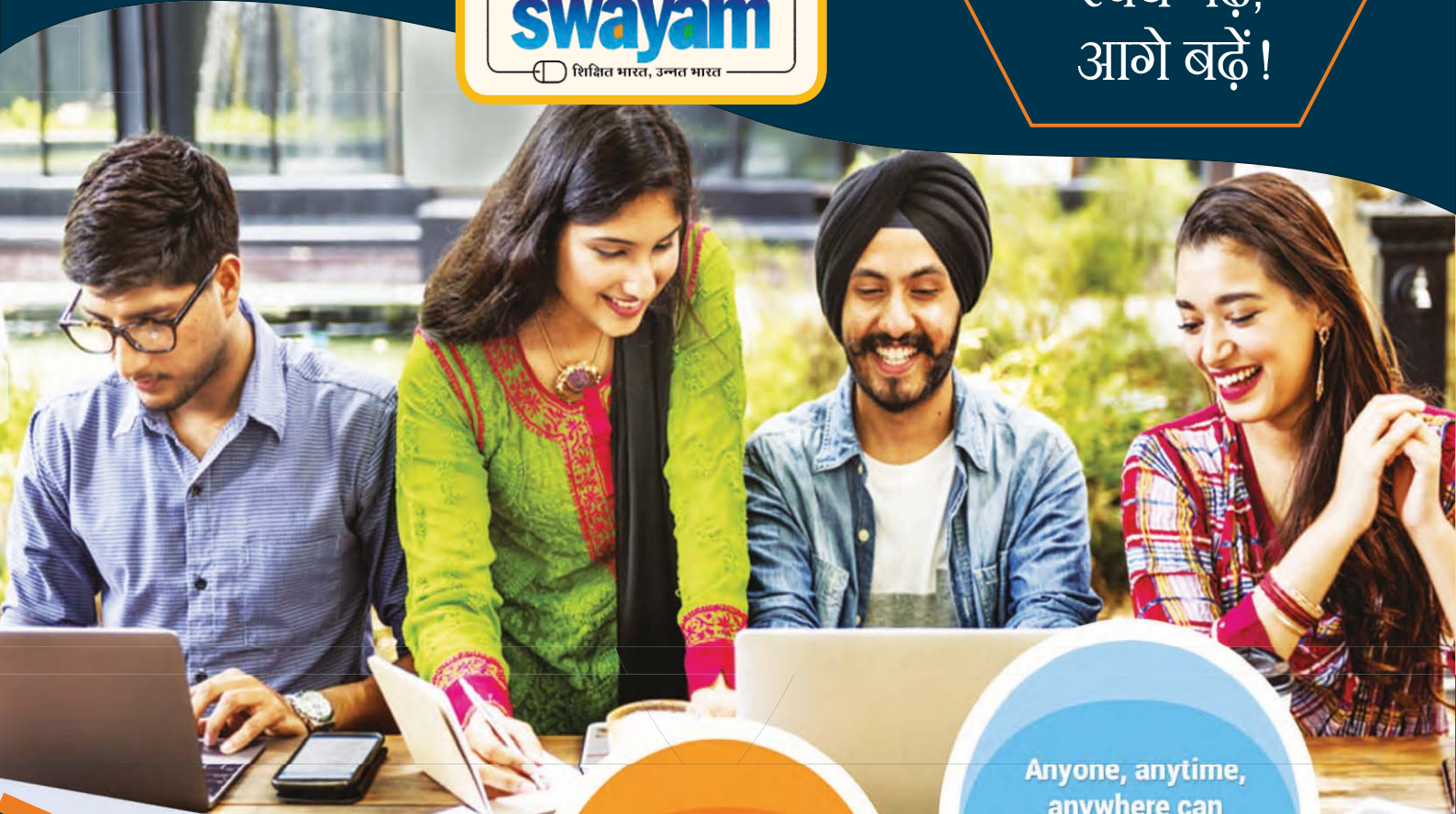


SWAYAM Courses: At a Glance



स्वयं पढ़ें,
आगे बढ़ें!



Thousands of
Massive Open
Online Courses available
by best teachers from
top institutions.

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anywhere can
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laptop absolutely
free.



Ministry of Human Resource Development
Government of India

July 2018



Message of the Chairman



The Indian higher education system is one of the oldest and largest in the world with 903 universities including Institutions of National Importance, 41, 012 colleges, 3.66 crore students and 12.84 lakh teachers. This massification of higher education brings along with it many issues which confront the higher education of our country today like, the issues of access, equity, relevance, quality, management and financing.

The ICT plays a major role in addressing these issues. In this context, Massive Open online courses are very successfully bridging the digital divide as through these courses quality education can be brought at the doorstep of every learner at virtually no cost. I congratulate the Ministry of Human Resource Development for this noble initiative which will bring a marked improvement in the quality of education being imparted in our country. The project would also help the students and teachers to update their knowledge and skills especially for those located in rural/backward/remote areas and would help the nation move towards an information-rich society.

I congratulate, Prof Rajnish Jain, Secretary, UGC, Dr(Mrs) Pankaj Mittal, Additional Secretary, UGC and her team in bringing out this document which will be very handy information booklet for our Vice Chancellors.

Wishing you all the best.

Prof. D P Singh
Chairman, UGC

Foreword



The phenomenal growth of ICT in the education system has had a tremendous impact globally. India has been quick enough to leverage technology for teaching learning processes as ICT has facilitated the accessibility to education and promoting quality teaching and learning to learners of all age groups across the length and breadth of the country. Taking cognizance of such advancements, the Ministry of Human Resource Development, Government of India launched SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), an indigenously developed platform aimed at providing learning opportunities to the learners through MOOCs (Massive Open Online Course) free of cost in a structured manner.

MHRD has identified nine National Coordinators for developing MOOCs from School to PG level on the platform, namely- NCERT for school education from 9th to 12th; NIOS for out of school children from 9th to 12th; Consortium for Educational Communication (CEC), an IUC of UGC, for Non-technology UG programmes; UGC for Non-technology PG programmes; IGNOU for Diploma and Certificate programmes; NPTEL for Technical/ Engineering UG & PG degree programmes; IIM for management programmes, NITTR, Chennai for Teacher Training programmes and AICTE for self paced programmes.

The MOOCs courses on Swayam being run by these National Coordinators (except for NPTEL) in the coming semester beginning from July, 2018 are compiled in this document for easy reference of the Vice Chancellors and academicians.

I compliment my colleagues, Dr (Mrs) Pankaj Mittal, Additional Secretary, UGC and Dr Diksha Rajput, Publication Officer and her team in editing and compiling this document which will work as a ready reckoner for our users.

My Good Wishes for all.

Prof Rajnish Jain
Secretary, UGC

Preface



The MOOCs on the SWAYAM are high quality, curriculum-based, interactive content in different subjects across disciplines of social sciences, arts, fine arts, humanities, natural & mathematical sciences, linguistics, languages, technology, management, teacher training and skill sector. These courses are developed by the best faculty of the country carefully chosen from various educational institutions across the country from Secondary till Post-Graduation level. The basic philosophy of MOOCs on SWAYAM is free learning for Any one, Any time, Any where (AAA) with the facility of credit transfer for upto 20% of the courses in a programme.

The MOOCs on SWAYAM follow a Four Quadrant Approach comprising of Quadrant-I - e-Tutorial, which contains Video and Audio Content in an organised form, Animation, Simulations, video demonstrations, Virtual Labs, etc. , Quadrant-II - e-Content, which contains PDF, Text, e-Books, illustrations, video demonstrations, documents and Interactive simulations; Quadrant-III - Web Resources, Open source Content on Internet, Case Studies, books including e-books, research papers & journals, Articles, etc. and Quadrant-IV - Self-Assessment, which contains Problems and Solutions, which could be in the form of Multiple Choice Questions, Fill in the blanks, Matching Questions, Short Answer Questions, Long Answer Questions, Quizzes, Assignments and solutions, Discussion forum topics and setting up the FAQs, Clarifications on general misconceptions etc.

This document "SWAYAM Courses : At a Glance " is a compilation of the Courses developed by the Course Coordinators/Instructors of eight National Coordinators and gives a bird's eye view of the Course objectives, learning outcomes, course duration, credits and profile of the course coordinator for the learner. It is hoped that this document will enable learners and institutions to make informed choices about the MOOCs courses to be pursued in the coming semester, commencing from July, 2018.

The compilation and production of this document would not have been possible without the active support of my colleagues in UGC, Dr Diksha Rajput, Mr Abhishek Anand and in INFLIBNET, Dr Jagdish Arora and Dr Abhishek Kumar. I am grateful to them for their support.

Wishing you a happy learning.

Dr(Mrs) Pankaj Mittal
Additional Secretary, UGC



विद्याधनम् सर्वधनं प्रधानम्

National Institute of Open Schooling



Out of School Educational Courses



MHRD



Out of School Educational Courses

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DR. BAL KRISHNAN RAI
Assistant Director (Academics), NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

हिंदी भाषी सामान्य व्यक्ति नई सूचना-क्रांति के परिणामस्वरूप आए अनेक शब्दों का प्रयोग अपने दैनिक जीवन में कर रहा है। इसके कारण साहित्य-लेखन में भी रचनाकारों की विचार-प्रक्रिया परिवर्तित हुई है। हिंदी भाषा भारत के जनतंत्र की आकांक्षाओं की पूर्ति करती है। इसी भाषा से देश के लोगों के बीच संपर्क स्थापित होता है। हिंदी भाषा का माध्यमिक स्तर का यह पाठ्यक्रम इन सभी बातों को ध्यान में रखते हुए तैयार किया गया है। यह जीवन और जगत की विभिन्न आवश्यकताओं में उपयोगी सिद्ध हो, इसी बात का ध्यान रखते हुए इसे अधिक व्यावहारिक, भाषा कौशल (सुनना, बोलना, पढ़ना और लिखना) आधारित और दैनिक जीवन से जुड़ा हुआ बनाने का प्रयास किया गया है। हम जीवन में मौखिक भाषा का सर्वाधिक प्रयोग करते हैं, अतः इस पाठ्यक्रम में सुनना और बोलना कौशल पर विशेष बल दिया गया है। व्याकरण कहीं पाठ्यक्रम को अधिक बोझिल न बना दे, इसके लिए इसे पाठ-सामग्री में ही समाहित किया गया है। इस रूप में यह पाठ्यक्रम अधिक व्यावहारिक तथा अन्य पाठ्यक्रमों से भिन्न और उपयोगी है।

LEARNING OUTCOME

- Hindi Language and Literature Learning
- Proficiency in Hindi
- Development of expression in Hindi

COURSE PLAN

Week 01 : Chapter-1 बहादुर

Week 02 : Chapter-2 दोहे

Week 03 : Chapter-3 गिल्लू

Week 04 : Chapter-4 आहवान

Week 05 : Chapter-5 राबर्ट नर्सिंग होम में

Week 06 : Chapter-6 भारत की ये बहादुर बेटियाँ

Week 07 : Chapter-7 आज्ञादी

Week 08 : Chapter-8 चन्द्रगहना से लौटती बेर

Week 09 : Chapter-9 अखबार की दुनिया

Week 10 : Chapter-10 पढ़ें कैसे

Week 11 : Chapter-11 सार कैसे लिखें

Week 12 : Chapter-12 इसे जगाओ

Week 13 : Chapter-13 सुखी राजकुमार

Week 14 : Chapter-14 बूढ़ी पृथ्वी का दुख

Week 15 : Chapter-15 अँधेर नगरी

Week 16 : Chapter-16 अपना परायण

Week 17 : Chapter-17 बीती विभावरी जाग री

Week 18 : Chapter-18 नाखून क्यों बढ़ते हैं

Week 19 : Chapter-19 शतरंज के खिलाड़ी

Week 20 : Chapter-20 उनको प्रणाम

Week 21 : Chapter-21 पत्र कैसे लिखें

Week 22 : Chapter-22 निबंध कैसे लिखें

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Dr. Bal Krishnan Rai is Assistant Director (Academics) at NIOS Headquarter since 28th October 2016. He attained M.A. in Mass Communication and Hindi. He also attained M. Phil (Topic - Gantantra Divas ki Shobha Yatra [Ravindernath Tyagi] : Samvedana or Shilp) and Ph.D (University of Delhi, Certificate Course in Translation). The topic of Ph.D is 'Hindi ke Lalit Nibhandhon mein Manav Mulya'. He also done P.G. Diploma in Journalism & Mass Communication. Previously, he served as Academic Officer (Hindi) since July 2009 at NIOS, MHRD, Government of India, NOIDA; Hindi Officer since November 1999 at the NIOS, MHRD, Government of India, NOIDA and Hindi Translator at Mahanagar Telephone Nigam Ltd. since September 1996. His areas of interest are Open and Distance Learning & Adhunik Hindi Sahitya (Prose and Poetry).





SAUMYA RAJAN

Assistant Director(Academic)

TYPE OF COURSE : Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (01/08/2018 to 31/01/2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : Self certificate and minimum age 14 years**OBJECTIVE OF COURSE**

In a pluralistic and multilingual society like ours, the place of English as a link language cannot be denied. This position assumes even more importance in today's world where barriers in communication have broken down and information technologies have modified our lifestyles: we are fast moving towards a global village.

In today's time, a learner needs to be equipped with working English Language abilities so that he or she interacts meaningfully with the wide world ahead of him/her. Also, to ensure that a learner is not disadvantaged in terms of access to other courses of study and avenues of knowledge and information, knowledge of English is required.

LEARNING OUTCOME

- Learners should be able to listen to and understand short texts prescribed in the course book and react to the theme, structure and content.
- Learners should be able to repeat after a model and use English in familiar life situations.
- Learners should be able to read and understand a variety of texts critically and proficiently to demonstrate in writing or speech
- Learners should be able to write all forms of writing and texts using the conventions of Standard English as stylistically appropriate
- Learners should be able to use a Learner's Dictionary to find the meaning, usage and spelling of words

COURSE PLAN**Week 1.** Snake Bite**Week 2.** How the Squirrel Got His Stripes**Week 3.** Kondiba - A Hero**Week 4.** Tall Trees**Week 5.** A Tiger Comes to Town-I**Week 6.** A Tiger Comes to Town-II**Week 7.** The Shoeshine**Week 8.** A Birthday Letter**Week 9.** Nine Gold Medals**Week 10.** Noise: How It Affects Our Lives**Week 11.** My Elder Brother**Week 12.** Indian Weavers**Week 13.** The Last Stone Mason**Week 14.** Stealing and Atonement**Week 15.** My Vision for India**Week 16.** My Only Cry**Week 17.** Caring for Others**Week 18.** The Little Girl**Week 19.** A Prayer for Healing**Week 20.** New Good Things from Rubbish**Week 21.** The Village Pharmacy**Week 22.** The Truth**Week 23.** The Return of the Lion**Week 24.** Co-operate and Prosper**Week 25.** Once Upon a Time**Week 26.** Ustad Bismillah Khan, The Parrot Who Wouldn't Talk**ABOUT INSTRUCTOR**

Saumya Rajan is a DPhil in English Literature from the University of Allahabad and trained and certified in Incorporating Gender Concerns in Public Policy from the Indian Institute of Public Administration, New Delhi. She is certified in Global Diplomacy- Diplomacy in the Modern World from the University of London & SOAS, University of London.





DR. R. N. MEENA

Designation: Assistant Director (Academic)

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

संस्कृतभाषा विश्वस्य प्राचीनतमा भाषा अस्ति। अस्यां भाषायां ज्ञान-विज्ञानयोः अनेके ग्रंथाः लिखिताः; ये आधुनिकस्य विज्ञानस्यापि अध्ययने सहायकाः सन्ति। न केवलं भारतस्य सर्वासु भाषासु अस्याः प्रभावः स्पष्टतया दृश्यते अपितु 'अवेस्ता' आदि वैदेशिकभाषास्वपि वर्तते। अतएव इमां भाषां ज्ञात्वा वयं अन्याः भाषाः अपि सारल्येन ज्ञातुं शक्नुमः। नवशब्दनिर्माणे अस्याः भाषायाः सामर्थ्यमनुपमम् वर्तते। संस्कृतभाषायाः अध्ययनेन वयं भारतस्य प्राचीनतमां संस्कृतिम् अपि ज्ञातुं शक्नुमः। एषः पाठ्यक्रमः सम्प्रेषण-आधरितोऽस्ति। एषः माध्यमिक-स्तरीयछात्राणां मार्गदर्शनार्थं निर्मितोऽस्ति। अनेन छात्राः संस्कृतभाषायां निहितनैतिकमूल्यैः अपि परिचिताः भविष्यन्ति स्वजीवने च तानि धरयितुं समर्थाः भविष्यन्ति। राष्ट्रनिर्माणेऽपि ते अधिकाधिकं सहायकाः भविष्यन्ति।

विशिष्ट- उद्देश्यानि

श्रवणकौशलम्

- क. छात्राः संस्कृतस्य विशिष्टध्वनीन् श्रुत्वा अवगमिष्यन्ति। उदा.-पदान्तस्वरः पदान्तव्यंजनम्, विसर्गः, अनुस्वारः संयुक्ताक्षरम् इत्यादीनि।
ख. संस्कृतस्य सरलवाक्यानि तेषामर्थं श्रुत्वा ज्ञास्यान्ति तदनुसारेण च व्यवहारं करिष्यन्ति।

वाचनकौशलम्

- क. संस्कृते प्रयुक्तानां विशिष्टध्वनीनां सम्यक्-उच्चारणं करिष्यन्ति (उदा-स्वरः, मात्रा, व्यंजनम्, संयुक्ताक्षराणि इत्यादि)
ख. संस्कृतवाक्यानां सम्यक् उच्चारणं करिष्यन्ति।
ग. पद्यरचनानां सस्वरवाचनं करिष्यन्ति।
घ. पठितसामग्रीम् आश्रितानां प्रश्नानाम् उत्तराणि दास्यन्ति।

पठनकौशलम्

- क. संस्कृतगद्यांशानां, पद्यांशानां, नाट्यांशानां सारम् अवगमिष्यन्ति।

लेखनकौशलम्

- क. पठितपदानि वाक्यानि च श्रुत्वा शुद्धवर्तन्यां लेखितुं शक्यन्ति।
ख. सन्धियुक्तपदानां समासयुक्तपदानां च वाक्यानाम् अनुलेखनं करिष्यन्ति।
ग. पठितकथायाः तस्यांशानां वा सारं संस्कृतवाक्येषु लेखितुं शक्यन्ति।
घ. चित्राणि दृष्ट्वा संस्कृतभाषायां तेषां वर्णनं कर्तुं शक्यन्ति।
घ. प्रदत्तानि वाक्यानि घटनाक्रमानुसारेण लेखितुं शक्यन्ति।

COURSE PLAN

- Week 1** पाठ 1. सुभाषितानि
Week 2 पाठ 2. प्रेरणा
Week 3 पाठ 3. त्याज्यं न धैर्यम्
Week 4 पाठ 4. कस्मात् किं शिक्षेत
Week 5 पाठ 5. प्राणस्य श्रेष्ठत्वम्
Week 6 पाठ 6. यद्भविष्यो विनश्यति
Week 7 पाठ 7. अयोध्यां प्रत्यागमनम्
Week 8 पाठ 8. विरहकातरं तपोवनम्
Week 9 पाठ 9. भारतीयविज्ञानम्
Week 10 पाठ 10. प्रहेलिका
Week 11 पाठ 11. रचनाकौशलम्
Week 12 पाठ 12. यक्ष - युधिष्ठिर संवाद
Week 13 पाठ 13. करुणापरा हि साधवः

LEARNING OUTCOME

- संस्कृतभाषायाः सामान्यज्ञानवर्धनं भविष्यति।
- संस्कृतसाहित्यं प्रति छात्रेषु अभिरुचेः वर्धनम्।
- संस्कृतसाहित्यस्य प्रमुखविधानां प्रतिनिधिचिन्तानां ज्ञानम्।
- छात्रेषु राष्ट्रियसांस्कृतिकसामाजिकनैतिक-मूल्यानां विकासः।
- विज्ञानप्रौद्योगिकीक्षेत्रे प्राचीनभारतीयमनीषिणां योगदानैः परिचयः।

- Week 14** पाठ 14. शरीरमाध्यं खलु धर्मसाधनम्
Week 15 पाठ 15. ईशः क्व अस्ति
Week 16 पाठ 16. गीतामृतम्
Week 17 पाठ 17. स्वस्तिपन्थामनुचरेम
Week 18 पाठ 18. कर्तव्यनिष्ठा
Week 19 पाठ 19. पुत्रोऽहं पृथिव्याः
Week 20 पाठ 20. सत्याग्रहाश्रमः
Week 21 पाठ 21. तेजसां हि न वयः समीक्ष्यते
Week 22 पाठ 22. पत्रलेखनम्
Week 23 Revision
Week 24 Revision
Week 25 Revision
Week 26 Revision

ABOUT INSTRUCTOR

Dr. R.N. Meena Completed his M.A., M.Phil., Ph.D. from JNU, New Delhi. He has expertise in Language Learning, Open and Distance Learning, Philosophy and Thoughts, Theater, Screenplay writing for short film and educational videos, Linguistics, Gender, Caste and Tribal Issues





DR. RAJENDRA KUMAR NAYAK

Academic Officer (Mathematics), NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Mathematics is an indispensable subject area in the school education because of its wide application in our day today activities as well as in different fields of education. Access to quality education in Mathematics is very important for each and every learner. Mathematics is an important discipline of learning at the Secondary stage.

The present course in Mathematics has been divided into 26 lessons/chapters from six modules namely Algebra, Commercial Mathematics, Geometry, Mensuration, Trigonometry and Statistics. Text Materials, Audio and Video programmes are provided for your better learning. The assessment has been provided you in each lesson for your self assessment purposes.

LEARNING OUTCOME

The learner will be able to:

- describe basic concepts, facts, principles, terms, symbols and processes of Mathematics.
- convert the word problems in to the mathematical forms and solve them.
- explain different ways of processing the given data and help them in arriving at conclusions.
- express the skills of quantification of experiences around them and make linkage with their life.
- solve wide variety of mathematical problems in daily life and reflect in different context of learning.
- relate mathematical knowledge and skills to solve variety problems and develop positive attitude towards Mathematics and its application.
- interpret tabular/graphical representation of the quantitative data.
- articulate logically and use the quantitative data to find many results.

COURSE PLAN

Week 01 : LESSON 1 - NUMBER SYSTEMS

Week 02 : LESSON 2 - EXPONENTS AND RADICALS

Week 03 : LESSON 3 - ALGEBRAIC EXPRESSIONS AND POLYNOMIALS

Week 04 : LESSON 4 - SPECIAL PRODUCTS AND FACTORIZATION

Week 05 : LESSON 5 - LINEAR EQUATIONS

Week 06 : LESSON 6 - QUADRATIC EQUATIONS

Week 07 : LESSON 7 - ARITHMETIC PROGRESSION

Week 08 : LESSON 8 - PERCENTAGE AND ITS APPLICATIONS

Week 09 : LESSON 9 - INSTALMENT BUYING

Week 10 : LESSON 10 - LINES AND ANGLES

Week 11 : LESSON 11 - CONGRUENCE OF TRIANGLES

Week 12 : LESSON 12 - CONCURRENT LINES

Week 13 : LESSON 13 - QUADRILATERALS

Week 14 : LESSON 14 - SIMILARITY OF TRIANGLES

Week 15 : LESSON 15 - CIRCLES

Week 16 : LESSON 16 - ANGLES IN A CIRCLE AND CYCLIC QUADRILATERAL

Week 17 : LESSON 17 - SECANTS, TANGENTS AND THEIR PROPERTIES

Week 18 : LESSON 18 - CONSTRUCTIONS

Week 19 : LESSON 19 - CO ORDINATE GEOMETRY

Week 20 : LESSON 20 - PERIMETER AND AREA OF PLANE FIGURES

Week 21 : LESSON 21 - SURFACE AREA AND VOLUME OF SOLID FIGURES

Week 22 : LESSON 22 - INTRODUCTION TO TRIGONOMETRY

Week 23 : LESSON 23 - TRIGONOMETRIC RATIOS OF SOME SPECIAL ANGLES

Week 24 : LESSON 24 - DATA AND THEIR REPRESENTATION

Week 25 : LESSON 25 - MEASURES OF CENTRAL TENDENCY

Week 26 : LESSON 26 - INTRODUCTION TO PROBABILITY

ABOUT INSTRUCTOR

Dr. Rajendra Kumar Nayak is Academic Officer (Mathematics) at NIOS Headquarters for 6 years. He attained M.Sc (Mathematics) from Ravenshaw University, Odisha and M.Ed from Regional Institute of Education (RIE, NCERT)-Bhubaneswar. He also attained his Ph.D in Mathematics Education from Utkal University, PGDDE (IGNOU). Previously, he worked as Lecturer in Education at Ravenshaw University, Cuttack from 2nd May, 2011 to 10th July, 2012; he worked as Assistant Professor in Mathematics Education at Regional Institute of Education (NCERT), Bhubaneswar from 6th July, 2010 to 30th April, 2011; he worked as Lecturer in Education at Army Institute of Education, Delhi Cantt, New Delhi from 1st October, 2009 to 31st May, 2010 and worked as Research fellow in Education Department, Regional Institute of Education (NCERT), Bhubaneswar from 1st July, 2008 to 30th September, 2009. His areas of interest are Mathematics Education, Educational Statistics, Measurement and Evaluation, Teacher Education and Distance Education.



**DR. SANGHMITRA SURYAPANI**

Academic Officer (Biology), NIOS

TYPE OF COURSE : Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : Self certificate and minimum age 14 years**OBJECTIVE OF COURSE**

There are Thirty Two lessons in this course and you are expected to study them. The Course has seven modules. Each module would take you through various topics like Measurement in Science, Matter in our Surroundings, Moving Things and Energy. After studying these modules you would begin to understand the scientific principles behind many of the day to day events. Also, there are modules dedicated to the Living World, Natural Resources as well as Humans and Environment.

LEARNING OUTCOME

The learner will be able to:

- explain the science behind natural phenomena.
- enumerate the various facets of science and the role it plays in human welfare.
- develop scientific attitude so that reasoning wins over blind faith and opinions.
- formulate simple hypothesis, verify them and apply in their daily life activities.
- cultivate an interest in science and technology and be encouraged to pursue it as a career.

COURSE PLAN**Week 01** : Lesson 1 Measurement in Science & Technology**Week 02** : Lesson 2 Matter in our surroundings**Week 03** : Lesson 3 Atoms and Molecules**Week 04** : Lesson 4 Chemical Reaction & Equations**Week 05** : Lesson 5 Atomic Structure**Week 06** : Lesson 6 Periodic Classification of Elements**Week 07** : Lesson 7 Chemical Bonding**Week 08** : Lesson 8 Acid, Bases and Salts**Week 09** : Lesson 9 Motion and its Description**Week 10** : Lesson 10 Force and Motion**Week 11** : Lesson 11 Gravitation**Week 12** : Lesson 12 Sources of Energy**Week 13** : Lesson 13 Work and Energy and Lesson 14 Thermal Energy**Week 14** : Lesson 15 Light Energy and Lesson 16 Electrical Energy**Week 15** : Lesson 17 Magnetic Effects of Electric Current and Lesson 18 Sound and Communication**Week 16** : Lesson 19 Classification of Living Organisms and Lesson 20 History of Life on Earth**Week 17** : Lesson 21 Building Blocks of Life- Cells & Tissues and Lesson 22 Life Processes I Nutrition, Transportation, Respiration and Excretion**Week 18** : Lesson 23 Life Processes II Control and Coordination and Lesson 24 Life Processes III Reproduction**Week 19** : Lesson 25 Heredity**Week 20** : Lesson 26 Air and Water**Week 21** : Lesson 27 Metal and Non-metals**Week 22** : Lesson 28 Carbon and its Compounds**Week 23** : Lesson 29 Natural Environment**Week 24** : Lesson 30 Human Impact on Environment**Week 25** : Lesson 31 Food Production and Animal Husbandry**Week 26** : Lesson 32 Health and Hygiene**ABOUT INSTRUCTOR**

Dr. Sanghmitra Suryapani is Academic Officer (Biology) at NIOS Headquarters for six years. She attained her B.Sc (Environmental Science) from Maitreyi College, Delhi University and M.Sc (Environmental Botany) from Jamia Hamdard University, New Delhi. She also done her Ph.D in Botany from Jamia Hamdard University, New Delhi. She also done Post Graduate Diploma in Environmental Law and Management from Indian Law Institute, New Delhi, India; Comprehensive Disaster Risk Management Framework from National Institute of Disaster Management-GFDRR (Online Course) and pursuing M.A (Distance Education) from IGNOU. Previously, she has two years experience of Guest Faculty for "Environmental Studies" undergraduate classes (BCA & B. Pharm.) at Jamia Hamdard, New Delhi; one year experience as a Senior Technical Assistant under the plan of "Bringing Green Revolution in Eastern India" and "National Food Security Mission", Krishi Bhawan, Ministry of Agriculture, New Delhi and also delivered Science Talk Shows and Discussions regarding Environmental Issues, broadcasted from Yuvvani, Vividh Bharti Division and Indraprastha Channel since 2001. Her areas of interest are Plant Ecology, Plant Physiology, Plant Biotechnology, Environmental Biology & Open and Distance Learning.





SMT. TARUN
Assistant Director, NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Social Science involves the study of human society which makes us familiar with evolution of human society and covers the major civilisations of the world. You will learn about India and the world during the Ancient, Mediaeval and Modern period. Further, you will understand interrelationships between nature, environment, resources and development. You would also learn about the importance of being a good citizen who fulfils his/her duties before enjoying his/her rights. The course highlights the mutually reinforcing relationship between the State and the citizen, leading to an insight into the functions of different levels of governments- rural and urban. You would be able to appreciate the political, social and economic challenges faced by India from within and outside the country and able to identify, understand and fulfil your own role for making a positive contribution towards nation building.

LEARNING OUTCOME

- recall struggles and experiences of our previous generations;
- explain the need to judiciously use the country's resources and conserve them;
- establish that India as a functioning democracy is inspired by the values enshrined in our constitution; and
- interpret various socio-political problems in contemporary India.

COURSE PLAN

Week 01 : INTRODUCTION TO SOCIAL SCIENCE

Week 02 : MEDIEVAL WORLD

Week 03 : MODERN WORLD-1

Week 04 : MODERN WORLD-11

Week 05 : IMPACT OF BRITISH RULE ON INDIA: ECONOMIC, SOCIAL AND CULTURAL

Week 06 : RELIGIOUS AND SOCIAL AWKENING IN COLONIAL INDIA

Week 07 : POPULAR RESISTANCE TO THE BRITISH RULE

Week 08 : INDIAN NATIONAL MOVEMEN

Week 09 : PHYSIOGRAPHY OF INDIA

Week 10 : CLIMATE

Week 11 : BIO-DIVERSITY

Week 12 : AGRICULTURE IN INDIA

Week 13 : TRANSPORT AND COMMUNICATION

Week 14 : POPULATION COMPOSITION

Week 15 : CONSTITUTIONAL VALUES AND POLITICAL SYSTEM IN INDIA

Week 16 : FUNDAMENTAL RIGHTS AND FUNDAMENTAL DUTIES

Week 17 : INDIA – A WELFARE STATE

Week 18 : LOCAL GOVERNMENTS AND FIELD ADMINISTRATION

Week 19 : GOVERNANCE AT THE STATE LEVEL

Week 20 : GOVERNANCE AT THE UNION LEVEL

Week 21 : POLITICAL PARTIES AND PRESSURE GROUPS

Week 22 : PEOPLE'S PARTICIPATION IN THE DEMOCRATIC PROCESS

Week 23 : CHALLENGES TO INDIAN DEMOCRACY

Week 24 : NATIONAL INTEGRATION AND SECULARISM

Week 25 : SOCIO-ECONOMIC DEVELOPMENT AND EMPOWERMENT OF DISADVANTAGED GROUPS

Week 26 : ENVIRONMENTAL DEGRADATION AND DISASTER MANAGEMENT

ABOUT INSTRUCTOR

Smt. Tarun Assistant Director in National Institute of Open Schooling (NIOS) Regional centre Chandigarh, Ministry of HRD, Govt. of India, Academic Consultant (Full Time, against the post of Assistant Regional Director) in IGNOU, Regional Center, Karnal, Haryana, India from 10 May to 29 Dec 2010. Lecturer (on Temporary basis) of Geography in KVA DAV College for Women, Karnal, Haryana, India from 21 July 2009 to 20 March 2010. Lecturer (as a guest faculty) of Disaster Management in Govt. College for Women, Karnal, Haryana, India from Nov 2008 to 31 March 2009

Areas of Interest/Specialization

- Open and Distance Learning
- Urbanization and Land Use Patterns

Experience

- Academic Officer (Geography) in National Institute of Open Schooling (NIOS), Ministry of HRD, Govt. of India, Noida-201309 (U.P.), India from 31 Dec 2010 to till now.
- Academic Consultant (Full Time, against the post of Assistant Regional Director) in IGNOU, Regional Center, Karnal, Haryana, India from 10 May to 29 Dec 2010.
- Lecturer (on Temporary basis) of Geography in KVA DAV College for Women, Karnal, Haryana, India from 21 July 2009 to 20 March 2010.
- Lecturer (as a guest faculty) of Disaster Management in Govt. College for Women, Karnal, Haryana, India from Nov 2008 to 31 March 2009





SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy, NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will enable learner to understand economy and different types of it. During the course, learners will get a clear view of central problems of an economy and basic economic activities. Learners are introduced with some basic concepts related to consumption, production and market mechanism.

LEARNING OUTCOME

The learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources.
- explain production and distribution of goods and services.
- explain the meaning and functions of money, banks and insurance.
- discuss the challenges and sectoral aspects of Indian economy.
- describe in detail India's position in the world and with its neighbours.
- list various consumer rights and responsibilities.

COURSE PLAN

Week 01 : Chapter-1 What is Economics

Week 02 : Chapter-2 Human Wants

Week 03 : Chapter-3 Goods and Services

Week 04 : Chapter-4 Economy – Its Meaning and Types

Week 05 : Chapter-5 Central Problems of an Economy

Week 06 : Chapter-6 Basic Economic Activities

Week 07 : Chapter-7 Production

Week 08 : Chapter-8 Cost and Revenue

Week 09 : Chapter-9 Demand

Week 10 : Chapter-10 Supply

Week 11 : Chapter-11 Determination of Price and Quantity

Week 12 : Chapter-12 Market

Week 13 : Chapter-13 Role of Govt. in Determination of Price & Quantity System

Week 14 : Chapter-14 Money and its Role

Week 15 : Chapter-15 Banking and Credit

Week 16 : Chapter-16 Savings and Insurance

Week 17 : Chapter-17 Collection and Presentation of Data

Week 18 : Chapter-18 Analysis of Data

Week 19 : Chapter-19 An Overview of Indian Economy

Week 20 : Chapter-20 Sectoral Aspects of Indian Economy

Week 21 : Chapter-21 Challenges of Indian Economy

Week 22 : Chapter-22 Indian Economy in Global Context

Week 23 : Chapter-23 Environment and Sustainable Development

Week 24 : Chapter-24 Consumer Awareness

Week 25: Revision

Week 26: Revision

ABOUT INSTRUCTOR

Smt. Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.





SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy, NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will give the learner an awareness of the world of business. This will help the learner to get an idea of different forms of business organisations available in our country. The course also explains various service sectors. The learner will be able to understand buying, selling and distribution techniques in business.

LEARNING OUTCOME

The learner will be able to:

- understand the nature and scope of business activities and social responsibilities of business.
- classify the business activities into industry and commerce and decide the form of business organization for the same.
- list the need and importance of various aids to trade like warehousing, transport, communication, postal, banking, insurance etc.
- describe the new developments in the business world like e-banking, B.P.O., K.P.O. services etc.
- explain the channels of distribution and various types of retail trade.
- discuss the need and importance of advertising, sales promotion and personal selling.
- recall the need and importance of consumer protection and redressal of consumer grievances.
- discuss the importance of self employment and competencies required to pursue a career.
- develop the skill of doing the project work using the case study approach.

COURSE PLAN

Week 01 : Chapter-1 Nature Scope of Business

Week 02 : Chapter-2 Industry & Commerce

Week 03 : Chapter-3 Sole Proprietorship, Partnership & Hindu Undivided Family

Week 04 : Chapter-4 Cooperative Societies and Joint Stock Companies

Week 05 : Chapter-5 Transport Services

Week 06 : Chapter-6 Warehousing Services

Week 07 : Chapter-7 Communication Services

Week 08 : Chapter-8 Postal and Courier Services

Week 09 : Chapter-9 Banking Services

Week 10 : Chapter-10 Insurance Services

Week 11 : Chapter-11 Outsourcing

Week 12 : Chapter-12 Purchase and Sale

Week 13 : Chapter-13 Channels of Distribution

Week 14 : Chapter-14 Retail Trade

Week 15 : Chapter-15 Advertising

Week 16 : Chapter-16 Sales Promotion and Personal Selling

Week 17 : Chapter-17 Consumer – Rights and Responsibilities

Week 18 : Chapter-18 Consumer Protection

Week 19 : Chapter-19 Choosing a Career

Week 20 : Chapter-20 Entrepreneurship

Week 21 : Chapter-21 Project work

Week 22 : Revision

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Smt.Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.





DR. ANJANA AGARWAL
Senior Executive officer (SEO), NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

- Home science subject consists of five specializations, (1) Food and nutrition (2) Human Development (3) Family Resource Management (4) Textile and Apparel Science (5) extension and Communication.
- Five specializations integrates the life skills which equip the learner to face the challenges of life in changing scenario of eating habits, health, fashion, child care, family dynamics, market, media, mobile apps, entrepreneurs, laws and regulations etc. The learner finds his or her path to walk upon in future.
- Sky is limit for Home Science learners. The learner gains the knowledge, skills and abilities in each field of specializations. The learner with creative bend of mind may find career in planning and cooking healthy meals, fabric weaving and printing, work for play school, making utility articles. The learners are made sensitive towards their food habits, cooking practices and health of the all family members, care and selection of clothes, environment, safety, cleanliness, hygiene and sanitation in houses, role of ethics, values and positive attitude in people as well as consumer rights and responsibilities in the market
- Learners develop managerial skills through time, energy, and money and resource management. Home Science equips the learner in all aspects of life.

LEARNING OUTCOME

recognize their own strengths and weaknesses and work on them to achieve their maximum potential;
put into practice decision making and problem solving skills to make informed choices;
Learn the milestones of growth and development and develop sensitivity for each member of the family in different life stages;
develop lifelong ability to absorb knowledge and apply it effectively to meet the challenges to ever changing life while focusing on adolescent issues;
become aware of the national issues and challenges and identify one's own role in overcoming them.

COURSE PLAN

Week 01 : Lesson 01 What is Home Science

Week 02 : Lesson 02 Food and Nutrients, function of food, Nutrients and deficiency diseases

Week 03 : Lesson 03 Food groups

Week 04 : Lesson 04 Methods of cooking food

Week 05 : Lesson 05 Food Preservation, Food Spoilage

Week 06 : Lesson 06 Environment, Air Pollution, Water Pollution

Week 07 : Lesson 07 Health, Factors Affecting Health

Week 08 : Lesson 08 Communicable and Life Style diseases, Life Style Disease

Week 09 : Lesson 09 Care and Maintenance of Fabric

Week 10 : Lesson 10 Fibre to Fabric

Week 11 : Lesson 11 Fabric Finishes, type of finishes

Week 12 : Lesson 12 Housing

Week 13 : Lesson 13 Safety at home

Week 14 : Lesson 14 Introduction to Resources

Week 15 : Lesson 15 Time & Energy Management

Week 16 : Lesson 16 Managing Family Income

Week 17 : Lesson 17 Life Begins

Week 18 : Lesson 18 Concept of development

Week 19 : Lesson 19 Family and I

Week 20 : Lesson 20 Adolescence Charms and Challenges

Week 21 : Lesson 21 Ethics in Daily Life

Week 22 : Lesson 22 Consumer Education, Consumer Rights

Week 23 : Lesson-01, 02 Assignments

Week 24 : Lesson-03, 04 Assignments

Week 25 : Lesson-05, 06 Assignments

Week 26 : Lesson-07, 08 Assignments

ABOUT INSTRUCTOR

Dr. Anjana Agarwal is employed at National Institute of Open Schooling (NIOS) as Senior Executive officer (SEO) in Academic department, Noida. She looks after academic activities including radio talks and video making for Home Science subject at secondary and senior secondary levels. She is well versed in Home Science and specialized in Food and Nutrition. She writes scientific articles and papers in national and international journals for long and the first author of "Text Book of Human Nutrition", 2014. She owns a website- www.nutroma.in and provides dietary and nutritional counselling for health and disease. She had been academically involved for Food Science and Nutrition in various capacities in Dehradun and Mumbai for more than 16 years. She has also delivered presentations on nutrition and aromatherapy in public and corporate forums. She has achieved her higher education in Pantnagar and University of Delhi, New Delhi with fellowships.



**DR. SHWETA VERMA**

Executive Officer (Academic), NIOS

TYPE OF COURSE : Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

- The study of psychology deals with important aspects of human behaviour and mental processes. The study of psychology is significant to one's personal growth and development and facilitates the process of social development. The way we think, feel and behave with the people and world around us influence our adjustment. The psychology course enables learners to understand the complex mental processes that govern human behaviour.
- The course offers an opportunity for learners to analyse the nature of psychology and the range of behaviours and mental processes. The course highlights on basic psychological processes, human development and social psychological process. You will also be able to learn about health and well being, work life and environmental concerns as well as the significance of psychology to understand the world of work.
- The course also introduces the learners to the concept of Yoga and its significance in day to day life.
- In all its essence the course collectively enables you to understand yourself and others around you to have a healthy life.

LEARNING OUTCOME

- explain the basic concepts of psychology and their application;
- relate oneself positively to family, neighbourhood and society;
- behave responsibly and in a value based manner;
- learn to live a purposeful life of health and happiness.

COURSE PLAN

Week 01 : Introduction to Psychology, Methods of Psychology

Week 02 : INDIVIDUAL DIFFERENCES

Week 03 : SENSORY PROCESSES

Week 04 : Memory

Week 05 : Thinking and Problem Solving

Week 06 : Motivation and emotion

Week 07 : NATURE AND DETERMINANTS

Week 08 : Childhood

Week 09 : Adolescence and its challenges

Week 10 : Adulthood and Aging

Week 11 : Group and leadership

Week 12 : Communication

Week 13 : Attitude

Week 14 : Social and Educational Problem

Week 15 : Happiness and well being

Week 16 : Mental Disorders and Their Treatment

Week 17 : Mental Health and Hygiene

Week 18 : Aptitude, Interest and Job Requirements

Week 19 : Preparation for the Vocational Role

Week 20 : The World of Organisations

Week 21 : Environmental Stress

Week 22 : Healthy Mind in Healthy Body

Week 23 : Self development and Yoga

Week 24 : Nurturing the whole being_ An Indian Perceptive Part

Week 25 : CONTROLLING AND DISCIPLINING THE MIND

Week 26 : Quiz

ABOUT INSTRUCTOR

Name : Dr Shweta Verma

Designation: Executive Officer (Academic)

Department: NIOS, Academic Department PhD in Psychology from H.P.U. Shimla University, Worked with various government organizations as psychologist and counsellor and having a university teaching experience of more than 2 years. Presently working with NIOS in the academic department.





DR.AZMAT NOORI
Academic Officer(History)

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

India is one of the ancient civilizations of the world which has stood the test of time. In fact what makes Indian culture unique among other ancient civilizations is its ability to accommodate and assimilate external influences and weave them into its own cultural fabric. This composite influence has not only enriched the cultural milieu of India, it has also made it stronger. Indian art, architecture, music, language, philosophy and religion reflect this diversity of influence that has occurred through centuries. This is the beauty of Indian Culture and Heritage. As Indian citizens not only do we need to be proud of this pluralistic and rich cultural heritage but also to study it objectively and assess it critically.

LEARNING OUTCOME

- To familiarize learners with various aspects of the culture and heritage of India.
- To acquaint learners with the contributions of our ancestors in the areas of religion, philosophy, science, arts, education, languages and literature.
- To enable learners to appreciate the underlying unity amidst diversity in all aspects of India's culture.
- To acquaint learners with the impact of Indian culture in different countries of the world
- To enable learners to appreciate the composite nature of Indian culture.

COURSE PLAN

Week1: Lesson 1: Culture: An Introduction

Week 2: Indian Culture

Week 3: Ancient India

Week 4: Medieval India

Week 5: Modern India

Week 6: Indian Languages and Literature-I

Week 7: Indian Languages and Literature-II

Week 8: Religion and Philosophy in ancient India

Week 9: Religion and Philosophy in Medieval India

Week 10: Religious Reform Movements in Modern India

Week 11: Indian Painting

Week 12: Performing Arts: Music, Dance and Drama

Week 13: Indian Architecture

Week 14: Science and Technology in India

Week 15: Scientists of Ancient India

Week 16: Science and Scientists of Medieval India

Week 17: Scientists of Modern India

Week 18: Education in India

Week 19: Indian Social Structure

Week 20: Socio-Cultural Issues in Contemporary India

Week 21: Spread of Indian Culture Abroad

Week 22: Revision

Week 23: Revision

Week 24: Revision

Week 25: Revision

Week 26: Revision

ABOUT INSTRUCTOR

Name : Dr. Azmat Noori

Designation : Academic Officer (History)

Qualification: Ph.D (History), 2010, Aligarh Muslim University, Aligarh

M.A (History), 2005, Aligarh Muslim University, Aligarh

B.A (Hons), History, 2003, Aligarh Muslim University, Aligarh

P.G Diploma in Women Studies, 2008, Aligarh Muslim University, Aligarh





SMT.SIBA SARASWATHY
Senior Executive Officer in Accountancy, NIOS

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

This course will help the learners to understand the basic concepts in accounting. The course enables the learner to understand the rules of debit and credit. After studying this course, the learners will develop the skill to prepare journal, other subsidiary books, trial balance and financial statements. During the course, learners will also get an idea of computers in accounting.

LEARNING OUTCOME

The learner will be able to:

- understand the meaning, objectives, advantages, basic concepts and conventions of Accountancy.
- develop the skill of preparing the accounting equation.
- classify the accounts into different categories, understand the rules of debit and credit and develop the skill of preparing accounting vouchers.
- prepare the various books of accounts like journal, cash book, other subsidiary books and ledger.
- develop bank reconciliation statement.
- post the transactions from journal and other subsidiary books to ledger and prepare the trial balance.
- identify the accounting errors and to learn their rectification.

COURSE PLAN

Week 01 : Chapter-1 Introduction of Accounting

Week 02 : Chapter-2 Accounting Concepts and Conventions

Week 03 : Chapter-3 Accounting Terms

Week 04 : Chapter-4 Accounting Equation

Week 05 : Chapter-5 Double Entry System

Week 06 : Chapter-6 Journal

Week 07 : Chapter-7 Cash Book

Week 08 : Chapter-8 Bank Reconciliation Statement

Week 09 : Chapter-9 Purchase and Sales Book

Week 10 : Chapter-10 Ledger

Week 11 : Chapter-11 Trial Balance and Accounting Errors

Week 12 : Chapter-12 Depreciation

Week 13 : Chapter-13 Provisions and Reserve

Week 14 : Chapter-14 Financial Statements (without adjustments)

Week 15 : Chapter-15 Financial Statements (with adjustments)

Week 16 : Chapter-16 Computers in Accounting

Week 17 : Chapter-17 Introduction to Tally

Week 18 : Revision

Week 19 : Revision

Week 20 : Revision

Week 21 : Revision

Week 22 : Revision

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Smt. Siba Saraswathy obtained her Master of Commerce (1992), Master of Philosophy (1994) and Bachelor of Education degree (1996) from University of Kerala. She worked as teacher in various schools and Colleges in Kerala State from 1997 to 2009. At present she is working with National Institute of Open Schooling, Sector -62, NOIDA, U.P. as Senior Executive Officer in Accountancy. Her current area of interest lies in Commerce and Management.





MS. SANCHITA BHATTACHARJEE

SEO (Painting)

TYPE OF COURSE : Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (01/08/2018 to 31/01/2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Self certificate and minimum age 14 years

OBJECTIVE OF COURSE

Painting is nothing but skills to express oneself through colour and proportion and it also helps cultivate aesthetic sense. It further aims to develop the visual sense of the learner and to help him/her appreciate expressive value of line, texture, space, rhythm etc.

LEARNING OUTCOME

- Learner will be to appreciate the History and Evaluation of Indian Art
- Explain the medium, techniques and styles of Indian Folk Art
- Create different shapes effectively in producing a composition
- Draw human figure with proportion

COURSE PLAN

PRACTICAL

Week 1. TOOLS AND MATERIALS

Week 2. OBJECT STUDY

Week 3. NATURE STUDY

Week 4. HUMAN FIGURE

Week 5. STUDY OF ANIMALS AND BIRDS

Week 6. COMPOSITION

THEORY

Week 7. History and Appreciation of Art(From 3000 BC to 600 AD) 01

Week 8. History and Appreciation of Art 05(From 7th Century AD to 12th Century AD)

Week 9. History and Appreciation of Art (from 13th Century AD to 18th Century AD.)

Week 10. Folk Art of India 13

Week 11. Renaissance 17

Week 12. Impressionism 21

Week 13. Cubism, Surrealism and Abstract Art 24

Week 14. Pioneers of Contemporary Indian Art 27

Week 15. Contemporary Indian Art 30

Week 16. Revision

Week 17. Revision

Week 18. Revision

Week 19. Revision

Week 20. Revision

Week 21. Revision

Week 22. Revision

Week 23. Revision

Week 24. Revision

Week 25. Revision

Week 26. Revision

ABOUT INSTRUCTOR

Presently working as a Senior Executive Officer (Performing Arts Education) in National Institute of Open Schooling from July 2001. She holds master degree M. A. in Drawing and Painting from Maharaja Tomar University, Madhya Pradesh. She has been engaged in the conducting Meeting, Development of Curriculum, Learning Objectives, Study Materials, Audio and Video Material, Marking Schema, Tutor Mark Assignment, Question Item for On Demand Examination and organizing workshops in different parts of the Country in the field of Art and Culture.



**RADHIKA B**

Academic Officer (ICT), NIOS

TYPE OF COURSE : Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : Self certificate and minimum age 14 years**OBJECTIVE OF COURSE**

Data Entry Operations is an introductory course provides students with the opportunity to practice using computer, operating systems, documents, spreadsheets and presentation. In this subject student will learn about word processing which helps them to format their document and merge their document with data. Also student will learn about spreadsheet which helps them to analyse their data and presentation software helps them to present their views or ideas to audience.

LEARNING OUTCOME

- define basic components of computer system;
- explain the features of Operating System;
- develop the skills of creating, printing and formatting the documents;
- handle different features of Spreadsheet;
- format spreadsheet and insert charts;
- create PowerPoint presentations.

COURSE PLAN**Week 01** : Basics of Computer**Week 02** : Video for L-01**Week 03** : Operating System**Week 04** : Video for L-02**Week 05** : Basics of Word Processing**Week 06** : Video for L-03**Week 07** : Formatting Documents**Week 08** : Video for L-04**Week 09** : Mail Merge**Week 10** : Video for L-05**Week 11** : Basics of Spreadsheet**Week 12** : Video for L-06**Week 13** : Formatting Worksheet**Week 14** : Video for L-07**Week 15** : Formulas, Functions and Charts**Week 16** : Video for L-08**Week 17** : Creating Presentation**Week 18** : Video for L-09**Week 19** : L-01 Quiz**Week 20** : L-02 Quiz**Week 21** : L-03 Quiz**Week 22** : L-04 Quiz**Week 23** : L-05 Quiz**Week 24** : L-06 Quiz**Week 25** : L-07 Quiz**Week 26** : L-08 Quiz**ABOUT INSTRUCTOR**

Name : Radhika B

Designation: Academic Officer (ICT), NIOS.

Having post graduation in Master of Computer Applications. Around 7+ years of intensive work experience in various projects and also gained experience and knowledge of the software development processes in the relevant technologies. Last six years associated in the content development of ICT courses in Academic and vocational courses of NIOS





DR. SANGHMITRA SURYAPANI

Academic Officer (Biology)

TYPE OF COURSE : Sr.Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 6 Months (01/08/2018 to 31/01/2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

Learner will be able to understand the concept of “learning by doing” which in turn helps in developing scientific temper.

LEARNING OUTCOME

The course content begins from Biodiversity classification; Structure and function of the living; their reproduction and development and also Genetics, Molecular Biology, Biotechnology and Immunology which are the modern fields of Biology. An exhaustive treatment of the environment in all its aspects is also contained in the curriculum and so are topics like some common human diseases and health and nutrition which are closely related to human welfare. Module-I Diversity and Evolution of Life, Module-II Forms and Functions of Plants and Animals Module-III Reproduction and Heredity Module-IV Environment and Health and Module-V Emerging Areas in Biology.

COURSE PLAN

Week :1 Origin and Evolution of Life and Introduction to Classification

Week :1 The Kingdom Monera, Protoctista and Fungi

Week :1 Kingdom Plantae and Animalia

Week :2 Cell Structure and Function

Week :2 Tissues and other Level of Organization

Week :3 Root system

Week :3 Shoot system

Week :4 Absorption, Transport and Water Loss in Plants

Week :4 Nutrition in plants - Mineral Nutrition

Week :4 Nitrogen Metabolism

Week :5 Photosynthesis

Week :5 Respiration in Plants

Week :6 Nutrition and Digestion

Week :6 Respiration and Elimination of Nitrogenous Wastes

Week :7 Circulation of Body Fluids

Week :7 Locomotion and Movement

Week :8 Coordination and Control - The Nervous and Endocrine Systems

Week :8 Homeostasis: The Steady State

Week :9 Reproduction in Plants

Week :9 Growth and Development in Plants

Week :10 Reproduction and Population Control

Week :11 Principles of Genetics

Week 12,13: Molecular Inheritance and Gene Expression

Week 14: Genetics and Society

Week 15,16: Principles of Ecology

Week 17,18: Conservation and Use of Natural Resources

Week 19: Pollution

Week 20: Nutrition and Health

Week 21,22: Some Common Human Diseases

Week 23,24: Biotechnology

Week 25,26: Immunobiology: An Introduction

ABOUT INSTRUCTOR

Dr. Sanghmitra Suryapani is working as an Academic Officer (Biology) at National Institute of Open Schooling (NIOS), NOIDA Uttar Pradesh. Dr. Suryapani has her Ph.D in Botany from Jamia Hamdard, University New Delhi. She has also done diploma in Environmental law and management from Indian Law Institute, New Delhi. She is a Subject Matter Specialist (SME) for Science and Technology at the Massive Open Online Courses (MOOC) platform for Swayam. She is also a State Coordinator; Mizoram for Diploma in Elementary Education (D. El. Ed) programme for in-service untrained teachers launched by NIOS an initiative of Ministry of Human Resource Development. She has developed self learning material of biology at Senior Secondary level. In addition to that she prepared learners guide for secondary, Science and Technology and developed various audio programmes through Muktavidyavani and video programs for MOOCs at NIOS. She has represented at various national, international and corporate platforms for writing and presenting talks.



**DR. RAJEEV PRASAD**

Assistant Director(Academic), NIOS

TYPE OF COURSE : Sr.Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 Weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th Passing Certificate and min. age 15 yr**OBJECTIVE OF COURSE**

According to present scheme of school education at Senior Secondary stage, chemistry emerges out as a separate discipline. The present chemistry course has been developed basically around the themes: Why do chemical reactions occur? What is the quantitative relationship among reacting constituents in a chemical reaction? How far and how fast will a chemical reaction proceed under a given set of conditions? Can we predict whether a chemical reaction will occur or not? What is the relation between the structure of a chemical substance and its functions/properties? In what way is a chemical reaction relevant for getting new types of substances and materials for daily life and chemical industries?

Some interdisciplinary aspects have also been provided to make the course more meaningful and functional. This Chemistry Course has three parts, I and II consist of theory portion and part III is a practical manual. Part I and II of theory portion has eight modules. Part-I consists of five modules namely as : Some basic concepts of chemistry, Atomic Structure and Chemical Bonding, States of matter, Chemical Energetics, and Chemical Dynamics. Part-II consists of three modules namely: Chemistry of Elements, Chemistry of Organic Compounds, and Chemistry in Everyday Life. Each module is further divided into different lessons.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain the principles, theories and laws of chemistry responsible for various chemical processes/ reactions
- realise the role of chemistry in production of many elements (metals/non-metals) and compounds useful in industries and daily life
- identify the chemical nature of inorganic and organic substances around him/her
- choose various vocational, professional and applied courses of choice based on knowledge of chemistry gained
- perform chemical calculations to know about the chemical reactions and chemical compounds
- explain chemical reactions, concepts and phenomenon
- develop awareness about uses and abuses of chemical substances
- develop skills of arranging/setting apparatus, handling apparatus and chemicals properly ; and analyse and synthesise simple compounds.

COURSE PLAN**Week 1:** Atoms, Molecules and Chemical Arithmetic**Week 2:** Atomic Structure & Periodic Table and Periodicity in Properties**Week 3:** Chemical Bonding**Week 4:** The Gaseous State and Liquid State & The Solid State**Week 5:** Solutions & Colloids**Week 6:** Chemical Thermodynamics & Spontaneity of Chemical Reactions**Week 7:** Chemical Equilibrium & Ionic Equilibrium**Week 8:** Electrochemistry**Week 9:** Chemical Kinetics & Adsorption and Catalysis**Week 10:** Occurrence and Extraction of Metals & Hydrogen and s-Block Elements**Week 11:** General Characteristics of the p-block Elements**Week 12:** p-block Elements and their Compounds – I**Week 13:** p-block Elements and their Compounds - II**Week 14:** d-Block and f-Block Elements & Coordination Compounds**Week 15:** Nomenclature and General Principles**Week 16:** Hydrocarbons**Week 17:** Compounds of Carbon Containing Halogens (Haloalkanes and Haloarenes)**Week 18:** Alcohols, Phenols and Ethers**Week 19:** Alcohols, Phenols and Ethers**Week 20:** Aldehydes, Ketones and Carboxylic Acids**Week 21:** Aldehydes, Ketones and Carboxylic Acids**Week 22:** Compounds of Carbon Containing Nitrogen**Week 23:** Biomolecules**Week 24:** Drugs and Medicines**Week 25:** Soaps, Detergents and Polymers**Week 26:** Environmental Chemistry**ABOUT INSTRUCTOR**

I Dr. Rajeev Prasad, Assistant Director(Academic), NIOS welcomes you all in this course. I have been working with NIOS from last eight years. I worked as Academic Officer(Chemistry), NIOS from 2011 to 2016 and developed and revised Senior Secondary Chemistry (313) of NIOS. My Specialisation is in Organic Chemistry. I have 11 years of Teaching experience at Senior Secondary Chemistry in reputed academic Institutions as Lecturer/PGT.



**DR. SAUMYA RAJAN**

Designation: Assistant Director (Academic)

TYPE OF COURSE : Sr.Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 6 Months (01/08/2018 to 31/01/2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th Passing Certificate and min. age 15 yr**OBJECTIVE OF COURSE**

After completing this course, the learner will be able to:

- develop listening skills;
- develop speaking skills;
- develop reading skills;
- develop writing skills.

This course will also focus on elements of language – grammar and vocabulary. Special efforts will be made to enrich the vocabulary of students.

LEARNING OUTCOME

- Listening Skills
- Speaking Skills
- Reading Skills
- Writing Skills
- Study Skills
- Literary Skills

COURSE PLAN**Week 1** My First Steps**Week 2** Leisure**Week 3** Reading With Understanding**Week 4** Father Dear Father**Week 5** Fuel of the Future**Week 6** My Grandmothers House**Week 7** Reading With Understanding**Week 8** A Case of Suspicion**Week 9** My Son will not a Beggar be**Week 10** Where the Mind is Without Fear**Week 11** Reading With Understanding**Week 12** If I Were You**Week 13** The Tiger in the Tunnel**Week 14** The Road not Taken**Week 15** Reading With Understanding**Week 16** I Must Know the Truth**Week 17** India-Her Past and Future**Week 17** Night of the Scorpion**Week 18** Reading With Understanding**Week 18** Reading With Understanding**Week 19** Reading With Understanding**Week 19** Reading With Understanding**Week 20** Reading With Understanding**Week 20** Reading With Understanding**Week 21** Bholi**Week 22** The Reception Desk and You**Week 22** Face to face Communication in Business**Week 23** Managing The Telephone**Week 23** Writing Memos and Letters**Week 24** Analysing Turns in Telephoning**Week 24** Writing e-mails**Week 25** Controlling Strategies and Out-Going Calls**Week 25** Writing Reports**Week 26** Aids for a Receptionist**Week 26** Writing Job Applications & Appearing for an Interview**ABOUT INSTRUCTOR**

Saumya Rajan is a DPhil in English Literature from the University of Allahabad and trained and certified in Incorporating Gender Concerns in Public Policy from the Indian Institute of Public Administration, New Delhi. She is certified in Global Diplomacy- Diplomacy in the Modern World from the University of London & SOAS, University of London.





DR. BAL KRISHNAN RAI
Assistant Director (Academics), NIOS

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

हिंदी अपने साहित्यिक एवं बोलचाल के रूप के माध्यम से आरम्भ से ही जन आकाक्षाओं की अभी व्यक्ति करती रही है, हिंदी साहित्य की समृद्धि का यह हुत बड़ा कारण है कि हिंदी ने समयनुसार अपने आप को परिवर्तित एवं समृद्ध किया है, आज के समय में एक तरफ तो हिंदी में अनेक विधाओं का हित्य लिखा जा रहा है दूसरी तरफ हिंदी मीडिया का भी विस्तार हुआ है हिंदी भाषी सामान्य व्यक्ति नई सूचना-क्रांति के परिणामस्वरूप आए अनेक शब्दों का प्रयोग अपने दैनिक जीवन में कर रहा है। इसके कारण साहित्य-लेखन में भी रचनाकारों की भाषिक क्षमता एवं विचार-प्रक्रिया परिवर्तित हुई है। हिंदी भाषा भारत के जनतंत्र की आकांक्षाओं की पूर्ति करती है। इस भाषा से देश के लोगों के बीच संपर्क स्थापित होता है। हिंदी भाषा का उच्चतर माध्यमिक स्तर का यह पाठ्यक्रम इन सभी बातों को ध्यान में रखते हुए तैयार किया गया है। यह जीवन और जगत की विभिन्न आवश्यकताओं में उपयोगी सिद्ध हो यह हमारा उद्देश्य है, इसी बात का ध्यान रखते हुए इसे अधिक व्यावहारिक, भाषा कौशल (सुनना, बोलना, पढ़ना और लिखना) आधारित और दैनिक जीवन से जुड़ा हुआ बनाने का प्रयास किया गया है। हम जीवन में मौखिक भाषा का सर्वाधिक प्रयोग करते हैं, अतः इस पाठ्यक्रम में सुनना और बोलना कौशल पर विशेष बल दिया गया है। व्याकरण कहीं पाठ्यक्रम को अधिक बोझिल न बना दे, इसके लिए इसे पाठ-सामग्री में ही समाहित किया गया है। इस रूप में यह पाठ्यक्रम अधिक व्यावहारिक तथा अन्य पाठ्यक्रमों से भिन्न और उपयोगी है।

LEARNING OUTCOME

भाषिक और साहित्यिक योग्यता का विकास कर उनका प्रयोग कर सकेंगे;
हिंदी की व्याकरण-सम्मत, समाज-संदर्भित और व्यावहारिक अभिव्यक्ति का विकास कर सकेंगे;
हिंदी की साहित्यिक-सामाजिक संवेदना की समझ विकसित कर सकेंगे और उसे परंपरा से जोड़ कर प्रस्तुत कर सकेंगे;
साहित्यिक, प्रयोजनपरक और व्यावहारिक भाषा के विविध रूपों की तुलना कर सकेंगे

COURSE PLAN

week 1 कविता कैसे पढ़ें
week 1 रैदास
week 2 तुलसीदास
week 2 मीराबाई
week 3 रहीम
week 3 गद्य कैसे पढ़ें
week 4 एक था पेड़ और एक था ढूँठ
week 4 दो कलाकार
week 5 अच्छा कैसे लिखें
week 5 सार कैसे करें
week 6 बिहारी
week 6 पद्माकर
week 7 सूर्यकांत त्रिपाठी 'निराला'
week 7 महादेवी week 8 अनुराधा
week 8 अनपढ़ बनाए रखने की साजिश

week 9 पीढ़ियां और गिट्टियां
week 9 कुटज
week 10 पत्र कैसे लिखें
week 10 भाव पल्ल वन
week 11 प्रतिवेदन, टिप्पण और प्रारूपण
week 11 रामधारी सिंह 'दिनकर'
week 12 गजानन माधव 'मुक्तिबोध'
week 12 राजेंद्र उपाध्याय
week 13 हिंदी कविता की विकास यात्रा
week 13 क्रोध
week 14 आखिरी चट्टान
week 14 जिजीविषा की विजय
week 15 निबंध कैसे लिखें
week 15 तालिका, अरेख निर्माण आदि
week 16 परियोजना कैसे लिखें
week 17,18,19 उपन्यास

week 20,21 तीन लघुकथाएं
week 22 सूचना प्रौद्योगिकी : स्वरूप और महत्त्व
week 22 संचार माध्यम और उनके प्रकार
week 23 संचार की प्रक्रिया
week 23 संचार माध्यम के प्रमुख अवयव
week 24 संचार माध्यम की भाषा
week 24 वैज्ञानिक दृष्टि और वैज्ञानिक विकास
week 25 भारतीय विज्ञान
week 25 जनसंख्या वृद्धि और विज्ञान
week 26 कंप्यूटर और हिंदी

ABOUT INSTRUCTOR

Qualification:

- M.A. (Mass Communication and Hindi),
- M. Phil. Topic - Gantantra Divas ki Shobha Yatra (Ravindernath Tyagi) : Samvedana or Shilp
- Ph.D., (University of Delhi, Certificate Course in Translation) Topic: Hindi ke Lalit Nibandhon mein Manav Mulya
- P.G. Diploma in Journalism & Mass Communication

Areas of Interest/Specialization

- Open and Distance Learning
- Adhunik Hindi Sahitya (Prose and Poetry)

Specialization:

- Translation, Editing and Mass Communication

Experience:

- Assistant Director since 28 October 2016 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
- Academic Officer (Hindi) since July 2009 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
- Hindi Officer since November 1999 at the National Institute of Open Schooling, MHRD, Government of India, NOIDA.
- Hindi Translator at Mahanagar Telephone Nigam Ltd. Since September 1996





DR. RAJENDRA KUMAR NAYAK

Academic Office (Mathematics), NIOS

TYPE OF COURSE : Sr.Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

There are basically four parts of Mathematics course under Swayam platform. These are 1.Text part 2. Audio and Video tutorials 3. Self Assessment 4. Discussion forum

Under text part, all efforts have been made to give related illustrations and sufficient examples for your better understanding. You must go through all solved examples and try to solve all problems under check your progress and Terminal exercises.

Along with text materials, lesson wise video tutorials are also provided for your clarification and better understanding. In some of the lessons concept wise certain audio clips are also provide you. Lesson wise Multiple Choice Questions (MCQs) are provided you after each lesson for the self progress purposes. A discussion forum is also provided to you in this platform, where you can able to share with me your doubts, difficulties and any suggestions. Remember in Swayam platform, one of the important aspects of learning Mathematics is you must have to carefully observe the Videos and practice the quiz items for your self assessment purposes.

LEARNING OUTCOME

After completing this course, learner will be able to:

describe basic concepts, facts, principles, terms, symbols and processes of Mathematics.

convert the word problems in to the mathematical forms and solve them.

explain different ways of processing the given data and help for arriving at conclusions.

express the skills of quantification of experiences and make linkage with day-today life.

solve wide variety of mathematical problems in daily life and reflect in different context of learning.

relate mathematical knowledge and skills to solve variety of problems and develop positive attitude towards Mathematics and its application.

COURSE PLAN

Week 1: Sets

Week 2: Relations and Functions-I

Week 3: Trigonometric Functions-I & Trigonometric Functions-II

Week 4: Relation between Sides and Angles of a triangle

Week 5: Sequences and Series & Some special sequences

Week 6: Complex Numbers

Week 7: Quadratic Equations and Linear Inequalities & Principle of Mathematical Induction

Week 8: Permutations and Combinations & Binomial Theorem

Week 9: Cartesian system of rectangular co-ordinates & Straight Lines

Week 10: Circles & Conic Sections

Week 11: Measures of Dispersion & Random experiments and events.

Week 12: Probability

Week 13: Matrices

Week 14: Determinants & Inverse of a Matrix and its Applications

Week 15: Relation and Functions-II Inverse Trigonometric Functions

Week 16: Limits and Continuity

Week 17: Differentiation

Week 18: Differentiation of Trigonometric functions & Differentiation of exponential and Logarithmic functions

Week 19: Application of Derivatives

Week 20: Integration

Week 21: Definite Integrals

Week 22: Differential equations

Week 23: Introduction to 3-D

Week 24: Vectors & Plane

Week 25: Straight Line

Week 26: Linear Programming Mathematical Reasoning

ABOUT INSTRUCTOR

Dr. Rajendra Kumar Nayak, M.Sc (Mathematics), M.Ed, Ph.D (Utkal University) presently working as Academic Office (Mathematics) in the Academic Dept., NIOS from 13/07/2012. Before joining of NIOS Dr. Nayak worked as Assistant Professor of Mathematics Education at Regional Institute of Education (NCERT), Bhubaneswar, Army Institute of Education, New Delhi and Ravenshaw University, Cuttack, Odisha.

The Interest area of teaching and learning - Mathematics, Mathematics Education, Educational Statistics, and Distance Education.

Dr. Nayak always believe on research based teaching and experince based learning. Based on this philosophy awarded Ph.D on the topic" Effectiveness of Construcivist Approach on Learning Process and Learning Achivement in Mathematics and Creativity of Primary School Children" from Utkal Univerdity, Odisha.





MS. SANCHITA BHATTACHARJEE
SEO (Painting)

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Months (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and age 15 yr

OBJECTIVE OF COURSE

This course is provided with necessary inputs of practical work and skill to the learner's familiarity of the theory of art through the ages. This will further help in aesthetic development, ability to appreciate and discover the beauty of life and integrate it into one's own personality. Thus, art will make more sense to the Cultural Heritage, environment and develop a creative attitude in day-to-day activities. When you will go through this book you will know about the brief introduction and appreciation of Indian Art. In theory part there is detailed and systematic description of Indian art history (early to Modern period) such as Art of Indus valley Civilization, Art of Mauryan to Gupta period, Ajanta Caves, Mural Painting, Temple Art and Sculpture, Architecture of Indo-Islamic period, Miniature painting of Mughals School, Rajasthan School, Pahari School, Company School, Bengal School and Folk Painting. In practical part we have fundamental of painting, how to draw an object from nature, how to compose Sketching from life and memory and how to do traditional folk painting. In practical paper it is also mentioned that you need to submit Portfolio with 12 original paintings and one sketch book. This course will offer good opportunity to you in your creative and self-expressional development.

LEARNING OUTCOME

- develop knowledge and understanding of visual art;
- develop skill, ability and aesthetic attitude
- acquaint about the development of art and various styles of art expression and their salient features;
- learn the visual aspects of composition, division of space, rhythm, texture, tonal gradation and expressive value of line;
- work with harmony and contrast of colour, having various drawing and painting materials such as pencils, pastels, water and oil colour, ink etc

COURSE PLAN

Week 1L-1 Art of Indus Valley Civilization

Week 2L-2 Art From Maurya To Gupta Period

Week 3L-3 Ajanta Caves

Week 4L-4 Temple Art And Sculpture

Week 5L-5 Indian Bronzes

Week 6L-6 Indo- Islamic Architecture

Week 7L-7 Mughal School

Week 8L-8 Rajasthani School Of Painting

Week 9L-9 Pahari School Of Miniature Painting

Week 10L-10 Deccan School Of Painting

Week 11L-11 Company School

Week 12L-12 Pioneers Of Contemporary Art Movements In India

Week 13L-13 Contemporary Art Of India

Week 14L-14 Folk Painting

Painting Practical Syllabus

Week 15L-1 Object Drawing

Week 16L-2 Nature Study

Week 17L-3 Fundamentals Of Painting

Week 18L-4 Composition

Week 19L-5 Sketching From Life And Memory

Week 20L-6 Folk Art As Motif

Painting (Practical Guidelines)

List of Practical

Week 21

1. Study And Draw Basic Shapes And Volume Of Objects In Individual And Group
2. Differentiate between the man made and natural objects.

Week 22

3. Use of light and Shade to achieve volume and depth in terms of perspective.
4. Study of rhythm, harmony, balance and texture.

Week 23

5. Application of primary, secondary and complementary cool and warm colours according to the need of the composition.
6. Arrangement of forms in pictorial space after assimilation of elements studied.

Week 24

7. Create composition to express feelings and emotions.
8. Documentation of visual experience, capture the movement, mood and the characteristics with instant perception

Week 25

9. Manifest forms from stored perception of studies of visual experience in the memory.
10. Study the traditional folk motifs. Week 2611. Study of methods and materials of folk art.

ABOUT INSTRUCTOR

Presently working as a Senior Executive Officer (Performing Arts Education) in National Institute of Open Schooling from July 2001. She holds a master degree M. A. in Drawing and Painting from Maharaja Tomar University, Madhya Pradesh. She has been engaged in the conducting Meeting, Development of Curriculum, Learning Objectives, Study Materials, Audio and Video Material, Marking Schema, Tutor Mark Assignment, Question Item for On Demand Examination and organizing workshops in different parts of the Country in the field of Art and Culture.





BIJAYALAXMI PRADHAN

senior executive officer(Physics),NIOS

TYPE OF COURSE : Sr. Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and age 15 yr

OBJECTIVE OF COURSE

Physics is a fundamental science because it deals with the basic features of the world such as time, space, motion, charge, matter and radiation. Study of physics is a means of rationally understanding nature. Physics lies behind all technological advancements, such as computer, internet, launching of rockets and satellites, lasers, etc. It also finds applications in such simple activities of men as lifting a heavy weight or making a long jump. Physics is, thus, an all pervading science and its study helps us in finding answers to whys and hows of our day to day happenings.

Physics course has been so designed that it not only focuses on the basic concepts of Physics but relates them to the daily life activities. The basic themes of Physics which would be of interest to all, particularly to those who are interested in pursuing Physics as a career in life have been selected to form core content of the course. Besides, this course also includes such emerging areas as electronics, communication, nuclear physics which find immense applications in our life.

LEARNING OUTCOME

After completing this course, the learner will be able to:

develop understanding of concepts, fundamental laws, principles and processes in the area of physics

establish relationship between causes and effects of physical phenomenon

explain the contributions of physics towards improving quality of life

create interest in physics and foster a spirit of enquiry

develop experimental skills like taking observations, manipulation of equipment, and

communicative skills such as reporting of observations and experimental results

develop problem solving ability e.g. analyzing a situation or data, establishing relationship between cause and effect

develop scientific temper of mind by making judgment on verified facts and not opinions, by showing willingness to accept new ideas and discoveries

develop awareness of the dangers inherent in the possible misuse of scientific knowledge.

COURSE PLAN

Week 1: Units, Dimensions and Vectors

Week 2: Motion in a Straight Line

Week 3: Laws of Motion

Week 4: Motion in a Plane & Gravitation

Week 5: Gravitation & Work, Energy and Power

Week 6: Work, Energy and Power & Motion of a Rigid Body

Week 7: Elastic Properties of Solids & Properties of Fluids

Week 8: Properties of Fluids

Week 9: Kinetic Theory of Gases

Week 10: Thermodynamics

Week 11: Heat Transfer and Solar Energy & Simple Harmonic Motion

Week 12: Wave Phenomena

Week 13: Electric Charge and Electric Field

Week 14: Electric Potential and Capacitors

Week 15: Electric Current

Week 16: Magnetism and Magnetic Effect of Electric Current

Week 17: Electromagnetic Induction and Alternating Current

Week 18: Reflection and Refraction of Light & Dispersion and Scattering of light

Week 19: Dispersion and Scattering of light & Wave Phenomena and Light

Week 20: Wave Phenomena and Light & Optical Instruments

Week 21: Structure of Atom & Dual Nature of Radiation and Matter

Week 22: Dual Nature of Radiation and Matter & Nuclei and Radioactivity

Week 23: Nuclear Fission and Fusion

Week 24: Semiconductors and Semiconducting Devices

Week 25: Applications of Semiconductor Devices

Week 26: Communication Systems

ABOUT INSTRUCTOR

Ms. Bijayalaxmi Pradhan is senior executive officer(Physics) in National Institute of Open Schooling(NIOS).Her qualification is M.Sc.(Physics),B.Ed.,PGDDE. She has been involved in various academic activities of Physics subject at senior secondary level and Science and Technology at secondary level in NIOS such as development of question bank,TMA,Video programmes, live audio programmes for webradio etc. She has also experience of teaching of Physics at senior secondary level. She was also involved in research and academic activities in science education in institutions like NCERT and Vigyan Prasara.





DR. R. N. MEENA

Designation: Assistant Director (Academic)

TYPE OF COURSE : Sr. Secondary
INTENDED AUDIENCE : School

COURSE DURATION : 6 Mpnths (01/08/2018 to 31/01/2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : 10th Passing Certificate and min. age 15 yr

OBJECTIVE OF COURSE

अस्मिन् स्तरे संस्कृतभाषायाः शिक्षणस्य उद्देश्यानि सन्ति-
सामान्य-उद्देश्यानि

- संस्कृतभाषायाः संस्कृतवाङ्मयस्य च विषये रुचिवर्धनम्;
- संस्कृतसाहित्यस्य विविधविधानां परिचयः;
- संस्कृतभाषाकौशलेषु दक्षताविकासः;
- राष्ट्रियस्तरे सामाजिक-सांस्कृतिक-वैज्ञानिकाध्यात्मिकसंचेतनाविकासः;
- आचारशुद्धिमाध्यमेन छात्राणां चारित्रिकविकासः।

विशिष्ट-उद्देश्यानि

श्रवणं भाषणाच्च

- छात्राः दैनन्दिनव्यवहारे शिष्टाचारपालने संस्कृतस्य प्रयोगं कुर्युः;
- सरलसंस्कृते प्रश्नं प्रष्टुं समर्थाः भवेयुः;
- सरलसंस्कृतप्रश्नानां मौखिकरूपेण उत्तरदाने समर्थाः भवेयुः;
- वर्णानां शुद्धम् उच्चारणं कर्तुं समर्थाः भवेयुः;

LEARNING OUTCOME

- संस्कृतभाषायाः सामान्यज्ञानवर्धनं भविष्यति ।
- संस्कृतसाहित्यं प्रति छात्रेषु अभिरुचेः वर्धनम्।
- संस्कृतसाहित्यस्य प्रमुखविधानां प्रतिनिधिचिन्तनां ज्ञानम्।
- छात्रेषु राष्ट्रियसांस्कृतिकसामाजिकनैतिक-मूल्यानां विकासः।
- विज्ञानप्रौद्योगिकीक्षेत्रे प्राचीनभारतीयमनीषिणां योगदानैःपरिचयः।

COURSE PLAN

Week 1 thou-lans'k%

Week 2- ;fn tkukfl rn~ on

Week 3- vkjksX;a ijea lq[ke~

Week 4- okpka e.Mua IR;e~

Week 5- vfryksHk% u dÜkZO;%

Week 6- jktrs [kyq dU;kdqekjh

Week 7- ,rn~ mikL;e~

Week 8- ijkFksZ vkReksRlxZ%

Week 9- dkys Qyfr lkSHkX;e~

Week 10- irfUr ijihMdk%

Week 11- vuqPNsnys[kue~

Week 12- laoknys[kue~

Week 13- o"kZrqZo.kZue~

Week 14- ve`rL; iUFkk%

Week 15- fgeky;ks uke uxkf/kjkt%

Week 16- ekuks fg egrka /kue~

Week 17- dYiukdhfrZ% fot;rs , i;kZoj.kL; laj{k.ke~

Week 18- Øks/kks-uFkZdkjd%,vuUr%Kkulkxj%

Week 19- 'kY;fpfdRlktud% lqJqr% ,d"Va U;k;lL; j{k.ke

Week 20- ân; ifjorZue, i=a fy[kke%

Week 21- ifj;kstuk&fuekZ.ke ,

Week 22- lelkef;da laLÑrlkfgR;e, laLÑrL; iz;kstuewydrk

Week 23- Hkkjrh;KkufoKkuiejEijk, tulxpkjek;/e%

Week 24- laLÑre~vU;k% Hkkjrh;k% Hkk"kk% p , laLÑri=dkfjrk

Week 25- Hkkjrh;laLÑrkS laLdkjk% ~ if=dkizk;ie~

Week 26- eqnz.k=qfV'kks/kue~

ABOUT INSTRUCTOR

Dr. R.N. Meena Completed his M.A., M.Phil., Ph.D. from JNU, New Delhi. He has expertise in Language Learning, Open and Distance Learning, Philosophy and Thoughts, Theater, Screenplay writing for short film and educational videos, Linguistics, Gender, Caste and Tribal Issues.





BIJAYALAXMI PRADHAN

senior executive officer(Physics),NIOS

TYPE OF COURSE : Sr. Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 Weeks (1st Aug, 2018 to 31st Jan,2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

- This course has been divided into 10 modules and 32 lessons. First Module is The study of Geography in India. It talks about the development of Geography as a discipline, the approaches of learning geography and its branches.
- The Module 2 is on Changing Face of the Earth. The earth we can see and know is the result of evolution taken place in a very long time. This module helps students to understand the origin and evolution of the earth. It talks about different theories related to the dynamic surface of the earth i.e. isostasy and continental drift.
- Module 3 is The domain of the water on the Earth. As the name refers its talk about oceans, the movement of oceanic water, ocean reliefs and its influence on human and climate.
- 4th Module The Domain of Air on the Earth covers the atmospheric structure and composition, insolation, winds, precipitation and other elements of weather and climate.
- Module 5 talks about The Domain of Life on Earth. It explains the biosphere and life in different biomes. It also let you think about the global climatic changes and its impact on human society. So that we can take a step to achieve sustainable development.
- The next module is The Physical Setting of India. This module has covers the physiography, drainage system and climate of India. It also help you to analyse the natural disaster prone areas in India and efforts to be made to cope up with it.
- Module 7 talks about Natural Resources and their Development in India. This module will help to understand the resources available in India and their wise use and distribution.
- The very next Module is on Economic Activities and Infrastructural Development. It discusses about available resources, their distribution and related economic activities. The module also covers the transport and communication system in India.
- Module 9 covers the Human Resource Development in India. This will help you to analyse the demography of India along with human development index and settlement patterns in India.
- Module 10 is Optional Module. You have to select any one module either Local Area Planning or Geography of Tourism in India.

LEARNING OUTCOME

- explain the terms, key concepts and basic principles of geography
- explore the processes and patterns of the spatial arrangements of the natural as well as human phenomena
- explain the complex relationship that exists between physical and human environment
- apply geographical knowledge and methods of enquiry to emerging issues and problems at different levels – local, regional, national and global
- develop an understanding of diverse physical resource base, economic activities and regional inequalities in India
- summarize the concept of unity in diversity in India and its demographic structure and recognize the spirit and purpose of geography as a discipline in the modern world.

COURSE PLAN

Week 1 : L-1 and 2: Nature of Geography as a Discipline, Earth's Interior and Its Material

Week 2 : L-3: Dynamic Surface of the Earth

Week 3 : L-4 and 5: Evolution of Landforms Due To Internal Forces, the Work of Running Water and Underground Water

Week 4 : L-6: The Work of Moving Ice, Wind and Sea Wave

Week 5 : L-7: Major Landforms and Their Economic Significance

Week 6 : L-8: Oceans: Submarine Relief and Water Circulation

Week 7 : L-9 and 10: Atmosphere Composition and Structure, Insolation and Temperature

Week 8 : L-11: Pressures and Wind

Week 9 : L-12 and 13: Humidity and Precipitation, Weather and Climate

Week 10 : L-14 and 15: Biosphere, Biomes

Week 11 : L-16: India - Physical Features

Week 12 : L-17 and 18: Climate of India, Natural Disasters

Week 13 : L-19 and 20: Our Resources, Land, Soil and Vegetation Resources In India

Week 14 : L-21 and 22: Our Water Resources, Land Use and Agriculture

Week 15 : L-23 and 24: Development of Mineral and Energy Resources, Industrial Development

Week 16 : L- 25: Transport, Communication and Trade in India

Week 17 : L-26: Population Density, Distribution and Growth in India

Week 18 : L-27: Population Composition in India

Week 19 : L-28: Human Development

Week 20 : L-29: Human Settlement

Week 21 : Optional Module 10 A Lesson 30/ 10 B Lesson 30

Week 22 : Optional Module 10 A Lesson 31/ 10 B Lesson 31

Week 23 : Optional Module 10 A Lesson 32/ 10 B Lesson 32

Week 24 : Practical Lesson 1 and 2

Week 25 : Practical Lesson 3 and 4

Week 26 : Practical Lesson 5

ABOUT INSTRUCTOR

Name : Mr. Vivek Singh

Designation : Sr. Executive Officer (Academic)

Department : Academic Department

MA (Geography) from A.P.S. University, Rewa and MBA (HRM) from Institute of Management Technology-CDL. More than 10 years of experience in Open and Distance Learning. His interest area is Geography, Open and Distance Learning and Basic Education.





DR. SHWETA VERMA
Executive Officer (Academic), NIOS

TYPE OF COURSE : Sr. Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

- Psychology is a discipline which is relevant to all walks of life. Its applications to the various areas of personal, organizational and social functioning are well recognized. All of us use various psychological concepts without knowing them. This course at the Senior Secondary level has been designed in such a way that the learners will know the basics of psychology in simple language. Attention has also been paid to the Indian context.
- This field has a large number of opportunities for employment, some of these are:
- Clinical psychologists: Clinical psychologists aim to reduce the distress and improve the psychological wellbeing of their clients.
- Counsellor: As a counselling psychologist one uses psychological theory and research in therapeutic work to help clients with a variety of problems such as difficult life issues and mental health conditions.
- Educational psychologists: Educational psychologists help children or young people who are experiencing problems that hinder their successful learning and participation in school and other activities. These problems can include a range of emotional and social problems or learning difficulties.
- Occupational psychologists: Occupational psychologists apply expert knowledge to all levels of working and may work on organisational issues, such as culture and change, as well as issues at an individual or team level.
- Primary care graduate mental health workers: Primary care graduate mental health workers provide a range of treatments, support and advice to people suffering from common mental health issues, such as anxiety and panic attacks.
- There are other varied options like to work as a rehabilitation counsellor/psychologist, health psychologist, sports psychologist etc

LEARNING OUTCOME

- develop an understanding about the basics in psychology for understanding mind and behaviour.
- demonstrate the knowledge and understanding of theory in the areas of learning, memory and problem solving.
- develop an overview of the nature of human development.
- understand self and others for personal growth and development
- adapt effectively in the environment around
- appreciate the importance of planning for career development
- become responsible citizens and serve towards the refinement of society

COURSE PLAN

Week 01 : Psychology: Understanding Self and Others

Week 02 : How Psychologists Study?

Week 03 : Biological and Cultural Shaping Of Mind and Behaviour

Week 04 : Becoming Aware of the World around Us

Week 05 : Attention and Perception

Week 06 : Learning Process and Acquiring Skills

Week 07 : Remembering and Forgetting

Week 08 : Going Beyond the Reality: Thinking and Reasoning

Week 09 : Motivation

Week 10 : Emotions

Week 11 : Development: It's Nature

Week 12 : Domains of Development

Week 13 : Adolescence

Week 14 : Adulthood and Aging

Week 15 : Understanding Individual Differences: The Case Of Intelligence

Week 16 : What Is Self?

Week 17 : Self and Psychological Processes

Week 18 : Personality Theories, Personality Assessment

Week 19 : Psychological Disorders, Group Processes, Person Perception and Interpersonal Attraction

Week 20 : Man-Environment Interaction

Week 21 : Psychotherapy, Health Psychology

Week 22 : Education and Work, Career Development, Vocational Choice And Vocational Adjustment

Week 23 : Stress and Your Health, Stress Management and Well-Being

Week 24 : Developmental Patterns in Early Childhood

Week 25 : Play Centre: Objectives, Play Centre: Structural Details

Week 26 : Planning And Conducting Programmes, Involvement of Parents and Community in a Play Centre

ABOUT INSTRUCTOR

A Doctorate of philosophy in Psychology from Himachal Pradesh University. Availed University scholarship during MA in Psychology. I have served various government and non government (NGO) institutions in Himachal Pradesh as Psychologist/Counselor. During my stay with Red Cross Dharamshala(NGO) as a Psychologist I was given an additional responsibility of creating awareness among the Health Workers of Kangra Distt. about the various mental health issues. Besides this I have served as a faculty with Shiva Institute of Engineering and Technology Bilaspur, H.P. and the job role included training and mentoring students for soft skills. Apart from this I have worked with the Lovely Professional University, Jalandhar, Punjab as an Assistant professor in Psychology for quite a long time. I am currently working with NIOS for the past two years where the job role requires to work on the academic activities like standardization of marking scheme in psychology ,developing Tutor Marked Assignments for learners in Psychology etc. Besides this the job role also requires to deliver Personal Contact programme through Mukta Vidya Vani every month and through Swayam Prabha and Swayam Porta also. My passion is to teach and train the learners through various modes of teaching and I believe in learning while teaching. I hope we will have fun learning on this platform. I wish you all a happy learning



**RADHIKA B**

Academic Officer (ICT), NIOS

TYPE OF COURSE : Sr. Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th passing certificate and minimum age 15 years**OBJECTIVE OF COURSE**

- The syllabus of Computer Science for Senior Secondary course developed by NIOS to provide knowledge and understanding of basic components of computer and their working, uses of Internet, C++ programming and problem solving skills.
- This course has two modules. The first module explains about Computer Fundamentals. The second module explains about C++ programming.

LEARNING OUTCOME

- identify the basic components of computer and their working; use of operating system
- list the types of computer network
- Use of various services provided by internet
- practice basics of Java programming language
- Use of C++ programming
- State basic concepts of OOP
- Use of control statements in C++ programming
- define library and user defined functions in C++ programming;
- Use of one dimensional and two dimensional arrays
- select members of the class
- explain the concept of inheritance; use pointers in arrays
- Use of files in C++ programming.

COURSE PLAN**Week 1** - L-1: Anatomy of a Digital Computer**Week 2** - L-2: Data Processing Concept**Week 3** - L-3: Computer Software**Week 4** - L-4: Operating Systems**Week 5** - L-5: Data Communication and Networking**Week 6** - L-6: Fundamentals of Internet and Java Programming

Week 7 - L-7: Introduction to C++

Week 8 - L-8: General Concept of OOP**Week 9** - L-9: Control Statements**Week 10** - L-10: Functions**Week 11** - L-11: Array**Week 12** - L-12: Structure, Typedef & Enumerated Data Type**Week 13** - L-13: Classes & Objects with Constructors/Destructors**Week 14** - L-14: Inheritance Extending Classes**Week 15** - L-15: Pointer**Week 16** - L-16: Files**Week 17** - L-1 Quiz**Week 18** - L-2 Quiz**Week 19** - L-3 Quiz**Week 20** - L-4, 5 Quiz**Week 21** - L-6, 7 Quiz**Week 22** - L-8, 9 Quiz**Week 23** - L-10, 11 Quiz**Week 24** - L-12, 13 Quiz**Week 25** - L-14, 15 Quiz**Week 26** - L-16 Quiz**ABOUT INSTRUCTOR**

Name: Radhika B

Designation: Academic Officer (ICT), NIOS.

Having post graduation in Master of Computer Applications. Around 7+ years of intensive work experience in various projects and also gained experience and knowledge of the software development processes in the relevant technologies. Last six years associated in the content development of ICT courses in Academic and vocational courses of NIOS





DR. SANDHYA KUMAR
Deputy Director (Academic), NIOS

TYPE OF COURSE : Sr. Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

Home Science trains the learners in life skills and equips both men and women in in following aspects through 5 modules and 2 optional modules.

1- The Art and Science of Managing Home” focuses on concept of the subject in three lessons.

2: Food and Nutrition details about Food, Nutrition, cooking and Health via six lessons.

3: Resource Management trains in management of Resources, Time, Energy, Income Space, Household Equipments, Environment, Energy and the Consumer.

4: Human Development includes different aspects of growth and development in different stages of life.

5: Textiles and Clothing talks about fibre, yarn, fabric, textile finishes and also the selection and care of fabric.

Two optional modules are meant for choice. One is Housekeeping and second is Creative hand embroidery.

LEARNING OUTCOME

- develop skills that help in bringing a positive change in daily life style and solving problems; develop creative thinking and a rational approach towards everyday life
- develop scientific temper and a spirit of inquiry
- Sensitivity to values of ethical living.

COURSE PLAN

Week 01 : L-1 Home, family and Home science

Week 02 : L-2 Ethics in daily life, Family and L-3 health and Security

Week 03 : L-4 Food, nutrition and health and L-5 Meal planning

Week 04 : L-6 Nutritional status

Week 05 : L-7 Purchase and storage of food

Week 06 : L-8 Preparation of food and L-9 Food preservation

Week 07 : L-10 Family resource management

Week 08 : L-11 Time and energy management book

Week 09 : L-12 Space management

Week 10 : L-13 Income management

Week 11 : L-14 Energy conservation and L-15 Environment management

Week 12 : L-16 Household equipment

Week 13 : L-17 Consumer education

Week 14 : L-18 Growth and development (0-5 year)

Week 15 : L-19 Growth and development (6-12 year)

Week 16 : L-20 Adolescence

Week 17 : L-21 Concerns and issues in human development

Week 18 : L-22 Introduction to fabric science and L-23 Yarn and its construction

Week 19 : L-24 Fabric construction

Week 20 : L-25 Textile finishes

Week 21 : L-26 Selection of textiles and clothing

Week 22 : L-27 Care and maintenance

Week 23 : Module A, L-28 Introduction to housekeeping and Module A, L-29 Cleaning and cleaning materials

Week 24 : Module A, L-30 Maintenance of premises and Module A, L-31 Aesthetics at home

Week 25 : Module B, L-28 Creative hand embroidery and Module B, L-29 The design

Week 26 : Module B, L-30 Colour, Module B, L-31 Embroidery stitches

ABOUT INSTRUCTOR

Dr. Sandhya Kumar (Designation: Deputy Director (Academic))

- Ph D (Education), MEd, MSc (Home Science)
- Serving NIOS for more than two decades (15 years as Academic Officer, 5 years as Assistant Director at Regional Center Dehradun,
- Current status as Deputy Director at Head Quarter of NIOS
- intensively involved in organising variety of workshops and conferences etc
- Developed self Learning material (SLM) for Home Science, vocational subjects , Quality Assurance Policy of NIOS in collaboration with COL Institution of "Reading Hour" in the Library, SOP etc.
- Initiated many projects in the Academic Department





DR. SUKANT KUMAR MAHAPATRA

Academic Officer, NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary

INTENDED AUDIENCE : School

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : 10th passing certificate and minimum age 15 years

OBJECTIVE OF COURSE

The world we live in today, is simultaneously shrinking and expanding, growing and under constant pressure for change. The large-scale changes in use of technology, the great increase in the traffic in culture and political and economic changes are the cause of the changes around the world. Understanding these socio-cultural changes requires studying the social world scientifically and developing some understanding of the character of society. Sociology is the scientific study of society & its institutions, social interactions, organizations and groups.

It investigates the practices and processes operating in the society. By observing the broad range of activities in society and getting a space for exploring topics such as family, caste, class, gender, religion, socialization & population dynamics, Sociologists provide a base for in-depth understanding & perspectives on our social order and processes of social change. Sociology provides an important platform which is useful both to personal wellbeing and social development as well. Sociology is among the broadest of the social sciences and thus provides the opportunity for the learners to understand the broad range of the social issues operating in the space between individual, community and society.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- define basic concepts in Sociology;
- draw generalizations about various social institutions and social divisions in society;
- explain the process of change and development in society in general and with reference to Indian society in particular;
- extrapolate the different dimensions of Indian society; evaluate social realities objectively; and
- develop the ability to perceive social realities scientifically

COURSE PLAN

WEEK 01 - L1: AN INTRODUCTION TO SOCIOLOGY

WEEK 02 - L2 : EMERGENCE AND DEVELOPMENT OF SOCIOLOGY

WEEK 03 - L3 : SOCIOLOGY ITS RELATIONSHIP WITH OTHER SOCIAL SCIENCES

WEEK 04 - L4 : METHODS AND TECHNIQUES IN RESEARCH OF SOCIOLOGY

WEEK 05 - L5 : SOCIETY COMMUNITY ASSOCIATION AND INSTITUTION

WEEK 06 - L6 : SOCIAL GROUP, L7 : SOCIAL STRUCTURE AND SOCIAL SYSTEM

WEEK 07 - L8 : NORMS AND VALUES, L9 : STATUS AND ROLE

WEEK 08 - L10 : CO-OPERATION COMPETITION AND CONFLICT

WEEK 09 - L11 : ACCULTURATION ASSIMILATION AND INTEGRATION

WEEK 10 - L12 : MARRIAGE, L13 : FAMILY

WEEK 11 - L14 : KINSHIP, L15 : ECONOMY POLITY AND RELIGION

WEEK 12 - L16 : SOCIAL STRATIFICATION

WEEK 13 - L17 : FACTORS OF SOCIAL CHANGE

WEEK 14 - L18 : PROCESSES OF SOCIAL CHANGE, L19 : SOCIALIZATION AS A PROCESS OF LEARNING

WEEK 15 - L20 : SOCIAL CONTROL, L21 : SOCIAL DEVIANCE

WEEK 16 - L22 : SOCIETY AND ENVIRONMENT

WEEK 17 - L23 : INDIAN SOCIAL THINKERS, L24 : UNITY AND DIVERSITY

WEEK 18 - L25 : NATIONAL INTEGRATION : CONCEPT AND CHALLENGE, L26 : INDIAN SOCIETY : TRIBAL RURAL AND URBAN

WEEK 19 - L27 : CASTE SYSTEM IN INDIA, L28 : MAJOR RELIGIOUS COMMUNITIES IN INDIA

WEEK 20 - L29 : MAJOR SOCIAL PROBLEMS OF INDIA

WEEK 21 - L30 : PROBLEMS OF SCHEDULED CASTES AND SCHEDULED TRIBES

WEEK 22 - L31 : PROBLEMS OF OTHER DEPRIVED SECTIONS

WEEK 23 - L32A : STATUS OF WOMEN IN INDIAN SOCIETY : A SOCIO-HISTORICAL PERSPECTIVE OR L32B : CULTURE : CONCEPT AND CHARACTERISTICS

WEEK 24 - L33A : GENDER DISCRIMINATION AND GENDER EQUALITY OR L33B : INDIAN CULTURAL HERITAGE

WEEK 25 - L34A : PROBLEMS OF WOMEN OR L34B : CULTURAL PLURALISM

WEEK 26 - L35A : WOMEN'S EMPOWERMENT AND EMANCIPATION OR L35B : IMPACT OF MEDIA ON CULTURE

ABOUT INSTRUCTOR

Dr. Sukanta Kumar Mahapatra is working as an Academic Officer (Sociology) in National Institute of Open Schooling under Ministry of HRD, Government of India He has teaching experience of more than seven years. He has done his Doctorate from School of Social Sciences, Tata Institute of Social Sciences Mumbai Campus. Dr. Sukanta does the research in Sociology of Education, Pedagogic Theory, Educational Policy and Social Stratification, Open Schooling and E-Learning.



**MANJU CHRUNGU**

Assistant Librarian NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th passing certificate and minimum age 15 years**OBJECTIVE OF COURSE**

This course will not only help you use a Library in a more efficient way for your day to day studies, but this will also help you by introducing another option for your further studies, and hence taking up library and information science as a profession. This material is designed in such a way that it can help anybody in using library resources in a better manner for their personal growth or research. The course structure is developed keeping in view needs of the society and learners.

This course is developed in Modular form which includes- four Core Modules and two optional Modules. The four core modules aim to impart comprehensive knowledge on different areas of Library and Information Science. It is compulsory for learners to study all the four Core Modules, you will have the choice to select one out of the two optional modules. Further, the course also includes practical. We would like you to use the modules in the same sequence as the modules are arranged because there are references and cross references in each subsequent lesson.

LEARNING OUTCOME

After completing this course, the learner will be able to

- explain information storage, searching and retrieval system
- develop library and information related skills
- inculcate interest in the library and information science to opt this subject as a career; explain various information sources and their use
- organize different sources of information
- develop necessary skills for utilizing the library
- use of ethical information

COURSE PLAN**WEEK 01 - L1** : LIBRARY AND INFORMATION CENTRES : CONCEPT AND ROLE IN SOCIETY**WEEK 02 - L2** : TYPES OF LIBRARIES AND INFORMATION CENTRES**WEEK 03 - L3** : MODERN LIBRARY: AUTOMATED, DIGITAL & VIRTUAL**WEEK 04 - L4** : FIVE LAWS OF LIBRARY SCIENCE SOURCES**WEEK 05 - L5** : OVERVIEW OF INFORMATION SOURCES**WEEK 06 - L6** : TYPES OF INFORMATION SOURCES**WEEK 07 - L7** : REFERENCE SOURCES**WEEK 08 - L8** : ELECTRONIC RESOURCES**WEEK 09 - L9** : ORGANIZATION OF LIBRARY MATERIAL: CONCEPT, NEED AND PURPOSE**WEEK 10 - L10** : PROCESSING OF LIBRARY MATERIAL: CLASSIFICATION AND CATALOGUING**WEEK 11 - L11** : ARRANGEMENT & MAINTENANCE OF LIBRARY MATERIAL**WEEK 12 - L12** : LIBRARY AND INFORMATION SERVICES FOR THE USERS**WEEK 13 - L13** : TRADITIONAL LIBRARY SERVICES: RESPONSIVE AND ANTICIPATORY**WEEK 14 - L14** : MODERN LIBRARY SERVICES**WEEK 15 - L15** : LIBRARY SYSTEM AND MANAGEMENT**WEEK 16 - L16** : INFORMATION RETRIEVAL SYSTEM: CONCEPT**WEEK 17 - L17** : LIBRARY STAFF**WEEK 18 - L18** : INFORMATION RETRIEVAL TOOLS: CATALOGUES, INDEXES, SUBJECT HEADING LISTS**WEEK 19 - L19** : LIBRARY USERS**WEEK 20 - L20** : SEARCH TECHNIQUES: BASIC AND ADVANCED**WEEK 21 - L21** : LIBRARIANSHIP AS A CAREER**WEEK 22 - L22** : SEARCH TECHNIQUES: WEB BASED SEARCH**WEEK 23 - L23** : PRACTICALS (P1, P2, P3 & P4)**WEEK 24 - L24** : PRACTICALS (P5, P6, P7 & P8)**WEEK 25 - L25** : PRACTICALS (P9, P10, P11 & P12)**WEEK 26 - L26** : PRACTICALS (P13, P14 & P15)**ABOUT INSTRUCTOR**

Manju Chrungu is B.Sc & M.Lib.Sc Qualified. She is having work experience of more than 25 years. Her subject interest is Science and Library Science. Library Science helps you to go through oceans of material. Which helps you to gain knowledge and apply same in different fields.



**DR. MANISH CHUGH**

Academic Officer (Economics) NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th passing certificate and minimum age 15 years**OBJECTIVE OF COURSE**

Economics has become a very sought-after subject in the field of Social Science. The knowledge of Economics is very important in pursuing various activities in everyday life such as production, consumption and investment. In Consumption, every individual wants to utilize the income in the best possible manner so as to get maximum satisfaction from the goods and services purchased. Similarly, as producer, the individual/firm/industry uses the resources to minimize cost and get maximum output/profit. At the economy level, everybody wants that there should be economic growth and development through higher income and employment. Study of economics is very useful to achieve these goals.

At NIOS, students are introduced to the subject of Economics at Secondary stage. The level at this stage is elementary in nature. However, at the Senior Secondary level, students will be exposed to more areas of economics. They are also expected to know the use of tables and graphs/statistical tools to understand and explain various concepts and theories of economics.

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources;
- explain production and distribution of goods and services;
- explain the meaning and functions of money, banks and insurance;
- discuss the challenges and sectoral aspects of Indian economy;

COURSE PLAN**WEEK 01 - L1** : OVERVIEW OF INDIAN ECONOMY**WEEK 02 - L2** : ECONOMIC PLANNING IN INDIA**WEEK 03 - L3** : ECONOMIC GROWTH & ECONOMIC DEVELOPMENT**WEEK 04 - L4** : THE PROBLEMS OF UNEMPLOYMENT, POVERTY & INEQUALITY**WEEK 05 - L5** : MEANING, SCOPE AND ITS NEED IN ECONOMICS**WEEK 06 - L6** : COLLECTION AND CLASSIFICATION OF DATA**WEEK 07 - L7** : PRESENTATION OF DATA**WEEK 08 - L8** : MEASURES OF CENTRAL TENDENCY**WEEK 09 - L9** : MEASURES OF DISPERSION**WEEK 10 - L10** : CORRELATION ANALYSIS**WEEK 11 - L11** : INDEX NUMBERS**WEEK 12 - L12** : INTRODUCTION TO THE STUDY OF ECONOMICS**WEEK 13 - L13** : CENTRAL PROBLEMS OF AN ECONOMY**WEEK 14 - L14** : CONSUMER'S EQUILIBRIUM**WEEK 15 - L15** : DEMAND, L16 : INFORMATION RETRIEVAL SYSTEM: CONCEPT**WEEK 16 - L17** : PRODUCTION FUNCTION**WEEK 17 - L18** : COST OF PRODUCTION**WEEK 18 - L19** : SUPPLY, L20 : PRICE ELASTICITY OF SUPPLY**WEEK 19 - L21** : FORMS OF MARKET**WEEK 20 - L22** : PRICE DETERMINATION UNDER PERFECT COMPETITION**WEEK 21 - L23** : REVENUE AND PROFIT MAXIMISATION OF A COMPETITIVE FIRM**WEEK 22 - L24** : NATIONAL INCOME AND RELATED AGGREGATES**WEEK 23 - L25** : NATIONAL INCOME AND ITS MEASUREMENT**WEEK 24 - L26** : CONSUMPTION, SAVING AND INVESTMENT**WEEK 25 - L27** : THEORY OF INCOME DETERMINATION**WEEK 26 - L28** : MONEY AND BANKING, L29 : MONEY AND BANKING**ABOUT INSTRUCTOR**

Dr. Manish Chugh is working as Assistant Director (Acad. Economics) with NIOS. Earlier He has worked with many management colleges & schools. He has been teaching & doing research and consultancy in the area of strategy and economics for the last 12 years. He has been associated with NIOS for last 08 years. Besides MA & PhD in Economics, He is MIB -Gold Medallist. He had the opportunity to act as Programme co-ordinator of PGDBM programme of AIMST Udaipur.



**DR. NEELAM GUPTA**

SEO (EVS) NIOS, NOIDA

TYPE OF COURSE : Sr. Secondary**INTENDED AUDIENCE** : School**COURSE DURATION** : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)**EXAM DATE** : NA**NO OF CREDITS** : NA**PRE-REQUISITES** : 10th passing certificate and minimum age 15 years**OBJECTIVE OF COURSE**

Environmental Science is an interdisciplinary academic field that integrates physical, biological and information sciences including but not limited to Ecology, Biology, Physics, Chemistry, Zoology, Mineralogy, Oceanology, Limnology, Soil Science, Geology, Atmospheric Sciences, Geography etc. to the study of the environment and solution of environmental problems. Environmental Sciences emerged from the field of natural history and medicine during the enlightenment. Environmental Science assesses the impact of human activity on the global environment and develop scientific, risk based solutions to help secure and sustainable global environment. It encompasses both the biological and the earth sciences.

The course covers all the major components of the environment including origin and evolution of earth and life, natural resources, ecological principles and population dynamics, pollution, wildlife conservation and impact of individualization. In addition it also addresses related some economic, cultural and ethical aspects which are important to ensure a sustainable future for humans. This course also provides information related to Environmental issues related to sustainable livelihood and human welfare.

Some important topics includes in Environmental Science Senior Secondary course as follows:

1. Origin, Evolution and its uses by humans
2. Principles of Ecology
3. Human settlement and their impact on environment
4. (a) Environmental Pollution and Natural Disasters
(b) National and Global Environmental Issues
5. Conservation of biodiversity and other natural resources
6. Sustainable development with regards to agriculture and cleaner technology
7. Environmental Management (ethics, legislation and organization related to environment)
- 8A. Water Resource Management
- 8B. Energy and Environment

LEARNING OUTCOME

After completing this course, the learner will be able to:

- explain how societies, businesses, governments, households and individuals can allocate their scarce resources;
- explain production and distribution of goods and services;
- explain the meaning and functions of money, banks and insurance;
- discuss the challenges and sectoral aspects of Indian economy;

COURSE PLAN**WEEK 01** - L1 : ORIGIN OF EARTH AND EVOLUTION OF THE ENVIRONMENT**WEEK 02** - L2 : ENVIRONMENT AND HUMAN SOCIETY

L3 : DEGRADATION OF NATURAL ENVIRONMENT

WEEK 03 - L3 : PRINCIPLES OF ECOLOGY**WEEK 04** - L4 : ECOSYSTEM**WEEK 05** - L5 : NATURAL ECOSYSTEM**WEEK 06** - L6 : HUMAN MODIFIED ECOSYSTEMS, L8 : HUMAN SOCIETIES**WEEK 07** - L9 : DEFORESTATION**WEEK 08** - L10 : ENVIRONMENTAL POLLUTION**WEEK 09** - L11 : ENVIRONMENT AND HEALTH**WEEK 10** - L12 : DISASTERS AND THEIR MANAGEMENT**WEEK 11** - L13 : NATIONAL ENVIRONMENTAL ISSUES**WEEK 12** - L14 : GLOBAL ENVIRONMENTAL ISSUES**WEEK 13** - L15 : BIODIVERSITY CONSERVATION, L16 : CONSERVATION OF OTHER NATURAL RESOURCES**WEEK 14** - L17 : CONSERVATION OF SOIL AND LAND**WEEK 15** - L18 : WATER AND ENERGY CONSERVATION**WEEK 16** - L19 : CONCEPT OF SUSTAINABLE DEVELOPMENT**WEEK 17** - L20 : MODERN AGRICULTURE**WEEK 18** - L21 : CONCEPT OF SUSTAINABLE AGRICULTURE**WEEK 19** - L22 : CLEANER TECHNOLOGIES**WEEK 20** - L23 : ENVIRONMENTAL LEGISLATION**WEEK 21** - L24 : ENVIRONMENTAL IMPACT ASSESSMENT**WEEK 22** - L25 : ENVIRONMENT RELATED INSTITUTIONS AND ORGANISATIONS**WEEK 23** - L26 : ENVIRONMENTAL ETHICS AND GANDHIAN APPROACH**WEEK 24** - L27A : GLOBAL CIRCULATION OF WATER OR L27B : IMPORTANCE OF ENERGY IN SOCIETY, L28A : GROUND WATER RESOURCES OR L28B : NON-RENEWABLE SOURCES OF ENERGY**WEEK 25** - L29A : FRESH WATER RESOURCES OR L29B : RENEWABLE SOURCES OF ENERGY-I, L30A : METHODS OF WATER HARVESTING OR L30B : RENEWABLE SOURCES OF ENERGY-II**WEEK 26** - L31A : WATER CONSERVATION AT DIFFERENT LEVELS OR L31B : ENERGY CONSERVATION**ABOUT INSTRUCTOR**

Neelam Gupta is M.Sc. (Botany), M.Phil. (Botany), B.Ed. from Agra University, Agra and Certificate course in Russian language from University of Delhi. More than 23 years experience in the field of Open and Distance Education. Area of interest is course development; evaluation strategies; e-content development; training, and Open Basic Education.



**DR. P. K. CHAUHAN**

Senior Executive Officer (Y & N), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and 12th Pass

OBJECTIVE OF COURSE

‘योग शिक्षक प्रशिक्षण कार्यक्रम’ योग विज्ञान के क्षेत्र में एक महत्वपूर्ण पाठ्यक्रम है। जो लोग योग के क्षेत्र में रुचि रखते हैं या कार्य कर रहे हैं और ‘योग शिक्षक बनने के इच्छुक हैं, उन सभी लोगों को ध्यान में रखते हुए इस पाठ्यक्रम को विकसित किया गया है। यह पाठ्यक्रम यौगिक अभ्यास और योग शिक्षा का गहन ज्ञान प्रदान करता है। भारतीय नागरिकों के साथ - साथ विदेशी नागरिक भी इस पाठ्यक्रम में प्रवेश ले सकते हैं।

भारतीय ज्ञान परम्परा में योग का बहुत महत्व है। प्राचीनकाल से ही योग हमारी जीवन शैली में समाहित रहा है। योग स्वस्थ जीवन जीने की कला है जो मन एवं शरीर के बीच सामंजस्य स्थापित करता है। योग अनुशासन का भी विज्ञान है जो शरीर, मन तथा आत्मशक्ति का सर्वांगीण विकास करता है। आज स्वस्थ एवं चुस्त-दुरुस्त रहने की दृष्टि से योग, सभी को अपनी ओर आकृषित कर रहा है अतः समाज में योग शिक्षा की विशेषरूप से मांग है।

LEARNING OUTCOME

- योग सिद्धांतों तथा योग क्रिया विज्ञान को समझा सकेंगे
- मानव शरीर विज्ञान और शरीर क्रिया विज्ञान की मूलभूत जानकारी रखने और स्वास्थ्य, स्वच्छता, आहार व यौगिक संस्कृति के अवधारणा पर प्रकाश डाल सकेंगे
- योग के एकीकृत दृष्टिकोण के अनुप्रयोगों को लागू करने, योग कक्षाएं संचालित करने में और शिक्षार्थियों को योग शिक्षा देने में सक्षम हो सकेंगे

COURSE PLAN

Week 01 : Chapter-1

Week 02 : Chapter-1 Contd.

Week 03 : Chapter-2

Week 04 : Chapter-2 Contd.

Week 05 : Chapter-3

Week 06 : Chapter-3 Contd.

Week 07 : Chapter-4

Week 08 : Chapter-4 Contd.

Week 09 : Chapter-5

Week 10 : Chapter-5 Contd.

Week 11 : Chapter-6

Week 12 : Chapter-6 Contd.

Week 13 : Chapter-7

Week 14 : Chapter-7 Contd.

Week 15 : Chapter-8

Week 16 : Chapter-8 Contd.

Week 17 : Chapter-9

Week 18 : Chapter-9 Contd.

Week 19 : Chapter-10

Week 20 : Chapter-10 Contd.

Week 21 : Revision

Week 22 : Revision

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Dr.P.K.Chauhan is Senior Executive Officer (Y & N) in Vocational Education Department at NIOS. He attained his M.Sc.(Zoology),B.Ed and NDDY(Diploma in Naturopathy & Yoga). He is currently pursuing Masters in Yoga.





MS. KIRTI AILANI

Senior Executive Officer (Health & Paramedical), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and 10th Pass

OBJECTIVE OF COURSE

यह कोर्स छात्र को कौशल और शिक्षा प्रधान करेगा ताकि छात्र स्वयं नियोक्ता प्राप्त कर सकें। पाठ्यक्रम को पूरा करने के पश्चात, बिस्तर पर पड़े रोगियों को घर पर ही उपचार उपलब्ध कराकर स्व: रोजगार प्राप्त कर पाएगा।

- पंचकर्मा चिकित्सालय
- आयुर्वेदिक हस्पताल
- आयुर्वेदिक आहार केन्द्र
- आयुर्वेदिक हर्बल नर्सरी
- आयुर्वेदिक हर्बल नर्सरी
- जीवन शैली केन्द्र स्वास्थ्य केन्द्र
- स्वास्थ्य स्पा तथा रिसोर्ट
- आयुर्वेदिक कॉस्मेटिक क्लीनिक
- आदि में सहायक के रूप में कार्य कर सकते हैं।

LEARNING OUTCOME

- मरीज, उपकरण, थेरेपी रूम, दवाओं की तैयारी करके पंचकर्मा के पहले और उसके दौरान चिकित्सक की सहायता करना
- पंचकर्मा थेरेपी से गुजर रहे मरीजों को बुनियादी देखभाल प्रदान करें
- पंचकर्मा से संबंधित परामर्श

COURSE PLAN

Week 01 : Chapter-1 पंचकर्म के सिद्धांत

Week 02 : Chapter-1 पंचकर्म के सिद्धांत Contd.

Week 03 : Chapter-2 स्नेहन और स्वेदन विधि

Week 04 : Chapter-2 स्नेहन और स्वेदन विधि Contd.

Week 05 : Chapter-3 वमन और विरेचन विधि

Week 06 : Chapter-3 वमन और विरेचन विधि Contd.

Week 07 : Chapter-4 बस्ति विधि

Week 08 : Chapter-4 बस्ति विधि Contd.

Week 09 : Chapter-5 नस्य विधि एवं रक्तमोक्षण

Week 10 : Chapter-5 नस्य विधि एवं रक्तमोक्षण Contd.

Week 11 : Chapter-6 धारा (पिप्पिलिचिल)

Week 12 : Chapter-6 धारा (पिप्पिलिचिल) Contd.

Week 13 : Chapter-7 बाह्य बस्ति (शिरो/जानु/कटि बस्ति आदि)

Week 14 : Chapter-7 बाह्य बस्ति (शिरो/जानु/कटि बस्ति आदि)

Contd.

Week 15 : Chapter-8 पोटली स्वेद (पिंड या किषि स्वेदन)

Week 16 : Chapter-8 पोटली स्वेद (पिंड या किषि स्वेदन) Contd.

Week 17 : Chapter-9 अभ्यंग, उदर्वतन एवं क्रियाकल्प

Week 18 : Chapter-9 अभ्यंग, उदर्वतन एवं क्रियाकल्प Contd.

Week 19 : Chapter-10 विविध पंचकर्म प्रक्रियाएं

Week 20 : Chapter-10 विविध पंचकर्म प्रक्रियाएं Contd.

Week 21 : Chapter-11 पंचकर्म में पथ्य-अपथ्य

Week 22 : Chapter-11 पंचकर्म में पथ्य-अपथ्य Contd.

Week 23 : Chapter-12 पंचकर्म सामग्री

Week 24 : Chapter-12 पंचकर्म सामग्री Contd.

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Name: Ms. Kirti Ailani

Designation: Senior Executive Officer (Health & Paramedical)

Experience: 4.5 yrs as Project Manager cum R&D (Biotechnology)



**DR. NEELIMA PANT**

Academic officer (Agriculture), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and literate

OBJECTIVE OF COURSE

देश में मधुमक्खी पालन के विकास की अतिबृहत गुंजाइश है। शहद का वैश्विक उत्पादन लगभग १५% सालाना बढ़ रहा है। वैश्विक उत्पादन का लगभग एक तिहाई हिस्सा एशिया का है जिसमें भविष्य में १५ से २०% की वृद्धि होने की उम्मीद है। लगभग १५ देश वैश्विक उत्पादन में ९०% योगदान देते हैं। प्रमुख शहद उत्पादक देश चीन, भारत, मेक्सिको, यूएसए, अर्जेंटीना, यूक्रेन, तुर्की, रूस हैं। २०१० के बाद से शहद की वैश्विक मांग प्रति वर्ष लगभग १९ हजार टन प्रति वर्ष औसतन बढ़ी है, जिसकी आपूर्ति मुख्य रूप से संयुक्त राज्य अमेरिका द्वारा होती है। २०१५-१६ में पश्चिम बंगाल, उत्तर प्रदेश, पंजाब और बिहार ने देश के शहद उत्पादन में ६१% योगदान दिया। कृषि पर राष्ट्रीय आयोग ने देश में १२ प्रमुख कृषि फसलों को परागण के लिए १५० मिलियन मधुमक्खी उपनिवेशों को तैनात करने की आवश्यकता को देखा। वर्तमान में, उन कृषि फसलों की उपज बढ़ाने के लिए २०० मिलियन मधुमक्खी उपनिवेशों की आवश्यकता है जो २१५ लाख लोगों को रोजगार प्रदान करेगी और १० मिलियन टन शहद का उत्पादन करेगी और फसल उत्पादन में भी वृद्धि होगी।

इस कोर्स को पूरा करने के बाद शिक्षार्थी एक मधुमक्खी पालक / शहद तकनीशियन / शहद पूर्तिकार के रूप में स्व रोजगार अथवा किसी के फार्म में काम कर सकता है।

LEARNING OUTCOME

- बेहतर परागण के लिए मधुमक्खियों, उनकी विभिन्न प्रजातियों, उनके जीवन चक्र और व्यवहारिक विज्ञान की जानकारी।
- मधुमक्खी पालन संबंधी विभिन्न उपकरणों की पहचान, प्रदर्शन, रखरखाव और संचालन।
- मौनालय स्थल का चुनाव, मौनालय की स्थापना, प्रबंधन और निरीक्षण के लिए संस्तुत कौशल।
- मौनगृह में नाशीजीव एवं रोग प्रबंधन।
- मौनगृह उत्पादों का उत्पादन, प्रसंस्करण एवं विपणन संबंधित ज्ञान एवं कौशल।

COURSE PLAN

Week 01 : Chapter-1

Week 02 : Chapter-1 Contd.

Week 03 : Chapter-2

Week 04 : Chapter-2 Contd.

Week 05 : Chapter-3

Week 06 : Chapter-3 Contd.

Week 07 : Chapter-4

Week 08 : Chapter-4 Contd.

Week 09 : Chapter-5

Week 10 : Chapter-5 Contd.

Week 11 : Chapter-6

Week 12 : Chapter-6 Contd.

Week 13 : Chapter-7

Week 14 : Chapter-7 Contd.

Week 15 : Chapter-8

Week 16 : Chapter-8 Contd.

Week 17 : Chapter-9

Week 18 : Chapter-9 Contd.

Week 19 : Chapter-10

Week 20 : Chapter-10 Contd.

Week 21 : Revision

Week 22 : Revision

Week 23 : Revision

Week 24 : Revision

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

D.Neelima Pant is Academic Officer (Agriculture) at NIOS Headquarters for six years. She done her Ph.D. (Vegetable Science) with 'Major in Vegetable Science & Minor in Genetics & Plant Breeding' from G.B. Pant University of Agriculture & Technology, Pantnagar, distt. Udham Singh Nagar (Uttarakhand). Previously, she worked as Post Doctoral Fellow (Horticulture) at Krishi Vigyan Kendra, Ranichauri, Tehri Garhwal from 9th August, 2010 to 8th February, 2012 and she worked as Senior Research Fellow in the project entitled "Production of Quality Seeds and Planting materials of Vegetables and Spices" from 27th November, 2006 to 31st October, 2007. Her areas of interest are Agriculture and Animal Husbandry, Horticulture and Vegetable Science.



**DR. PRAVEEN CHAUHAN**

Academic officer (Home Science), NIOS

TYPE OF COURSE : Vocational
INTENDED AUDIENCE : Skill Enhancement

COURSE DURATION : 26 weeks (1st Aug, 2018 to 31st Jan, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Minimum age 14 years and literate

OBJECTIVE OF COURSE

आज कल के आधुनिक समाज में हम सभी अपने सौन्दर्य को लेकर अधिक जागरूक हो गये हैं। ब्यूटी पार्लर्स, सैलोन, स्पा इत्यादि जाने वाले लोगों में लगातार बढ़ोतरी हो रही है, जिससे सौंदर्य के क्षेत्र में रोजगार के अवसर भी बढ़ रहे हैं। एनएसडीए की एक रिपोर्ट के अनुसार इस क्षेत्र में २०% की दर से सालाना बढ़ोतरी हो रही है। इसलिए व्यावसायिक प्रशिक्षित स्टाफ की आवश्यकता भी बढ़ रही है।

इस पाठ्यक्रम को कर के आप पार्लर में असिस्टेंट ब्यूटीशन के तौर पर कार्य कर सकते हैं। यदि आपका रुझान किसी एक क्षेत्र में ज्यादा है तो आप उसी क्षेत्र में अपना कैरियर बना सकते हैं। जैसे आप नेलआर्ट के लिए अलग से सैलोन स्थापित कर सकते हैं, हेयर स्टाइलिस्ट या मेकअप आर्टिस्ट बन सकते हैं।

LEARNING OUTCOME

- You will learn about services like basic skin treatments, removal of superfluous hair, manicure and pedicure, skin and hair service and the art of makeup.
- You will also learn about proper maintenance of work area, care of beauty salon and the art of creating a positive impression at work.
- A basic knowledge of these areas will help you in assisting the beautician in her work in the salon.

COURSE PLAN

Week 01 : Chapter-1

Week 02 : Chapter-1 Contd.

Week 03 : Chapter-1 Contd

Week 04 : Chapter-2

Week 05 : Chapter-2 Contd.

Week 06 : Chapter-2 Contd.

Week 07 : Chapter-3

Week 08 : Chapter-3 Contd.

Week 09 : Chapter-3 Contd.

Week 10 : Chapter-4

Week 11 : Chapter-4 Contd.

Week 12 : Chapter-4 Contd.

Week 13 : Chapter-5

Week 14 : Chapter-5 Contd.

Week 15 : Chapter-5 Contd.

Week 16 : Chapter-6

Week 17 : Chapter-6 Contd.

Week 18 : Chapter-6 Contd.

Week 19 : Chapter-7

Week 20 : Chapter-7 Contd.

Week 21 : Chapter-7 Contd.

Week 22 : Chapter-8

Week 23 : Chapter-8 Contd.

Week 24 : Chapter-8 Contd.

Week 25 : Revision

Week 26 : Revision

ABOUT INSTRUCTOR

Name: Dr.Praveen Chauhan

Designation: Academic Officer (Home Science)

Qualification:

Ph.D (Clothing and Textiles)





DR. MADHUR BHATIA

Academic officer in Teacher Education, NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

This course presents an overview of the elementary education at the national and global levels. It is aimed at describing the historical progression of elementary education to help the teachers understand the nature and development of elementary education in a holistic way. This course has been designed based on the needs of the society and varied life experiences to facilitate fair understanding of elementary education in the contemporary Indian society.

Working on the suggested readings and activities given at the end of each unit will provide profound understanding of elementary education.

LEARNING OUTCOME

- To develop an understanding of the trends, issues and challenges being faced by elementary education.
- To develop an overview of the universalization of education at the national and international levels.
- To appreciate the role of various initiatives such as, DPEP, SSA, RTE, etc., for universalization of elementary education
- To develop an understanding on the status of elementary education in pre-independence and post- independence periods.

COURSE PLAN

Week 01 : Block 1 UNIT 1 INDIAN EDUCATION SYSTEM -1
Week 02 : Block 1 UNIT 1 INDIAN EDUCATION SYSTEM -1 Contd.
Week 03 : Block 1 UNIT 2 INDIAN EDUCATION SYSTEM – II
Week 04 : Block 1 UNIT 2 INDIAN EDUCATION SYSTEM – II Contd.
Week 05 : Block 1 UNIT 3 EDUCATION AS A FUNDAMENTAL RIGHT
Week 06 : Block 1 UNIT 3 EDUCATION AS A FUNDAMENTAL RIGHT Contd.
Week 07 : Block 1 UNIT 4 ORGANIZATION STRUCTURE FOR UEE
Week 08 : Block 1 UNIT 4 ORGANIZATION STRUCTURE FOR UEE Contd.
Week 09 : Block 2 UNIT 5 STRATEGIES FOR UEE-I
Week 10 : Block 2 UNIT 5 STRATEGIES FOR UEE-I Contd.

Week 11 : Block 2 UNIT 6 STRATEGIES FOR UEE-II
Week 12 : Block 2 UNIT 7 PLANNING AND MANAGEMENT OF UEE
Week 13 : Block 3 UNIT 8 PREPARING TEACHERS FOR ELEMENTARY EDUCATION
Week 14 : Block 3 UNIT 8 PREPARING TEACHERS FOR ELEMENTARY EDUCATION Contd.
Week 15 : Block 3 UNIT 9 EDUCATION OF DISDAVANTAGED STUDENTS
Week 16 : Block 3 UNIT 9 EDUCATION OF DISDAVANTAGED STUDENTS Contd.
Week 17 : Block 3 UNIT 10 INTERNATIONAL SCENARIOS IN ELEMENTARY EDUCATION

ABOUT INSTRUCTOR

Dr.Madhur Bhatia is Academic Officer in Teacher Education at NIOS Headquarter for five years.She attained her M.Sc in Botany.She also attained her Ph.D. in Education from Jamia Millia Islamia University, New Delhi.She also done Advanced Diploma in Computer Applications and System Management (DCA). Previously, she worked as TGT (Biology) in C.B Ganj Inter College, Bareilly, and Govt. of U.P. from December, 2005- January, 2011;Visiting Faculty (Education) for B.A. (Prog.) in School of Open Learning (SOL), University of Delhi for session 2011-12 and Assistant Professor, Department of Education, Shyama Prasad Mukherji College for Women, University of Delhi from March, 2011-May, 2012. Her areas of interest are Teacher Education, Educational Technology, Early Childhood Care and Education, Emotional Intelligence, Curriculum Development and Gender issues.





DR. MANOJ KUMAR THAKUR
Research and Evaluation Officer, NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

Teacher Education is one of the important components to determine the quality of a teacher. Untrained teachers remains deprived of becoming aware realizing many good qualities of a teacher. Teaching is a profession which requires development of typical the feelings and skills of harnessing the good qualities in a learner.

The crux of all pedagogic efforts is to enhance the quality and extent of learning experience of children within the confines of schooling conditions. With this pedagogic perspective teacher and teaching are considered facilitators and facilitating process of learning.

This course will focus on equipping the prospective teachers with conceptual clarity of pedagogic processes so that they can select and use most appropriate methods and strategies for effective teaching in different contexts. They will assess the children's progress in diverse situations basing on which they shall undertake appropriate modifications in the teaching learning process. Pedagogic study will enable teachers to understand school subjects with specific context of children and process of learning.

LEARNING OUTCOME

- To help the teachers in understanding the nature of children and the ways the children learn in the school/classroom situations.
- To develop capacities of teachers to reflect, reason and make conceptual understanding of pedagogic practices and learning process.
- To empower teachers to select, integrate and use most appropriate methods and strategies for effective facilitation of learning of children.
- To expose the teachers to different modes of assessment of learning and enable them to uses those effectively to promote classroom learning.
- To acquaint the teachers with the different tools and techniques of ICT available for enriching the learning processes in and out of classroom.

COURSE PLAN

Week 01 : Block 1 UNIT 1 LEARNING AND TEACHING DURING EARLY SCHOOLING

Week 02 : Block 1 UNIT 2 APPROACHES TO LEARNING AND TEACHING

Week 03 : Block 1 UNIT 3 METHODS OF LEARNING AND TEACHING

Week 04 : Block 1 UNIT 4 LEARNER AND LEARNING- CENTRED APPROACHES

Week 05 : Block 2 UNIT 5 MANAGEMENT OF CLASSROOM PROCESSES

Week 06 : Block 2 UNIT 6 TEACHING AND LEARNING MATERIALS

Week 07 : Block 2 UNIT 7 MANAGEMENT OF MULTI-GRADE AND MULTI-LEVEL SITUATIONS

Week 08 : Block 3 UNIT 8 PLANNING LEARNING ACTIVITIES

Week 09 : Block 3 UNIT 9 INTEGRATED LEARNING AND TEACHING PROCESSES

Week 10 : Block 3 UNIT 10 CONTEXTUALIZING LEARNING PROCESSES & MATERIALS

Week 11 : Block 3 UNIT 11 ICT IN LEARNING

Week 12 : Block 3 UNIT 12 COMPUTER ASSISTED LEARNING

Week 13 : Block 4 UNIT 13 BASICS OF ASSESSMENT AND EVALUATION

Week 14 : Block 4 UNIT 14 LEARNING AND ASSESSMENT

Week 15 : Block 4 UNIT 15 TOOLS AND STRATEGIES OF ASSESSMENT

Week 16 : Block 4 UNIT 16 USING THE RESULTS OF ASSESSMENT FOR IMPROVING LEARNING

ABOUT INSTRUCTOR

Dr. Manoj Kumar Thakur is Research and Evaluation Officer at NIOS Headquarter. He attained B.A., M.Sc., M.A., B.Ed., and M.Ed. He also attained his Ph.D. in Education. He has eight years of teaching experience B.Ed. (Four years integrated course) at college and university level and BA. His areas of interest are Research in Open Schooling and Distance Education, Curriculum Development, Guidance and Career Counseling, Educational Technology & Measurement and Evaluation.





CHANCHAL KUMAR SINGH

Training Officer (Languages/Linguistics/Literature), NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 weeks (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

This course has been developed to enable you to know about various aspects of language. We hope that after completing this course your sensitivity to language will increase and you will become more sensitive learners and teach the language classes in a more pleasant and efficient way.

LEARNING OUTCOME

- To enable teachers to grasp general principles in language learning and teaching.
- To develop classroom management skills, procedures and techniques for teaching language.
- To examine issues in language assessment and their impact on classroom teaching.
- To develop competence in teaching languages at the elementary level
- To develop understanding about language – concept, nature, structure, functions, importance.
- To develop insight into the process of language learning and acquisition.
- To develop acquaintance with various approaches, methods and techniques of language teaching.
- To sharpen the skills needed to become an effective language teacher.

COURSE PLAN

- | | |
|---|---|
| Week 01 : Block 1 UNIT 1 WHAT IS LANGUAGE? | Week 10 : Block 2 UNIT 5 READING Contd. |
| Week 02 : Block 1 UNIT 1 WHAT IS LANGUAGE? Contd. | Week 11 : Block 2 UNIT 6 WRITING |
| Week 03 : Block 1 UNIT 2 INDIAN LANGUAGES | Week 12 : Block 2 UNIT 6 WRITING Contd. |
| Week 04 : Block 1 UNIT 2 INDIAN LANGUAGES Contd. | Week 13 : Block 3 UNIT-7 LITERATURE AND LANGUAGE |
| Week 05 : Block 1 UNIT 3 LANGUAGE LEARNING AND TEACHING | Week 14 : Block 3 UNIT 8 LANGUAGE TEACHING METHODS IN CLASSROOM SETTINGS |
| Week 06 : Block 1 UNIT 3 LANGUAGE LEARNING AND TEACHING Contd. | Week 15 : Block 3 UNIT 9: EDUCATIONAL MATERIALS: SOME NEW DIMENSIONS |
| Week 07 : Block 2 UNIT 4 LISTENING AND SPEAKING | Week 16 : Block 3 UNIT 10: ASSESSMENT |
| Week 08 : Block 2 UNIT 4 LISTENING AND SPEAKING Contd. | |
| Week 09 : Block 2 UNIT 5 READING | |

ABOUT INSTRUCTOR

Name: Mr. Chanchal Kumar Singh
Designation: Training Officer (Languages/Linguistics/Literature)
Qualification: M.A., B.Ed., Diploma of Hindi Translator





DR. RAM SINGH

Training Officer (Languages/Linguistics/Literature), NIOS

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 10 weeks (1st Jun, 2018 to 31st May, 2019)

EXAM DATE : NA

NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

The revised syllabus of mathematics formulated on the basis of NCF 2005 for the elementary stage of education reflects the recent developments and trends in mathematics education. It emphasizes conceptual understanding, skill proficiencies and thinking skills in the teaching and learning of mathematics. These competencies are integral to the development of mathematical problem solving ability. Emphasis is also need to be given to reasoning, applications, and use of technology. Advances in technology have changed the way we teach and learn mathematics technology.

Students need to have opportunities to discover reason and communicate mathematics. They are required engage in stimulating discussions and activities where they can explore possibilities and make connections. These qualitative changes require a change in the teaching and learning approaches, incorporating activity-based and learner–centered methodologies.

LEARNING OUTCOME

This course will enable the prospective teacher to:

reflect on the status and issues related to Elementary Mathematics Education.

attain mastery over the basics of elementary mathematics.

acquire pedagogical skills of teaching mathematics at elementary stage.

make effective use of a variety of mathematical tools including technology tools in learning and teaching of mathematics.

acquire skills of assessing young children's learning and performance in Mathematical concepts and in using those in enhancing their understanding and performance in Mathematics.

COURSE PLAN

Week 01 :	Week 08 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL	Week 16 : Block 2 UNIT 8 DATA HANDLING
Week 02 : Block 1 UNIT 1 HOW CHILDREN LEARN MATHEMATICS	Week 09 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL Contd.	Week 17 : Block 2 UNIT 8 DATA HANDLING Contd.
Week 03 : Block 1 UNIT 1 HOW CHILDREN LEARN MATHEMATICS Contd.	Week 10 : Block 2 UNIT 5 NUMBERS AND THE OPERATION ON NUMBERS Block 2	Week 18 : UNIT 9 ALGEBRA AS GENERALIZED ARITHMETIC
Week 04 : Block 1 UNIT 2 MATHEMATICS AND MATHEMATICS EDUCATION	Week 11 : Block 2 UNIT 5 NUMBERS AND THE OPERATION ON NUMBERS Contd.	Week 19 : UNIT 9 ALGEBRA AS GENERALIZED ARITHMETIC Contd.
Week 05 : Block 1 UNIT 2 MATHEMATICS AND MATHEMATICS EDUCATION Contd.	Week 12 : Block 2 UNIT 6 SHAPES AND SPATIAL UNDERSTANDING	Week 20 : Block 3 UNIT 10 APPROACHES TO ASSESSMENT OF LEARNING MATHEMATICS
Week 06 : Block 1 UNIT 3 GOALS AND VISION OF MATHEMATICS EDUCATION Block 1	Week 13 : Block 2 UNIT 6 SHAPES AND SPATIAL UNDERSTANDING Contd.	Week 21 : Block 3 UNIT 10 APPROACHES TO ASSESSMENT OF LEARNING MATHEMATICS Contd.
Week 07 : Block 1 UNIT 3 GOALS AND VISION OF MATHEMATICS EDUCATION Contd.	Week 14 : Block 2 UNIT 7 MEASURES AND MEASUREMENTS	Week 22 : Block 3 UNIT 11 TOOLS AND TECHNIQUES OF ASSESSMENT
Week 08 : Block 1 UNIT 4 LEARNER AND LEARNING-CENTRED METHODOLOGIES AT ELEMENTARY LEVEL		Week 23 : Block 3 UNIT 11 TOOLS AND TECHNIQUES OF ASSESSMENT Contd.
		Week 24 : Block 3 UNIT 12 FOLLOW UP OF ASSESSMENT OF LEARNING MATHEMATICS

ABOUT INSTRUCTOR

Name: Dr.Ram Singh

- Member of Quality development of Higher Education, Govt. of Jharkhand.
- Ambassador, Mission knowledge- UNESCO
- Member APEX Body of Academic Committee – NIOS
- Awarded National CBSE Teachers Award- 2015 President, Ranchi Sahodaya School Complex
- Eminent Educationist Award by Hindustan (a leading Media group) in 2012.
- Awarded the prestigious prize for innovations & excellence in school education from ASSCHOM.
- Best Principal Award by Hindustan Media.
- Best Principal Award by Science Olympiad Foundation.
- PRATIBHA SAMAAN 2015 by Prabhat Khabar given by The Honourable Governor of Jharkhand.
- International School Award (ISA) from the British Council 2015-18.
- Avantika Priyadarshani award 2015.





DR. BABLI CHOUDHURY

Assistant Professor (M.Ed Classes), Gauhati University, Guwahati

TYPE OF COURSE : D.El.Ed
INTENDED AUDIENCE : Diploma

COURSE DURATION : 14 months (1st Feb, 2018 to 31st May, 2019)
EXAM DATE : NA
NO OF CREDITS : NA

PRE-REQUISITES : Untrained Inservice Teacher with Sr.Secondary having minimum 50% Aggregate

OBJECTIVE OF COURSE

The present EVS syllabus for primary classes is designed to forge an integrated perspective for the primary stage of schooling that draws upon insights from Science, Social Science and Environmental Education. Environmental education is about helping learners become global citizens with critical thinking skills; sensitivities and respect for the natural environment; and pragmatism towards the socio-economic environment. This Course will help you strengthen your understanding of environment and environmental education. It will also help you to develop a holistic perspective of environment and the significance of environmental studies at the primary stage of education.

Within the formal education system, the curriculum and textbooks provide the vital link between policy and practice; however no learning process can be successful if left only to the curriculum and textbooks. The key to the formal education system is the teacher. Teacher's active participation and innovativeness is crucial for effective teaching and learning to take place. In addition to the subject of 'environment', the Course also deal with a variety of teaching-learning techniques which will help you create a learning environment in your classrooms which is congenial for child-centred and child-driven learning. The Course module has been designed in a way so that it will empower you with new ideas for effective transaction of environmental studies at the primary stage of education. We hope that you will find this Course useful in accomplishing the mission of environmental studies in formal education.

LEARNING OUTCOME

The Course will enable the Teachers:

- To understand the importance and concept of 'Environment'.
- To develop a holistic perspective of Environment.
- To realize the importance of learning about 'Environment' at the primary level.
- To identify local learning resources and expertise related to teaching-learning of EVS.
- To design appropriate teaching-learning activities for primary children with focus on interactive and experiential learning.
- To assess learning levels of each child, identify learning difficulties and design appropriate strategies for future enrichment.

COURSE PLAN

Week 01 : No material

Week 02 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING

Week 03 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING
Contd.

Week 04 : Block 1 UNIT 1 IMPORTANCE OF ENVIRONMENT AT THE EARLY STAGE OF LEARNING
Contd.

Week 05 : Block 1 UNIT2 OBJECTIVES & SCOPE OF TEACHING-LEARNING EVS AT THE PRIMARY STAGE

Week 06 : Block 1 UNIT2 OBJECTIVES & SCOPE OF TEACHING-LEARNING EVS AT THE PRIMARY STAGE
Contd.

Week 07 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS

Week 08 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.

Week 09 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.

Week 10 : Block 1 UNIT 3 PEDAGOGICAL CONSIDERATIONS OF TEACHING-LEARNING EVS Contd.

Week 11 : Block 1 UNIT 4 CURRICULAR PROVISIONS OF EVS AT THE PRIMARY STAGE

Week 12 : Block 1 UNIT 4 CURRICULAR PROVISIONS OF EVS AT THE PRIMARY STAGE Contd.

Week 13 : Block 2 UNIT 5 APPROACHES FOR TEACHING - LEARNING EVS

Week 14 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS

Week 15 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.

Week 16 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.

Week 17 : Block 2 UNIT 6 METHODS OF TEACHING - LEARNING EVS Contd.

Week 18 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS

Week 19 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS Contd.

Week 20 : Block 2 UNIT 7 PLANNING TEACHING AND LEARNING OF EVS Contd.

Week 21 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS

Week 22 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.

Week 23 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.

Week 24 : Block 2 UNIT 8 RESOURCES AND MATERIALS FOR TEACHING-LEARNING OF EVS Contd.

Week 25 : Block 3 UNIT 9 ASSESSING LEARNING IN EVS

Week 26 : Block 3 UNIT 9 ASSESSING LEARNING IN EVS Contd.

Week 27 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS

Week 28 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS Contd.

Week 29 : Block 3 UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS Contd.

Week 30 : Block 3 UNIT 11 USING ASSESSMENT RESULTS FOR ENHANCEMENT OF STUDENTS' UNDERSTANDING

Week 31 : Block 3 UNIT 11 USING ASSESSMENT RESULTS FOR ENHANCEMENT OF STUDENTS' UNDERSTANDING Contd.

ABOUT INSTRUCTOR

Name: Dr.Babli Choudhury

Designation: Assistant Professor (M.Ed Classes), Gauhati University, Guwahati

Qualification: M.A. in Education, Sociology and Social Work / B.Ed

Teaching Experience: 15 Years

Paper Published: 30 in National Journals / 20 in International Journals.

Associated with CCRT, NCTE, SCERT Guwahat





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Ministry of Human Resource Development
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July 2018

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