementation - Territorial Jurisdiction -Multiple Rates of GST- GST Model: Kelkar – Shah Model -Comprehensive structure of GST model in India: Advantages and Drawbacks of GST-Features of Single and Dual GST Models.

Unit-II: Taxes and Duties: Transactions & taxes covered under GST -Taxes and duties outside the purview of GST : Tax structure , computation administration of Tax on items containing Alcohol, Petroleum products and Tobacco products - Taxation of Services. -

Inter-State Goods and Services Tax: Transactions within a State under GST - Major advantages of IGST Model - Illustrations.

Unit III : Time of Supply of Goods & Services: Scope of Supply – Place and Value of Supply – GST Rate Structure. Input Tax Credit – Tax Invoice - Distribution of Credit - Procedures and Records for Input Tax Credits - Utilization, Recovery of Input Tax Credit - Levy and Collection, Tax Liability, Reserve Charge, Composite and Mixed Supplies, Exemptions and Non-Taxable Supplies.

Unit-IV: Registration and Filing–Registration of Assesses Under GST Act - Persons liable for registration –Procedure for Registration and Cancellation - Deemed registration – Credit and Debit Notes, Accounts and Records – Retention of Records - **Assessment:** Filing of Returns- Self-assessment - Provisional assessment – Assessment of Non-filers of returns - Assessment of Unregistered Persons –Computation of tax liability, TDS, TCS, Demand, Recovery and Adjudication, Refund -Audit by Tax Authorities.- Appeals and Revisions – Appellate Authority and its Powers - Miscellaneous Provisions.

Unit-V : Filing of Tax Returns: Procedure for Filing of tax returns of GST, Matching tax credits and due dates; Payment of tax, Interest and Levy of Late fees.**Assessment:** Self-assessment; Summary and scrutiny; Taxability of e-Commerce, e-way bills; Zero-rated supply.

Suggested Readings and E content

https://www.icai.org/post.html?post_id=16946

<https://egyankosh.ac.in/handle/123456789/55483>

<https://www.icsi.edu/media/webmodules/publications/GST%20Educational%20>

Series.p df

COURSE IV- DIGITALIZED ACCOUNTING

Learning Objectives: The course aims to achieve following objectives-

1. To Guide the students regarding regulatory framework for the operation of accounting activities.
2. Train the students regarding concept and structure of recording business transactions
3. Enable the students to use accounting information as a tool in applying solutions for managerial problems, evaluating the financial performance, and interpreting the financial structure.

Course Content:

Unit I - Introduction to Digitalized Accounting:

Need, significance and applications of digitalized final accounts. Discount Management- Cash Discount, Trade Discount, Vouchers Types, Back up, Restore

Use of Tally for Inventory management- Inventory Information- Stock Groups, Stock Items, Units of Measure Inventory creation/alteration, Inventory Features, Invoicing of daily Trades,

Inventory Reporting

Unit II

Inventory Control: Maintaining Inventory of some firm/organization, Trial Balance, Profitand Loss account, Balance Sheet, Bank Reconciliation Statement, Advance Accounting in Tally, Import / Export Data with Excel. Security Control in Tally.ERP 9, Tally Audit Controls.

Unit III - Multiple Price list Quotation Purchase Enquiry; Order Performa Invoice, Sales

Purchase & Rejection Voucher; Additional Purchase; Effective Rates Invoice. Generation of Reports: Cash Book, Ledger Accounts.

Unit IV

Bill wise details, Interest; Money Receipt and Cheques, Debit and Credit Notes Creating and Configuring New Company Accounts: Account masters 'maintenance, Account vouchers maintenance, inventory master's maintenance

Unit V

Display- Trial Balance, Day Book, Account books, Statement of Accounts, Inventory Books Statements of Inventory, Cash/fund flow, Payroll Reports, List of Accounts Exception Reports, Print Management, Reports Displaying, Accessing Reports, Modifying Reports, Financial Statements, Display of Balance Sheet, Display Profit and Loss Account.

Suggested Readings:

1. Agarwal, Garima. *Computerised Accounting*: Himalaya Publishing House.
2. Chheda, Rajesh. *Learn Tally. ERP9 with GST and E-way Bill*: Ane's Student Education.
3. Grewal, T.S. *Introduction to Accountancy*. S. Chand and Co.
4. Gupta, R.L. and Gupta, V.K. *Principles and Practice of Accounting*. Sultan Chand & Sons.
5. Haneef and Mukerjee. *Accountancy I*. Tata McGraw Hill Company.
6. Jain, S.P. and Narang, K.L. *Accountancy I*, Kalyani Publishers.
7. Jawahar Lal. *Financial Accounting*. Himalaya Publishing House.

Course V - DIGITALIZED GOODS AND SERVICE TAX

Learning Objectives: The course aims to achieve following objectives-

1. To understand the objectives, scope, provisions, implications and applications of Goods and Services Tax
2. Equipped with the knowledge of GST and its relevance
3. Comprehensive understanding of overall structure and assessment of GST and payment of Goods and Service Tax using computer hardware and software packages in a business set-up.

Course Content:

Unit I - Introduction: GST and its application, digital filing of tax return

Use of Computer (Hardware and Software) in GST: Use of MS excel and other Software Packages such as Tally.ERP9. Preparation of Business records using Microsoft Office: Use of Excel for preparing GST Records; Analysis of GST Data Use of Microsoft Power Point for Presentations; Use of Microsoft word for GST Reports

Unit II

Tax Invoice, Credit & Debit Notes and Assessment

Tax invoice, delivery challan, contents, bill of supply, receipt voucher, refund voucher, payment voucher and revised invoice. Appeal against adjudication order, non-appealable decisions & orders, ground of appeal, procedure for appeal, revision authority, Registration

and Returns under GST, Assessment, GST Authorities and Appeals

Unit III

Maintenance of Electronic Records and Documents for GST

Maintaining Online Ledgers – Tax liability ledger, Cash Payment ledger.

Online Tax Records-Tax invoice, Credit notes and Debit notes, Electronic way Bill.,Bill of supply.

Unit IV

Scrutiny of returns; Anti-profiteering; Avoidance of dual control

Penalty: Offences and penalties; Appeal and Revision of assessment; Demands and Recovery. Advance Rulings, Tax deduction at sources and Advance tax statements

Unit V-Assessment and Filing of Tax Returns

Assessment: Self-assessment; Provisional assessment, Summary assessmentSummary and scrutiny; Taxability of e-Commerce, e-waybills; Zero-rated supply

Filing of Tax Returns

Procedure for Filing of tax returns of GST, Matching tax credits and due dates; Payment of tax, Interest and Levy of Late fees. E-filing returns

References:

- 1) GST ready reckoner – Taxmann –V.S.Datey.
- 2) Indirect Taxes law & practice - Taxmann – V.S.Datey.

COURSE VI - INCOME TAX AND E- FILING

Learning Objectives: The course aims to achieve following objectives-

1. To attain knowledge about the Income Tax Act.
2. Understand the definitions related to Income tax
3. Determine the residential status of any person
4. Computation of Gross Total Income
5. Well versed with powers and Authorities of Income Tax officials.

Course Content:

Unit I Set off , Carry forward off losses and Deductions
Set off and Carry forward off losses, Aggregation of Income. Deductions from gross total income: Deductions in respect of certain payments: Deduction under sections 80C, 80CCC, 80CCD, 80CCE, 80D, 80DD, 80DDB, 80E, 80EE, 80EEB, 80G & 80GG. Specific deductions in respect of certain income: 80QQB, 80TTA, 80TTB & 80U.
Unit 2 Computation of Total Income-
Computation of total income and tax liability of individuals. Detail knowledge of e-portal for filing income tax return---E-filing to E-verify
Unit III: Conceptual knowledge of documents related to filing of returns:-
Knowledge of Form no16, 16A, 15G, 15H, 26AS, and Annual Information System (AIS)
Unit IV: Awareness regarding provisions for deposit of Advance tax, tax deduction atsource and introduction to tax collection at source. Deposit of income tax challan for self- assessment tax, advance tax and TDS.

Unit V: Income Tax Authorities and their powers:

Search & Seizure, Assessment of Individuals, HUFs, Firms and Companies, Collection of Tax: Tax deducted at source – Advance payment of tax – Refund of tax. Appeals and Revisions, Penalties and Prosecutions.

SUGGESTED READINGS

- 1) Gupta R.R., Gupta R.S., “ Income Tax Law and Practice, Agra Book Store, Agra
- 2) Bhagawati Prasad, Law and Practice of Income Tax In India, Navman Prakashnan, Aligarh.
- 3) Aligarh.
- 4) Sukumar Bhatt, Indian Income Tax Law and Practice, Wadhwa & Co., Agra.
- 5) Vinod.K. Singh, Direct Taxes Law & Practice, Taxmann Publications (P) Ltd., Delhi.
- 6) Ambujam Venkataraman, Income Tax Digest of Surpreme Court Cases, A.N. Aiyar’sCompany Law, Institute of India (P) Ltd., Madras.
- 7) Bhatnagar K, Digest of Income Tax Cases (Vol.1 to 4), Central Law Agency, Allahabad.

Certificate/Diploma in Software Development and Programming

Objective of the Course:

To provide training in software development, programming languages, and basics of DataStructures. The course also helps the candidates to get acquainted with basics of software development and programming techniques.

Learning Outcomes:

After completion of this course the students would be able to understand the program code written in C, C++, Python, write code in these languages, design OO structure diagrams and will have basic knowledge of databases.

Duration of the Course:

- 1) Certificate course: 6 months
- 2) Diploma: 12 months

Eligibility: Any student enrolled in the degree program of the college and having knowledge about the basics of Computers.

Sr.No.	Topics	
Topics covered under Certificate Course are Sr No.1, 2 and 3		
1	GC-SDP-01T Programming using C GC-SDP-01P Programming using C Lab	Credits: 6(4 Th. 2 Lab)
2	GC-SDP-02T Object Oriented Analysis And Design Using Uml GC-SDP-02P Object Oriented Analysis And Design Using Uml Lab	Credits: 6(4 Th. 2 Lab)
3	GC-SDP-03T Basics of Data Structure GC-SDP-03P Basics of Data Structure Lab	Credits: 6(4Th. 2 Lab)
Topics covered under Diploma Course are Sr No. 1, 2, 3, 4, 5 and 6		
4	GC-SDP-04T DataBase Management System GC-SDP-04P DataBase Management System	Credits: 6 (4Th. 2 Lab)
5	GC-SDP-05T Programming Fundamentals Using Python GC-SDP-05P Programming Fundamentals Using Python	Credits: 6 (4 Th. 2 Lab)
6	GC-SDP-06P Minor Project	Credits: 6

Detailed Contents

Programming Using C

Total Marks:100
External Marks:70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Section A

Unit I: Simple Program logic, Pseudo-code, Problem Identification, Analysis, Flowcharts, and algorithms

Unit II: C Programming: character set, Identifiers and keywords, Data types, Declarations, Statement and symbolic constants, Input-output statements.

Unit III: Operators and Expressions: Arithmetic, relational, logical, unary operators, other operators,

Unit IV: Control statements: Branching, looping using for, while and do-while Statements, Nested control structures, switch, break, continue statements.

Section B

Unit V: Functions: Declaration, Definition, Call, passing arguments, call by value, call by reference, Recursion, Use of library functions; Storage classes: automatic, external and static variables.

Unit VI: Arrays: Defining and processing arrays, Passing array to a function, Using multidimensional arrays, Solving matrices problem using arrays.

Unit VII: Strings: Declaration, Operations on strings.

Unit VIII: Pointers: Pointer datatype, Structures: Using structures and union

Suggested Reading:

1. Byron S Gottfried, Programming with C | 4th Edition (Schaum's Outlines)
2. Yashavant Kanetkar, Let Us C, 17TH EDITION
3. E Balagurusamy, Programming in ANSI C

Programming Using C Lab

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 2
Pass Percentage: 40%

The programs in lab will be based on the contents covered in the theory syllabus.

Object Oriented Analysis and Design Using UML

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 4

Pass Percentage: 40%

Section A

Unit I: Introduction to Object: Object Orientation, Development, Modeling, Object Modeling technique. Object modeling: Objects and classes, Links and Association, Generalization and inheritance

Unit II: Grouping constructs, Aggregation, Abstract Classes, Generalization as extension and restriction, Multiple inheritance

Unit III: Design Methodology, Analysis: Object modeling, Dynamic modeling, Functional modeling, Adding operations, Iterating Analysis.

Unit IV: Comparison of methodologies: Structured Analysis/ Structured Design, Jackson Structured Development.

Section B

Unit V: Implementation: Using Programming Language, Database System, outside Computer. Programming Style: Object Oriented Style, Reusability, Extensibility, Robustness, Programming in-the-large.

Unit VI: UML: Basics, Emergence of UML, Types of Diagrams. Use Case: Actors, Use Case Diagram, Relationships between Use Cases

Unit VII: Classes: Class Diagram, Classes, Objects, Attributes, Operations, Methods, Interfaces, Constraints, Generalization, Specialization, Association, Aggregation.

Unit VIII: Behavioral Diagrams: Activity Diagram, Collaboration Diagram, Sequence Diagram, State chart Diagram

Suggested Reading:

1. Ugrasen Suman, Object – oriented Analysis and Design Using UML, Cengage publications
2. Michael Blaha, Object – Oriented Modeling and Design with UML IPearson
3. Sarnath Ramnath, Object – Oriented Analysis and Design, Springer

The programs in lab will be based on the contents covered in the theory syllabus.

Basics of Data Structure

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 4

Pass Percentage: 40%

Section A

Unit I: Basic concept of data, Problem analysis, algorithm complexity, Big O notation and time space trade off

Unit II: Introduction to array, stack, queue, add elements and remove elements in stack and queue at first, last and nth location, application of stacks and queues,

Unit III: Linear and binary search, bubble sort, insertion sort, selection

sort. Unit IV: Link list, insertion, deletion, traversal

Section B

Unit V: Stack using Link list, Queue using link list,

Unit VI: double link list insertion and deletion

Unit VII: Tree terminology, Binary tree, Binary Search tree, tree traversal, Unit VIII: Insert and remove element in BST, heap, quick sort, merge sort.

Suggested Reading:

1. Seymour Lipschutz, Data Structures (Revised First Edition)| Schaum's Outline Series
2. Michael H. Goldwasser, Data Structures and Algorithms in Python

The programs in lab will be based on the contents covered in the theory syllabus

Programming Fundamentals Using Python

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 4

Pass Percentage: 40%

Section A

Unit I: Introduction to DBMS-Basic DBMS terminology, Data independence. Architecture of a DBMS

Unit II: Relational Keys: Primary Key, Foreign Key, Candidate Key, Super Key etc., and Integrity Constraints

Unit III: Relational model, Relational schema Hierarchical model, and Network

model. Unit IV: Normal Forms: Functional Dependency, 1NF, 2NF, 3NF, BCNF, 4NF, 5NF

Section B

Unit V: Structured Query Language- Introduction to SQL/ MySQL, data types, DDL, DML, DCL, querying database tables, Data Definition Language (DDL)

Unit VI: Creating Tables, Inserting and updating values into a Table.

Unit VII: Data Manipulation Language: Various form of SELECT-simple, using special operators, aggregate functions, group by clause, sub query

Unit VIII: Introduction to views, Dropping a VIEW, GRANT command, REVOKE command, COMMIT and ROLLBACK

Suggested Reading:

1. James Groff, SQL The Complete Reference, 3rd Edition
 2. Monika Pathak, Fundamentals of Database Management System (DBMS), Bookman Publishers
 3. S. Sumathi, Fundamentals of Relational Database Management Systems, Springer
- The programs in lab will be based on the contents covered in the theory syllabus

.Database Management System

Total Marks: 100

External Marks: 70

Internal Marks: 30

Credits: 4

Pass Percentage: 40%

Section A

Unit I: Introduction: Python installation and setup, Command line Basics; Python Objects.

Unit II: Data Structures Basics: Introduction to Python data types, Variable assignments, accepting input from the console, assignment statement,

Unit III: Expressions, operators and their precedence Numbers, String, String methods, Lists

Unit IV: Python Comparison Operators: Chaining comparison operators with logical operators, Pass Break and continue. write a lot of programs: interest calculation, primarily testing, and factorials.

Section B

Unit V: Program Flow control in Python: If Elif and Else statements in python, Loops: for loops,

While loops

Unit VI: Methods and Functions in python: Introduction to functions, Def keyword, User defined functions, arguments and parameters, Parameter naming in python

Unit VII: Errors and Exception Handling: Introduction to errors, Built-in errors, raising errors in python

Unit VIII: File handling in Python: Files in python, importing own files, Read and writing textfiles, working with CSV, XML and JSON files.

Suggested Reading:

1. Udemy, <https://www.udemy.com/course/python-the-complete-python-developer-course/>
2. Timothy Budd, Exploring Python, TMH, 1st Ed, 2011

The programs in lab will be based on the contents covered in the theory syllabus. Minor project will be allocated to each student. The student can develop the project in C or python language,

The project report will be submitted by the student for evaluation and viva-voce based on

project will be conducted.

**ONE MONTH CERTIFICATE COURSE IN CORE JAVA TRAINING (UNDER MOU WITH
FUEL, PUNE)**

(December 1 to 30, 2022)

Main Features

- ❖ Friends Union for Energising Lives (FUEL) is a non-profit organisation with a mission to provide the youth of the nation access to essential information about career opportunities.
- ❖ Government Mohindra College, Patiala has entered a memorandum of understanding with FUEL, Pune to train students in the technical skills required to bag jobs in MNCs and companies of repute.
- ❖ The MOU includes One Month-long certificate courses in Core Java/ Python with Artificial Intelligence, and Digital Marketing for Computer Science, Computer Applications, and Business Management students.
- ❖ More than 60 students participated in and completed the one month online training daily from December 1- 30, 2022 in the evening session (4 pm to 6.30 pm)
- ❖ All Students were awarded certificates after they completed the final test on LinkedIn app upon completion of the course.

Syllabus

Creative Writing Certificate course

Course Title:6-Day Creative Writing Course

Day 1: Introduction to Creative Writing

- What is Creative Writing?
- Types of Creative Writing
(Fiction, Poetry, Non-Fiction, etc.)

Post lunch session

- Elements of Creative Writing:
Plot, Character, Setting, and Theme

Day 2: Fiction Writing

- Basics of Fiction Writing
- Creating Compelling Characters
- Building Engaging Plots

Day 3: Poetry Writing

- Introduction to Poetry
- Different Forms of Poetry
(Rhymed, Free Verse, Haiku, etc.)
- Imagery and Metaphor in Poetry

Day 4: Creative Non-Fiction

- Exploring Creative Non-Fiction
- Personal Essays and Memoirs

Day 5: Editing and Revision

- The Importance of Editing
- The symbols used while proofreading a text
- Proof Reading Exercises

Day 6: Publishing and Sharing Your Work

- Publishing Options (Traditional vs. Self-Publishing)
 - ISBN & ISSN (approved journals)
 - Important Publishers and publishing sites

Assessment:

- Daily Writing Exercises
- Submission of a Short Story, Poem, or Non-Fiction work
- Participation and Engagement in Class Discussions

Additional Activities:

- Guest Author/Writer Talks
Dr.Amritjit, Ohio, US, online session
- Reading and Analysing Published Creative Works
 - Group Writing Sessions

Suggested Reading

- "On Writing: A Memoir of the Craft" by Stephen King
- "The Elements of Style" by William Strunk Jr. and E.B. White
- "Bird by Bird: Some Instructions on Writing and Life" by Anne Lamott
- "The Writing Life" by Annie Dillard
- "The Art of Fiction: Notes on Craft for Young Writers" by John Gardner
- "The Artist's Way" by Julia Cameron

"The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby

"The Poetry Handbook: A Guide to Reading Poetry for Pleasure and Practical Criticism" by John Lennard

**ONE MONTH CERTIFICATE COURSE IN DIGITAL MARKETING UNDER MOU WITH FUEL,
PUNE**

February 21- April 29, 2023

Highlights of the Course:

- This Course offers an opportunity for our students to explore career options in the digital field with training from industry experts, under HDFC Bank's Future Skills Initiative.

- Students get to learn the latest tools and techniques of digital marketing and acquire proficiency in enhancing brand identity and presence all over the world.

- This course offered by FUEL helps our students develop their skills and learn about the Right Digital Tools for Business to open windows of opportunity worldwide in Digital Marketing.

- 59 Students of Commerce and Management streams participated in and completed this online course in the evening session between 4 pm – 6.30 pm.

Course Title: **14-Day Certificate Course in Journalism** **Course Syllabus**

Department of English, Govt. Mohindra College, Patiala

Day 1: Introduction to Journalism

- What is Journalism?
- Importance of Journalism
- Roles and Responsibilities of Journalists

Day 2: News Writing Fundamentals

- News Values and Selection
- The Inverted Pyramid Structure
- Interviewing Techniques

Day 3: Feature Writing Basics

- Types of Feature Stories
- Writing Techniques for Features
- Human Interest Stories

Day 4: Multimedia Journalism

- Digital Journalism Overview
- Writing for Online Platforms
- Social Media for Journalists

Day 5: Ethics and Journalism

- Media Ethics
- Plagiarism and Credibility
- Fact-Checking

Day 6: Legal Aspects of Journalism

- Media Law and Regulations
- Libel and Defamation
- Privacy and Journalism

Day 7: Investigative Journalism

- Investigative Reporting Techniques
- Data Journalism Basics
- Ethics in Investigative Journalism

Day 8: Editing and Proofreading

- Copy Editing Principles
- Grammar and Style Guidelines
- Headline Writing

Day 9-10: Practical Workshops

- Hands-on News Writing Exercise
- Feature Writing Practice
- Multimedia Storytelling Workshop

Day 11: Guest Speaker Session

- Q&A and Discussion with a Professional Journalist

Day 12: Final Projects

- Students work on individual or group journalism projects

Day 13: Project Presentation

- Presentation of final projects by students
- Peer and instructor feedback

Day 14:

- Certificate distribution and closing remarks

Assessment Procedure

- Daily Quizzes and Exercises
- News Reporting Assignment
- Feature Writing Assignment
- Investigative Journalism Exercise
- Final Project and Presentation Evaluation

Suggested Reading

The Elements of Journalism: What Newspeople Should Know and the Public Should Expect" by Bill Kovach and Tom Rosenstie

Feature Writing: The Pursuit of Excellence" by Edward Jay Friedlander and John Lee

The AP Stylebook - The Associated Press Stylebook is a must-have reference for journalistic writing and style guidelines.

Media Ethics: Principles, Practices, and Cases from India" by Ujjwala Barve and Nalini Rajan

Television and Radio Journalism" by K. M. Shrivastava

Advertising and Branding: Concepts and Practices" by S. Ramesh Kumar and Rajeev Batra

SYLLABUS

7 DAYS CERTIFICATE COURSE IN PHONETICS

Day 1:

Introduction to Phonetics

- What is Phonetics?
- IPA / Queens English/ RP
- Articulation and Speech

Organs

Day 2: Consonant Sounds

- Introduction to Consonant

Sounds

- Place and Manner of

Articulation

- Practice exercises for

Consonant Sounds

Day 3: Vowel Sounds

- Introduction to Vowel

Sounds

- Monophthongs, Diphthongs

- Practice exercises for Vowel

Sounds

Day 4: The Phoneme & the syllable

- Types of syllable
- Transcription of words
- Transcription exercises

Day 5: Stress in words

- Primary stress in words
- Stress marking rules
- Stress marking exercises

Day 6: Consonant Clusters in English

- Types of consonant clusters
- The composition of a syllable
- Releasing & Arresting

consonant

Day 7: Practice Exercises & Problem-Solving

- English transcription exercises
- Primary stress exercises
- Practice of Pronunciation of words as per IPA/RP

Suggested Reading

English Phonetics and Phonology: An Introduction by Philip Carr

English Phonetics and Phonology: A Practical Course by Peter Roach

A Course in Phonetics and Spoken English by J Sethi & PV Dhamija

Syllabus
Also applicable for 3 days short term workshop
CERTIFICATE COURSE IN PHOTOGRAPHY
(Cell phone, DSLR)

Day 1:

Importance of photography in the digital age
Brief history of photography
Introduction to camera types (mobile and DSLR)
Camera settings and modes

Day 2:

Composition and Framing
Natural light vs. artificial light
Practice assignments

Day 3:

Mobile camera features and apps
Mobile photography tips and tricks
Practice: Mobile photography exercises

Day 4:

DSLR Photography Basics
Camera settings: ISO, aperture, shutter speed
Practice: DSLR settings and exposure exercises

Day 5:

Portrait composition and posing
Lighting for portraits
Practice: Portrait photography session

Day 6:

Landscape and Travel Photography
Capturing travel moments
Practice: Landscape and travel photography

Day 7:

Editing and Post-Processing
Introduction to photo editing software/apps
Basic photo editing techniques
Practice: Editing and retouching images

Additional Components:

- Field trips for practical photography sessions
- Guest photographers
- Group discussions and critique sessions
- Hands-on training session

Recommended resources for further learning

Understanding Exposure by Bryan Peterson
The Photographer's Eye: Composition and Design for Better Digital Photos by Michael Freeman
Digital Photography Complete Course by David Taylor

The Art of Photography: A Personal Approach to Artistic Expression by Bruce Barnbaum
The Mobile Photographer: An Unofficial Guide to Using Android and iOS Devices by Jerod Foster

PIDILITE COURSE IN CREATIVE ARTS
Course structure applicable for 3 days workshop also

DAY 1

Tie and Die

Raw Material: cotton cloth, fabric paint brushes, fabric colours, liners, rubber bands, mug.

Day 2

Fabric Painting

Raw Material: Fabric, fabric paints, liners, paint brushes, fabric colours, mug.

Day 3

Glass Painting

Raw Material: Glass item/ bottle, glass paints, paint brushes, paint liners, mug.

Day 4

Jute Bag Painting

Raw Material: Jute bag, fabric colours, fabric paints, paint brushes, mug.

Day 5

Greeting Card Making

Raw Material: Chart Papers, stencils, crayons/watercolours, sketch pens, embellishments.

Day 6

Mehandi Art

Raw Material: mehndi cones, mehndi oil, rag, student-subject

Day 7

Rangoli Making

Raw Material: rangoli colours, coloured rice or coloured wood dust, stencils.

The Professors of the Department of English and Pidilite instructor formulated the contents and course plan and executed the same.

Syllabus
Certificate Course in Soft Skills
7 days course

Module 1:

- Introduction to Soft Skills
- Interpersonal skills

Module 2:

- Communication Skills
- Verbal communication - Non-verbal communication
- Active listening

Module 3:

- Emotional Intelligence
- Relationship management

Module 4:

- Time Management and Organization Techniques
- Goal setting
- Stress management

Module 5:

- Teamwork and Collaboration
- Conflict resolution and negotiation skills

Module 6:

- Leadership and Influence- Leading by example
- Building influence and persuasion skills

Module 7:

- Problem Solving and Decision Making
- Critical thinking skills

Module 8:

- Networking and Professional Etiquette
- Building professional relationships
- Business etiquette and manners,,

Module 9:

- Personal Branding and Presentation
- Presentation skills
- Interviewing techniques

Additional Components:

- Role-playing and simulation exercises
- Workshops and practice scenarios

Reading materials and recommended resources

Emotional Intelligence 2.0 by Travis Bradberry and Jean Greaves

How to Win Friends and Influence People. by Dale Carnegie

The 7 Habits of Highly Effective People by Stephen R. Covey

Getting Things Done: The Art of Stress-Free Productivity by David Allen

Networking Like a Pro: Turning Contacts into Connections by Ivan Misne

Syllabus

Vigilance Awareness Week Certificate Course

Day 1:

- Importance of vigilance
- Role of vigilance officers and organizations
- Ethics and integrity

Day 2:

- Understanding corruption: Definition and types
- Identifying red flags of corruption

Day 3:

- Anti-corruption laws and regulations
- Whistleblower protection

Day 4:

- How to report corruption
- various online portals that keep your identity a secret

Day 5:

- Ethical principles and values
- Ethical dilemmas in the workplace

Day 5:

- Cybersecurity awareness
- Effectiveness of cyber cells
- Case studies in cybercrime

Day 6:

- Financial fraud prevention
- Safeguarding financial transactions
- Practical tips for online safety

Day 6:

- Interactive sessions with Faculty members
- Q&A and open discussions

Day 7:

- Role of leadership in preventing corruption
- Group projects on developing anti-corruption policies

8 days certificate course in Advanced Literary Analysis

Day 1:

Introduction to Literary Analysis

- Key literary terms and concepts from MH Abrams

Day 2:

Reading Techniques

- How to closely read a text
- Difference between prose and various kinds of poems

Day 3:

Analysing Fiction

- Examining short stories and novels
- Examining Plot and narrative structure

Day 4:

Character Analysis

- Types of Characters in English Literature
- Art of Characterisation of major English writers

Day 5:

Analysing Poetry

- Poetic devices
- Poetry appreciation

Day 6:

Analysing Drama

- Exploring plays and playwrights
- Understanding dialogue and themes

Day 7:

Critical Writing Workshop

- How to go about a thesis statement
- Structuring critical essays

Day 8:

Certificates & Closing

- Valedictory session
- Certificates of completion

This course provided students with a comprehensive understanding of literary analysis and critical writing, which are essential skills for English department students.

Notice for Add on courses

Government Mohindra College, Patiala

Notice

The Department of English will organise a Soft Skills training program from 19 to 27 April, 2023. All those students who are interested must submit their names by 12 April, 2023, with the following organising team:

Asst.Prof. Loveleen Parmar

Asst. Prof. Kamaldeep Kaur

Asst. Prof. Vandna

Asst. Prof. Geeta Sharma

Loveleen Parmar
5/4/2023

Government Mohindra College Patiala

Notice

The Department of English is going to organise a two-weeks course in Journalism for the students of English literature. Interested students must register their names by **August 10, 2018 with course in charge Mrs. Loveleen Parmar in Department Room, MA Block.**

Convener

Loveleen Parmar
27/7/2018

Government Mohindra College, Patiala

Notice

The Department of English will organise a 7-day comprehensive course in Phonetics in the first week of September. Students interested in honing their phonetic skills must get their names registered most definitely by 27th August 2019 with Prof. Loveleen Parmar (9872732727) in the English Department Room, MA Block.

Loveleen Parmar
Coordinator
6/Aug/2019

Government Mohindra College, Patiala

Notice

The Department of English will be holding a 10 days online workshop in Phonetics from October 12 to 22, 2020. Students will be awarded certificates upon completion of course and related assignments. Those interested must convey the same to Prof. Loveleen Parmar on her cell number 9872732727, by Oct. 5, 2020.

All sessions and practice exercises will be conducted on google meet and google classroom.


Convener

Oct 01, 2020.

Government Mohindra College, Patiala

Notice

The Department of English will conduct a Creative Writing workshop between May 6 and 12, 2021. Interested students must contact Prof. Loveleen Parmar (9872732727) for further information regarding course details and certification most definitely by 2nd May, 2021.


Convener

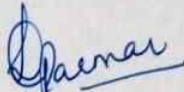
April 26, 2021

Government mohindra college Patiala

Notice

The Department of English is going to conduct a workshop to observe Vigilance Awareness Week from Oct. 31 to Nov. 6, 2022. The directions of the central government will be followed during the workshop. Students of the department are invited to get their names registered for participation in the same with Prof. Loveleen Parmar in room no. 20 or Prof. Kamaldeep & Prof. Geeta in the department room.

The last date for registration is 25th October 2022.


Convener
15/oct/2022

Notice for Admission in Certificate courses in

- 1. Certificate courses in Account & taxation**
- 2. Certificate courses in Software Development & programming**
- 3. Certificate courses in Automation & E-Governance**

ਦਫ਼ਤਰ ਪ੍ਰਿੰਸੀਪਲ, ਸਰਕਾਰੀ ਮਹਿੰਦਰਾ ਕਾਲਜ, ਪਟਿਆਲਾ

ਨੋਟਿਸ

ਮਿਤੀ: 15.10.2022

ਜਗਤ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਪੰਜਾਬ ਸਟੇਟ ਓਪਨ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ ਅਧੀਨ ਚਲ ਰਹੇ ਸਰਟੀਫਿਕੇਟ ਕੋਰਸ (6 Months) Office Automation and E- Governance, Accounting and Taxation ਅਤੇ Software Development and Programming ਦੇ ਸਾਲ 2022-23 ਦੇ ਦਾਖਲੇ ਲਈ ਵਿਦਿਆਰਥੀ ਆਨ-ਲਾਈਨ ਲਿੰਕ <https://admissions.psoa.ac.in> ਤੇ ਮਿਤੀ: 30.10.2022 ਤੱਕ ਐਪਲਾਈ ਕਰਨ ਉਪਰੰਤ ਫਾਰਮ ਅਤੇ ਦਸਤਾਵੇਜ਼ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਪ੍ਰੋਫੈਸਰ ਸਾਹਿਬਾਨ ਕੋਲ ਜਮ੍ਹਾਂ ਕਰਵਾਉਣ।

ਨੋਟ: ਕੋਰਸ ਸਬੰਧੀ ਕਿਸੀ ਵੀ ਤਰ੍ਹਾਂ ਦੀ ਜਾਣਕਾਰੀ ਲਈ ਵਿਦਿਆਰਥੀ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਪ੍ਰੋਫੈਸਰ ਸਾਹਿਬਾਨ ਨਾਲ ਸੰਪਰਕ ਕਰ ਸਕਦੇ ਹਨ।

1. Office Automation and E- Governance - ਪ੍ਰੋ. ਪਲਵਿੰਦਰ ਸੰਧੂ (9530700019)
2. Accounting and Taxation - ਪ੍ਰੋ. ਰਾਜਵੰਤ ਕੌਰ (9781400538)
3. Software Development and Programming - ਪ੍ਰੋ. ਗੁਰਦੀਪਿਕਾ ਕੌਰ (9779623637)

Jagpreet Kaur
ਪ੍ਰਿੰਸੀਪਲ
ਸਰਕਾਰੀ ਮਹਿੰਦਰਾ ਕਾਲਜ
ਪਟਿਆਲਾ

Time table of

4. Certificate courses in Account & taxation
5. Certificate courses in Software Development & programming
6. Certificate courses in Automation & E-Governance

Time Table of Certificate Courses (2022) Online/Offline Mode			
Name of The Course	3.00-4.00 PM	4.00-5.00 PM	5.00-6.00PM
Certificate Course in Accounting & Taxation	GC-CAT 1 Basic of Financial Accounting (Room No-81) Prof. Megha Thakur	GC-CAT 2 Basics of Income Tax Operation (Room No-82) Prof. Inderjit Singh	GC-CAT3 Basics of Goods & Service Tax (Room No-83) Prof. Shravan Kumar
Certificate Course in Software Development & Programming	GC-SDP-OIT Programming Using-C (Wed-Sat.) (Room No-84) GC-SDP-OIP Programming using C Lab (Mon. -Tue) (Prof . Amandeep Kaur)	GC-SDP-O2T Object Oriented Analysis and Design Using Uml (Mon-Tue, Fri-Sat) (Room No-85) GC-SDP-O2T Object Oriented Analysis and Design Using Uml Lab (Wed- Thu) Prof. Taranbir Kaur	GC-SDP-O3T Basics of Data Structure Mon-Thu) (Room No-75) GC-SDP-O3P Basics of Data Structure-Lab ((Fri-Sat) Prof. Ashima
Certificate Course in Automation and E-Governance	GC-OA/OIT Data Entry & Computer Application GC-OA-OITP (Wed-Sat) (Room No-76) Data Entry & Computer Application (Mon- Tue) Prof. Palwinder Kaur Sandhu	GC-OA-O2T Automation Tools GC-OA-O2P (Mon-Tue, Fri-Sat) (Room No-77) Automation Tools (lab) (Wed- Thu) Prof. Kaushal	GC-OA-O3T Office Equipment & Secretarial Tasks (Mon- Sat.) (Room No-78) Prof. Jaspreet Kaur.

Sirmat Kaur
Principal
Govt. Mohindra College, Patiala