

1.3.2 Value-added courses imparting transferable and life skills offered during the last five years

All UG Courses - II Year(Annual & 4th Semester)

Environmental and Road Safety Awareness

Total Marks : 100

Theory : 70 marks

Internal Assessment: 30

Max Time: 3 hrs.

Lectures per week 5

Credits: 04

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Each of sections A and B will have four questions from the respective sections of the syllabus. Each question shall carry 11 marks. Section C will consist of 13 short answer type questions of 2 marks each.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt any two questions from each section A and B. Section C is compulsory.

PRIVATE/DISTANCE EDUCATION STUDENTS

Max Marks: 100

Max Time: 3hrs.

Lectures per week 5

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Each of sections A and B will have four questions from the respective sections of the syllabus. Each question shall carry 15 marks. Section C will consist of 20 short answer type questions of 2 marks each.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt any two questions from each section A and B. Section C is compulsory.

SECTION-A

INTRODUCTION TO ENVIRONMENTAL STUDIES:

The multidisciplinary nature of environmental studies. Definition, scope and importance

Concept of Biosphere – Lithosphere, Hydrosphere, Atmosphere.

(Hours -2)

ECOSYSTEM & BIODIVERSITY CONSERVATION

Ecosystem and its components, Types of Ecosystems

Biodiversity - Definition and Value, Threats to biodiversity and its conservation

Level of biological diversity: genetic, species and ecosystem diversity; bio-geographic zones of India; biodiversity patterns and global biodiversity hot spots.

India as Mega-biodiversity nation; Endangered and endemic species of India.

Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.

(Hours -6)

NATURAL RESOURCES–RENEWABLE AND NON RENEWABLE RESOURCES

Land resources and land use change; land degradation, soil erosion and desertification.

Deforestation: causes and impacts due to mining, dam building on environment, Forests, Biodiversity and tribal populations.

Water: Use and over-exploitation of surface and ground water, Floods, droughts, conflicts over water (international & inter-state)

Energy resources: renewable and nonrenewable energy sources, use of alternate energy sources, growing energy needs, case studies.

(Hours -8)

Environmental Pollution

Environmental Pollution : types, causes, effects and controls; Air, Water, Soil and noise pollution. Nuclear hazards and human health risks Solid waste management, Source Segregations : Control measures of urban and Industrial waste. Pollution case studies.

(Hours -6)

SECTION-B

ENVIRONMENTAL PROTECTION LAWS IN INDIA

Environmental protection act for; Air (Prevention and control of pollution), Water (Prevention and Control of pollution), Wild life, Forest Conservation, Issues involved in the enforcement of environmental legislation. Role of an individual in prevention of pollution.

Environmental policies & Practices; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.

(Hours -5)

Human Communities and the Environment

Human population growth: Impacts on environment, human health and welfare, Sanitation & Hygiene. Resettlement and rehabilitation of project affected persons; case studies. Disaster management: floods, earthquake, cyclones and landslides. Environment movements: Chipko, Silent valley, Bishnoi of Rajasthan. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation for a Clean-green pollution free state.

Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi)

(Hours -5)

ROAD SAFETY AWARENESS

Concept and significance of Road safety, Traffic signs, Traffic rules, Traffic Offences and penalties, How to obtain license, Role of first aid in Road Safety.

(Hours -5)

Stubble Burning

Meaning of Stubble burning.

Impact on health & environment.

Management and alternative uses of crop stubble.

Environmental Legislations and Policies for Restriction of Agriculture Residue Burning in Punjab.

(Hours -8)

Field Work

Visit to an area to document environmental assets: river/Forest/Flora/Fauna, etc.
Visit to Local polluted site –urban/Rural/Industrial/Agricultural.
Study of common Plants, Insects, Birds and basic principles of identification.
Study of simple ecosystems-pond, river, Delhi Ridge, etc.

(Hours -5)

Suggested Readings :

1. Carson,R.2002. Silent Spring, Houghton Mifflin Harcourt.
2. Gadgil.M., & Guha,R.1993. This Fissured Land : An Ecological History of India.Univ. of California Press.
3. Gleeson, B. and Low, N.(eds.)1999.Global Ethics and Environment,London,Routledge.
4. Gleick,P.H.1993. Water in Crisis.PacificInstitute for Studies in Dev. Environment & Security.StockholmEnv. Institute,Oxford Univ.Press.
5. Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll.Principles of Conservation Biology.Sunderland :Sinauer Associates, 2006.
6. Grumbine,R.Edward, and Pandit,M.K.2013. Threats from India's Himalays dams. Science,339:36-37.
7. McCully,P.1996. Rivers no more: the environmental effects of dams (pp.29-64). Zed Books.
8. McNeill,John R. 2000. Something New Under the Sun : An Environmental History of the Twentieth Century.
9. Odum, E.P., H.T & Andrews, J.1971. Fundamentals of Ecology.Philadelphia : Saunders.
10. Pepper,I.L., Gerba ,C.P&Brusseau,M.L.2011. Environmental and Pollution Sciences.Academic Press.
11. Rao, M.N. &Datta,A.K.1987. Waste Water Treatment.Oxford and IBH Publishing Co.Pvt.Ltd.
12. Raven, P.H., Hassenzahl, D.M. & Berg, L.R.2012,Environment. 8Th edition. John Wiles & Sons.
13. Rosencranz, A., Divan, S., &Nobie, M.L. 2001. Environmental law and policy in India. Tripathi 1992
14. Sengupta, R. 2003. Ecology and economics: An approach to sustainable development. OUP.
15. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology, Environmental Science and Conservation. S. Chand Publishing, New Delhi.
16. Sodhi, N.S. Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics. John Wiley & Sons.
17. Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.
18. Warren, C.E. 1971. Biology and Water Pollution Control. WB Saunders.
19. Wilson, E.O. 2006. The Creation: An appeal to save life on earth. New York:Norton.
20. World commission on Environment and Development. 1987. Our Common Future. Oxford University Press.

BCA-114: PROGRAMMING FUNDAMENTALS USING C

Max Marks: 75

Min Pass Marks: 35%

Maximum Time: 3 Hrs.

Lectures to be delivered: 45-55 Hrs.

Instructions for the paper setter

The question paper will consist of three sections: A, B & C. SECTIONs A& B will have four questions each from the respective sections of the syllabus carrying 15 marks for each question. SECTION C will have 5-10 short-answer type questions carrying a total of 15 marks, which will cover the entire syllabus uniformly.

Instructions for the candidates

Candidates are required to attempt two questions each from the sections A & B of the question paper and the entire section C.

SECTION A

Programming Process: Problem definition, Algorithm development, Flowchart, Coding, Compilation and debugging.

Basic structure of C program: History of C, Structure of a C program, Character set, Identifiers and keywords, constants, variables, data types.

Operators and expressions: Arithmetic, Unary, Logical, Relational operators, assignment operators, Conditional operators, Hierarchy of operations type conversion.

Control statements: branching statements (if, if else, switch), loop statements (for, while and do-while), jump statements (break, continue, goto), nested control structures.

Functions: Library functions and user defined functions, prototype, definition and call, formal and actual arguments, local and global variables, methods of parameter passing to functions, recursion.

I/O functions: formatted & unformatted console I/O functions

SECTION B

Storage Classes: automatic, external, static and register variables.

Arrays: – One dimensional and two dimensional arrays

Declaration, initialization, reading values into an array, displaying array contents

Strings: input/output of strings, string handling functions (strlen, strcpy, strcmp, strcat&strrev), table of strings.

Structures and unions: using structures and unions, comparison of structure with arrays and union.

Pointers: pointer data type, pointer declaration, initialization, accessing values using pointers, pointers and arrays.

Introduction to Files in C: opening and closing files. Basic I/O operation on files.

Reference Books:

- 1 E. Balagurusamy, Programming in C, Tata McGraw-Hill.
- 2 Kernighan and Ritchie, The C Programming Language, PHI.
- 3 Byron Gotfried, Programming in C.
- 4 Kamathane, Programming in C, Oxford University Press

UTLINE FOR THE SYLLABUS OF A MODULE ON
DRUG ABUSE: PROBLEM, MANAGEMENT AND PREVENTION

Session: 2016-17, 2017-18 & 2018-19

(FOR ALL UNDERGRADUATE COURSES)

Note: This is a compulsory qualifying paper, which the students have to study and qualify during three years of their degree course.

REGULAR STUDENTS

Max Marks: 70

Max Time: 3hrs.

Internal Assessment: 30

Total Marks 100

Lectures per week 5

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Each of sections A and B will have four questions from the respective sections of the syllabus. Each question shall carry 7 marks. Section C will consist of 14 short answer type of 2 marks each.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt any three questions from section A and any three questions from section B. Section C is compulsory.

PRIVATE STUDENTS

Max Marks: 100

Max Time: 3hrs.

Lectures per week 5

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Each of sections A and B will have three questions from the respective sections of the syllabus. Each question shall carry 15 marks. Section C will consist of 20 short answer type of 2 marks each.

INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt any two questions from section A and any two questions from section B. Section C is compulsory.

SECTION A

UNIT: I – Problem of Drug Abuse: Concept and Overview; Types of Drug Often Abused

(a) Concept and Overview

What are drugs and what constitutes Drug Abuse?

Prevalence of menace of Drug Abuse

How drug Abuse is different from Drug Dependence and Drug Addiction?

Physical and psychological dependence- concepts of drug tolerance

(b) Introduction to drugs of abuse: Short Term, Long term effects & withdrawal symptoms

Stimulants: Amphetamines, Cocaine, Nicotine

Depressants: Alcohol, Barbiturates- Nembutal, Seconal, Phenobarbital Benzodiazepines

–Diazepam, Alprazolam, Flunitrazepam

Narcotics:Opium, morphine,heroin

Hallucinogens: Cannabis & derivatives (marijuana, hashish,hash oil)

Steroids

Inhalants

UNIT: II –Nature of the Problem

Vulnerable Age Groups

Signs and symptoms of Drug Abuse

(a)- Physical indicators

(b)- Academic indicators

(c)- Behavioral and Psychological indicators

SECTION B

UNIT: III – Causes and Consequences of Drug Abuse

a) Causes

Physiological

Psychological

Sociological

b) Consequences of Drug Abuse

For individuals

For families

For society & Nation

Unit: IV- Management & Prevention of Drug Abuse

Management of Drug Abuse

Prevention of Drug Abuse

Role of Family, School, Media, Legislation&DeaddictionCenters

Suggested readings

1. Kapoor.T. (1985) Drug Epidemic among Indian Youth, New Delhi: Mittal Pub
2. Modi, IshwarandModi, Shalini (1997) Drugs: Addiction and Prevention,Jaipur: Rawat Publication.
3. Ahuja, Ram,(2003),Social Problems in India, Rawat Publications: Jaipur
4. 2003 National Household Survey of Alcohol and Drug Abuse. New Delhi, Clinical Epidemiological Unit, All India Institute of Medical Sciences,2004.
5. World Drug Report 2011, United Nations Office of Drug and Crime.
6. World Drug Report 2010, United nations Office of Drug and Crime.
7. Extent, Pattern and Trend of Drug Use in India, Ministry of Social Justice and Empowerment, Government of India,2004.

8. The Narcotic Drugs and Psychotropic Substances Act, 1985, (New Delhi: Universal, 2012)

Pedagogy of the Course Work:

The pedagogy of the course work will consist of the following:

70% lectures (including expert lectures).

30% assignments, discussion and seminars and class tests.

Note: A visit to drug de-addiction centre could also be undertaken.

MCM-401 – Environmental Studies (Qualifying paper)

Maximum Marks: 100

Teaching hours: 50

Written Paper: 75 Marks

Instructions for paper-setters

The Written Paper will have two parts. First part will be of 25 marks it will contain 10 questions, the students will attempt 5 questions of marks out of this part. The answer to these questions should not exceed 50 words each. Part second will be of 50 marks and will contain 10 essay type questions. The candidates will attempt 5 questions out of this part and the answer to each question should not exceed 500 words. Each question will carry ten marks

Time allowed: 3 Hrs.

Minimum Pass Marks: 35

Field Work: 25 Marks

UNIT 1: The multidisciplinary nature of environmental studies: Definition, scope and importance, Need for public awareness.

UNIT 2: Natural resources:

Renewable and non renewable resources:

Natural resources and associated problems.

- (a) Forest resources: Use of over exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, change caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy, use of alternate energy sources. Case studies.
- (f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.
- (g) Role of an individual in conservation of natural resources, Equitable use of resources for sustainable lifestyles.

UNIT 3: Ecosystem

- Concept of an ecosystem,
- Structure and function of an ecosystem,
- Producers, consumers and decomposers,
- Energy flow in the ecosystem,
- Ecological succession,
- Food chains, food webs and ecological pyramids.
- Introduction, types, characteristic features, structure and function of the following ecosystem:
 - a. Forest ecosystem

- b. Grassland ecosystem
- c. Desert ecosystem
- d. Aquatic ecosystems (ponds, streams lakes, rivers, oceans, estuaries).

UNIT 4: Biodiversity and its conservation

- Introduction--definition, species and ecosystem diversity,
- Biogeographical classification of India.
- Value of biodiversity: Consumptive use, productive use, social, ethical, aesthetic and option values.
- Biodiversity of global, National and local levels, India as mega-diversity nation.
- Hot-spots of biodiversity.
- Threats to biodiversity: Habitat loss, poaching of wildlife, man wildlife conflicts. Endangered and endemic species of India.
- Conservation of biodiversity:*In situ* and *Ex-situ* conservation of biodiversity.

UNIT 5: Environmental pollution

Definition

- causes, effects and control measures of:
 - a) Air Pollution
 - b) Water Pollution
 - c) Soil Pollution
 - d) Marine Pollution
 - e) Noise Pollution
 - f) Thermal Pollution
 - g) Nuclear Pollution
- Soil Waste Management: Causes effects and control measures of urban and industrial wastes.
- Role of an individual in prevention of pollution.
- Pollution case studies.
- Disaster Management: Floods, Earthquake, Cyclone and Landslides.

UNIT 6: Social Issues and Environment

- From unsustainable to sustainable development
- Urban problems related to energy
- Water conservation, rain water harvesting, watershed management
- Resettlement and rehabilitation of people: its problem and concerns. Case studies
- Environmental ethics: Issues and possible solutions.
- Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.
- Wasteland reclamation
- Consumerism and waste products
- Environmental Protection Act
- Air (Prevention and Control of Pollution) Act
- Water (Prevention and Control of Pollution) Act
- Wildlife Protection Act
- Forest Conservation Act
- Issues involved in enforcement of environmental legislation
- Public awareness

UNIT 7: Human population and the environment

- Population growth, variation among nations
- Population explosion-Family welfare programme
- Environment and human health
- Human rights
- Value education

- HIV/AIDS
- Women and child welfare
- Role of information technology in environmental and human health
- Case studies

UNIT 8: Field Work

- Visit to a local area to document environmental areas, River /forest/grassland/hill/mountain.
- Visit to a local polluted site- Urban/rural/industrial/agriculture.
- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, *etc.*(Field work Equal to 5 Lecture hours)

BCA-215: Object Oriented Programming using C++

Max Marks: 75

Min Pass Marks: 35%

Maximum Time: 3 Hrs.

Lectures to be delivered: 45-55 Hrs

A) INSTRUCTION FOR THE PAPER SETTER

The question paper will consist of three sections A, B and C. Section A and B will have four questions from the respective section of the syllabus carrying 15 marks for each question. Section C will consist of 5-10 short answer type questions carrying a total of 15 marks, which will cover the entire syllabus uniformly. Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

B) INSTRUCTIONS FOR THE CANDIDATES

Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A

Evolution of OOP : Procedure Oriented Programming, OOP Paradigm, Advantages and disadvantages of OOP over its predecessor paradigms.

Characteristics of Object Oriented Programming : Abstraction, Encapsulation, Data hiding, Inheritance, Polymorphism, code Extensibility and Reusability, User defined Data Types.

Introduction to C++ : Identifier and keywords, Constants, Operators

Pointers: Pointer Operations, Pointer Arithmetic, Pointers and Arrays, Multiple indirections, Pointer to functions.

Function : Prototyping, Definition and Call, Scope Rules, Parameter Passing Value, by address and by reference, Functions returning references, Const Functions, recursion, function overloading, Default Arguments, Const Arguments.

Classes, Objects and Members : Class Declaration and Class Definition, Defining member functions, Defining Object, making functions inline, Members access control, Nested Classes, This Pointer.

SECTION-B

Object as function arguments, array of objects, functions returning objects, const members and member functions. Static data members and static member functions, Friend functions and Friend classes.

Constructors : Properties, types of constructors (Default, parameterized and copy), Dynamic constructors, Multiple constructors in classes.

Destructors : Properties, Virtual destructors, Destroying objects, Rules for constructors and destructors, Array of objects.

Dynamic memory allocation using new and delete operators.

Inheritance : Defining derived classes, inheriting private members, single inheritance, types of derivation, function, function redefining, constructors in derived class.

Types of inheritance: Single, Multiple, Multi level and Hybrid,

Types of base classes: Direct, Indirect, Virtual, Abstract, Code Reusability.

Polymorphism : Methods of achieving polymorphic behavior. Polymorphism with pointers, virtual functions, late binding, pure virtual functions and abstract base class. Difference between function overloading, redefining and overriding.

Operator overloading: Overloading binary operator, overloading unary operators, rules for operator overloading, operator overloading using friend function. Function overloading, early binding.

Open/ Close Files commands. Read/write operations on files.

Text Books:

1. E. Balagurusamy, Object Oriented Programming with C++, Tata McGraw-Hill.
2. Deitel and Deitel, "C++ How to Program", Pearson Education.

Reference Books:

1. Herbert Schildt, The Complete Reference C++, Tata McGraw-Hill.
2. Deitel and Deitel, C++ How to program, Pearson Education.
3. Robert Lafore, *Object Oriented Programming in Turbo C++*, Galgotia Publications.
4. BajaneStautrup, *The C++ Programming Language*, Addison-Wesley Publication Co.
5. Stanley B. Lippman, LoseeLajoic, C++. Primer; Pearson Education.
6. E. Balagurusamy, *Object-Oriented Programming with C++*, Tata McGraw-Hill.
7. D. Ravichandran, Programming with C++ , Tata McGraw-Hill Publishing Company Ltd.

Add on Courses - Common For B.A/B. COM

RISK MANAGEMENT AND INSURANCE (Add on Course)

PAPER-1 MANAGEMENT OF RISK AND INSURANCE

Time allowed : 3 hours

Max Marks: 100

Pass Marks : 35% Internal Assessment: 30

Periods per week : 6

External Assessment: 70

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

Risk: Meaning, Characteristics; Kinds Technical, Financial, Economic, Social, Political, Risk from natural disasters, Risk from Accidents etc. Causes of risk, Risk handling techniques. Risk identification, Risk evaluation and Management.

UNIT-II

Meaning, Evolution, scope, nature and significance of insurance. Objectives and functions of insurance, Types of insurance. Difference between Assurance and Insurance. General Principles of Insurance, Insurance as a social security tool. Contemporary issues in Insurance Business in Indian Context

OFFICE MANAGEMENT AND SECRETARIAL PRACTICE (Add on Course)- Common For B.A/B. COM

PAPER-1 BUSINESS ORGANISATION AND OFFICE PRACTICE

Time allowed : 3 hours

Max Marks: 100

Pass Marks : 35% Internal Assessment: 30

Periods per week : 6

External Assessment: 70

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

Office organisation, relation of office to general business, modern office, concept of office management, functions, organization and control of office routine, Centralised and decentralised office, office accommodation and layout, office environment, Departments of modern office.

UNIT-II

Office Systems and Procedures, Role of Office Manager in Systems and Procedures, Office Machines and equipment, Office Stationery and Supplies.

BCA-314: Java Programming

Max Marks: 75 Maximum Time: 3 Hrs. Min Pass Marks: 35% Lectures to be delivered: 45-55 Hrs

(A) INSTRUCTION FOR THE PAPER SETTER The question paper will consist of three sections A, B and C. Section A and B will have four questions from the respective section of the syllabus carrying 15 marks for each question. Section C will consist of 5-10 short answer type questions carrying a total of 15 marks, which will cover the entire syllabus uniformly. . Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

(B) INSTRUCTIONS FOR THE CANDIDATES Candidates are required to attempt five questions in all by selecting at least two questions each from the section A and B. Section C is compulsory.

SECTION-A Introduction to java: evolution, features, comparison with C and C++; Java program structure; tokens, keywords, constants, variables, data types, type casting, statements. Operators and expressions: arithmetic, relational, logical, assignment, increment, decrement, conditional, bitwise and special operators. Operator precedence & associativity rules. Control statements: if else, switch case, for, while, do while, break, continue, labeled loops. Class: syntax, instance variable, class variables, methods, constructors, overloading of constructors and methods.

SECTION B Inheritance: types of inheritance, use of super, method overriding, final class, abstract class, wrapper classes. Arrays, Strings and Vectors, Packages and Interfaces, visibility controls Errors and Exceptions: Types of errors, Exception classes, Exception handling in java, use of try, catch, finally, throw and throws. Taking user input, Command line arguments. Multithreaded Programming: Creating Threads, Life cycle of thread, Thread priority, Thread synchronization, Inter-thread communication.

Text Book: 1. Patrick Naughton and Herbert Schildt, “The Complete Reference Java 2”, TMH
References: 2. Horstmann, Cay S. and Gary Cornell, “Core Java 2: Fundamentals Vol. 1”, Pearson Education. 3. E. Balagurusamy “Programming with Java”, TMH

" कॉलेज " स्तर की परीक्षाओं के लिए कक्षा अनुसार पाठ्यक्रम

कक्षा	पाठ्यक्रम	अंक
10 + 1	धर्म शिक्षा - भाग ग्यारहवां	100
10 + 2	धर्म शिक्षा - भाग बारहवां	100
✓ बी० ए० प्रथम वर्ष/ एन० टी० टी०	(1) महात्मा हंसराज महात्मा खुशहाल चन्द लिखित (2) ईशोपनिषद	60 40 } 100
✓ बी० ए० द्वितीय वर्ष	(1) सरल संक्षिप्त सत्यार्थ प्रकाश 1 - 5 समुल्लास (2) गीता सुमन	60 40 } 100
✓ बी० ए० तृतीय वर्ष	(1) सरल संक्षिप्त सत्यार्थ प्रकाश 6 - 10 समुल्लास (2) केनोपनिषद	60 40 } 100
एम० ए० / बी० एड/ एम० एड - सरल संक्षिप्त सत्यार्थ प्रकाश		100

सभी कक्षाओं की पाठ्य पुस्तकें प्रकाशन विभाग, डी.ए.वी. कॉलेज प्रबन्धकर्तृ समिति, चित्रगुप्त मार्ग, पहाड़गंज, नई दिल्ली-110055, फोन नं. 23625335 में उपलब्ध है। आप इन्हें सीधे आर्डर भेज कर अपनी आवश्यकतानुसार पुस्तकें मंगवा सकते हैं।


Principal
D.A.V. College, Bathinda

Classwise syllabus for "College" level examination:-

Class	Syllabus	Marks
10+1	Dharam Shiksha-Part Eleven	100
10+2	Dharam Shiksha-Part Twelve	100
B.A. Part I/NTT	i) Mahatama Hans Raj Written by Mahatama Khushal Chand 60 ii) Ishopanishad 40	100
B.A. Part II	i) Saral Sankshipt Satyarth Prakash 1-5 whole 60 ii) Gita Suman 40	100
B.A Part III	i) Saral Sankshipt Satyarth Prakash 6-10 whole 60 ii) Keshopanishad 40	100


Principal
O.A.V. Collage, Bathinda

Source : <http://pupdepartments.ac.in/syllabi/>

Subjects:**Compulsory Subjects:**

1. Punjabi or Punjabi Compulsory Mudhla Gyan
2. English (Communication Skills)

Drug Abuse Problem, Management & Prevention: As per order of Hon'ble Punjab & Haryana High Court students have to appear in a paper : Drug Abuse Problem, Management & Prevention in second semester of B.A., B.B.A, B.Com. B.Sc. & B.C.A.

Besides above written Compulsory subjects, students have option to choose any three elective subjects, selecting one from the following groups.

Group-A	Group-B	Group-C	Group-D	Group-E
History	Political Science	English Lit.	Computer Science	Economics
Mathematics		Punjabi Lit.	Physical Education	
		Hindi Lit.		

1.3.2. Addition
information

Extra-Curricular Activities

Gainful activities outside the class room play a significant role in shaping the overall personality of a scholar. The aim of the college in organizing extra-curricular activities is to impart a sense of responsibility to the youth. All extra-curricular activities other than those organized under the N.C.C. and N.S.S. will be organized and co-ordinated by the youth welfare department of college.

A number of subject societies, associations and clubs actively function in the college. These societies organize very useful extra-curricular activities, such as lectures by eminent scholars, Inter college declamation and paper reading contests, debates, poetical symposia, variety shows etc.

National Cadet Corps (N.C.C.)

1. Facilities for N.C.C. training, parades and camps are available for those who voluntarily take up N.C.C.
2. Students get ample opportunities to attend training camps and specialized camps like advanced leadership, mountaineering and other inter state camps. N.C.C. Cadets are trained for 'B' and 'C' Certificate exam. Students holding 'C' certificate are given priority in selection as an officer in Army, Air Force, Navy and Police, Students holding 'B' and 'C' certificate are given incentives and additional marks in various professional and higher classes for getting admission.

National Service Scheme (N.S.S.)

The College has three units for boys and girls under the control of Punjabi University, Patiala The scheme is aimed at familiarizing the Youth with the environment of our community and its needs. It inculcates in students the spirit of placing service before self and the country above all.

The membership of the scheme is voluntary but it is desirable that more and more students should enroll themselves in the scheme. Distinguished N.S.S. Volunteers are given incentives and additional marks in various professional and higher classes for getting admission.

Sports Council

All sports activities are organized by the Sports Council constituted as under

1. Chairman (Principal)
2. Faculty members Nominated by the Principal as presidents of various games.
3. Captains of Various games.
4. Secretary (Lecturer in Phy. Education)

The outstanding sportsmen with a clean past career are given due consideration at the time of their admission to the college. Deserving scholars may be given fee concession and other facilities in keeping with their talent in sports.