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॥ अंतरी पेटवू ज्ञानज्योत ॥

**NORTH MAHARASHTRA UNIVERSITY,
JALGAON**

**New Syllabus for
BACHELOR OF EDUCATION
(General)**

w.e.f. June, 2003

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North Maharashtra University, Jalgaon

Broad Structure of the B.Ed. (General) Course

Area	Courses	Marks	Clock Hours
<u>Part – I</u>			
A.	<u>Pedagogical Theory.</u>		
	<u>Paper – I</u>		
	Teacher and Education in the Emerging Indian Society	100	80
	<u>Paper – II</u>		
	Psychology of learning and teaching.	100	80
	<u>Paper – III</u>		
	Foundations of School practices & special fields of education.	100	80
	<u>Paper – IV</u>		
	Essentials of Computer Education, Educational Technology and Action Research.	100	80
	<u>Paper – V</u>		
	Content Cum Methodology of School Subjects – I	100	80
	<u>Paper – VI</u>		
	Content Cum Methodology of School Subjects – II	100	80
	Total under area A	600	480
<u>Part – II</u>			
B.	<u>Tests & Tutorials.</u>		
	i) Tests – 2	50	50
	ii) Tutorials – 12	50	50
	Total under area B	100	100

Area	Courses	Marks	Clock Hours
C.	I) <u>Core Training Programme.</u>		
	a) Micro lessons No. 16	50	125
	b) Integration lessons No. 4	20	75
	c) School practice lessons 10 in each method	80	250
	School subject.	----- 150	
	Total lessons = 20		
	II) <u>Practical work related to theory papers.</u>		
	Paper – I	--	
	Paper – II	30	
	Paper – III	--	
	Paper – IV	40	
	Paper – V & VI	30	150
		----- 100	
	III) <u>Working with the community.</u>		
	a) S.U.P.W.	20	20
	b) Social Service (Camp)	20	100
	c) Co-Curricular Activities	10	10
IV) <u>Internship.</u>	50	90	
Total under area C	350	820	
D.	<u>Practical Examination.</u>		
	a) Final Examination for School lessons	100	--
	b) Computer Examination	50	--
Total under area D	150	--	
Total Grand area = A + B+ C+ D		1200	1400

Details about Practicals :

- Paper – II Practicals – Psychology experiments No. 10.
- Paper – IV Practicals will be related to computer and action research (Group Activity)
- Paper – V & VI – Two practicals.
 - One improvised teaching aid.
 - Preparation and administration of unit plan & test.
 Any one practical for each method.

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North Maharashtra University, Jalgaon

B.Ed. (General) Course

(In force from the academic year 2003-2004)

Title : Title of the degree shall be Bachelor of Education.

Eligibility for Admission :

Candidate should have passed the Bachelor's Degree of this University (from 1995) or a university recognized by this university, in any faculty with at least 45 % marks and should have offered at least one school subject at the first and / or second degree level as principal or subsidiary or allied or optional subject.

(School subject means the subject included in the syllabus of secondary and higher secondary level in the Maharashtra State.)

Selection Procedure :

Admission to the eligible candidates will be given as per the selection procedure laid down by the State Government from time to time.

Norms for appearing at B.Ed. Examination :

Students teachers should have kept two terms with at least 80 % attendance of theory periods in college. He should have completed all the practical work to the satisfaction of the principal. He should have obtained such certificate from the principal of the college. Unless and until he obtains such a certificate he will not be allowed to appear for University examination.

Practical work and compulsory work :

- A) Attendance of Demonstration and Discussion lessons inclusive of Micro-lessons.
- B) Observation of teaching as follows –
Every student shall observe –
i) Micro-lessons 16 (4 in each skill)
ii) Integration lessons 4 (2 in each method subject)
iii) Class room lessons 20.
- C) Training Programme :
Every student shall conduct –
i) Micro-lessons 16 (4 in each skill)

N.B. Each Micro-lessons shall comprise of –

- a) either teach or re-teach of 5 to 7 minutes.
b) critique of 10 to 15 minutes.

ii) Integration lessons 4 (2 in each method subject)

N.B. Teaching of 15 to 20 minutes and critique of 20 minutes.

iii) School practice lessons at least 30 minutes and critique of 20 minutes for each lesson.

a) 20 lessons in total are to be distributed over standards V to X in any recognised schools selected by the principal with the approval of the Management Council of this University.

b) As far as possible lessons shall be distributed equally between two method subjects, but not less than 8 lesson in any one subject.

c) Students with Post Graduate degree (at least second class) may be allowed to give 8 lessons in their specialized subject on Std. XI & XII out of 20 class room teaching lessons provided there in provision of teaching that method at B.Ed. level.

D) Internship :

Every student should complete internship programme satisfactorily as given in schedule.

E) Computer Practical :

Every student should complete computer practicals and maintain a journal as given in practicals of paper IV.

F) Action Research Programme :

A group of not more than five students will undertake problem related to education and will submit a joint report of action research project as given under paper IV.

G) Psychological Experiments :

Every student should complete psychological experiments and maintain a journal as given under paper II.

H) Practical work related to paper V & VI :

Every student should complete practical works related to Content-Cum-Methodology of school subjects and to submit reporting.

I) Working with community :

Every student should complete all the practical regarding working with community decided by the college.

Course Examination :

A) The examination of B.Ed. degree will consist of two parts.

Part - I : External Examination in theory courses 600 marks
(Area A)

Part - II : Internal Assessment and Practical
Examination (Area B, C & D) 600 marks

B) Allotment and distribution of marks :

The B.Ed. Examination will be of 1200 marks. These marks distributed under the four areas as under.

Area – A : Written external examination will consist of six theory papers each of three hours duration and 100 marks each. Total marks 600.

Area – B : Internal Assessment of theory courses.

i) Tests - 2	:	50 marks
ii) Tutorials -2	:	50 marks

		100 marks

Area – C : Internal Assessment.

I) Core training programme		
a) Micro-lessons No. 16	:	50 marks
b) Integration lessons No. 4	:	20 marks
c) Practice lessons No. 20	:	80 marks

		150 marks

II) Practical work related to theory papers : 100 marks

III) Working with community	:	50 marks
a) S.U.P.W.	20 marks	
b) Social Service (Camp)	20 marks	
c) Co-Curricular Activities	10 marks	

IV) Internship : 50 marks

Area – D : External examination

a) Final examination for school lessons	:	100 marks
b) Computer examination & viva of Action research	:	50 marks

		150 marks

Total Marks : 1200 marks

Medium of Instructions :

The medium of instruction at the B.Ed. course will be Marathi or English. However the medium of instruction for the courses content cum methodology in English, Hindi and Urdu will respectively be English, Hindi and Urdu.

The candidate appearing for the B.Ed. examination will have the option of answering all papers of Part – I either in English or in Marathi.

Answers to some of the papers may be written in Marathi and same in English.

Part – I External written examination of theory courses 600 marks.
Candidates admitted will be examined in the following courses.

- 1) Teacher and education in the emerging Indian society.
 - 2) Psychology of learning and teaching.
 - 3) Foundations of school practices and special fields of Education.
 - 4) Essentials of Computer Education, Educational Technology and Action Research
 - 5) * Content- cum- methodology of school subjects – I.
 - 6) * Content- cum- methodology of school subjects – II.
- The student must offer two school subjects out of following subjects i.e. Marathi, Hindi, English, Urdu, Sanskrit, History, Geography, Mathematics, Science, Commerce.

Part – II Practical Internal Assessment of theory courses.
Candidates will be assessed in –

Area – B	a) Tutorials in theory courses 12.	50 marks
	b) Tests (Not less than two)	50 marks
Area – C- I)	Core training programme	150 marks
	a) Micro lessons No. 16	50 marks
	b) Integration lessons 4	20 marks
	c) School practice lessons 20 (at least 8 in each method subject)	80 marks
	II) Practical work related to theory papers	100 marks
	i) Paper II	30 marks
	ii) Paper IV	40 marks
	iii) Paper V & VI	30 marks
	III) Working with the community	50 marks
	i) S.U.P W.	20 marks
	ii) Social Service Camp	20 marks
	iii) Co-curricular activities	10 marks
	IV) Internship	50 marks
Area – D	External Examination	150 marks
	a) Annual lessons examination	100 marks
	The candidate will be examined in two lessons of each of the school subjects offered by the candidate under course V & VI. Each lesson will carry 50 marks.	
	b) Computer examination & viva of Action Research	50 marks
	The candidate will be examined by the external examiner assigned by university authority. (Panel by B.O.S.)	

Standard of Passing :

To pass the examination a candidate must obtain at least 50 % marks in each head under two parts.

Heads :

Theory	Part – I	Area A (I to VI) Courses	
	Part – II	Area – B	(VII) Tests & Tutorials
		Area – C	(VIII) Core training programme
	(IX) Practical work related to theory papers.		
	(X) Working with community.		
	Area – D	(XI) Internship.	
		(XII) Annual lessons.	
		(XIII) Computer exam. & viva of Action Research.	

Such of the candidates who appeared for Part – I & II at one and the same time and obtained 65 % marks in each part and at least 70 % marks in aggregate shall be declared to have passed the examination in First Class with Distinction.

Out of the remaining successful candidates who obtained at least 55 % marks in each part and at least 60 % marks in aggregate shall be declared to have passed the examination in First class.

Out of the remaining successful candidates who have obtained at least 50 % in each part and in aggregate shall be declared to have passed in Second Class.

There will be no Pass Class.

All the remaining candidates shall be declared to have failed.

To pass the whole examination a candidate must pass all the two parts separately and also in the thirteen heads of passing.

The candidates who have obtained minimum 50 % or more marks in any heads of passing but failed in the examination shall be eligible to claim exemption in such head/ heads. Candidates claiming exemption will not be eligible for first class with Distinction and position in the merit list.

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Schedule – I
Training Programme

(a) Micro lessons :

The programme comprises of practicing **four** skills of teaching from the following list.

- i) Stimulus variations
- ii) Explanation
- iii) Questioning
- iv) Re-enforcement
- v) Narration
- vi) Demonstration
- vii) Black Board writing
- viii) Lesson planning
- ix) Set Induction
- x) Closure

Four lessons per skill are to be given by the student teacher i.e. he/she has to conduct 16 micro-lessons.

b) Mode of conducting micro lessons :

Teach and re-teach session of micro-lessons shall be conducted on two different peer groups. Opportunity for feed back shall be given immediately after teach in critique session. Teach and re-teach sessions shall not be conducted on one and the same group.

c) Integration lessons :

After mastering 4 skill the student teacher has to give 4 lessons each of 15 to 20 minutes in integration of skills followed by critique session of 15 to 20 minutes.

d) School practice lessons :

Each student teacher shall have to give 20 practice lessons in school (not less than 8 lessons in any one subject.) These lessons are to be conducted on the school classes from std. V to X. However those who want to specialise for higher secondary classes may give not more than 8 lessons on XI & XII.

Schedule – II

Working with community

Every college will have to take decision of their own, regarding actual implementation of the programme.

Guideline is given as under.

Area – B Working with the Community :

Activity	Objectives	Work-situations	Procedure	Evaluation of students performance
Area- A type City/Village Development Programme.	To enable student teacher i) to understand needs aspirations & problems of the weaker section of the community. ii) To understand the efforts being done by Government/Voluntary institutions to help the weaker sections. iii) to organize programmes for the development of these people. iv) Co-ordinate educational and developmental programme.	i) Conducting surveys a) the local community. b) the agencies working for the development of community. ii) Running of the following type of agencies of development. a) study centre for the school going children. b) Adult education centre. c) Non-formal education centre. d) Primary Health Service Centre. e) Local Library. f) Cultural Activities centre. g) Sports centre. h) Co-operative stores, etc.) Training the students teacher in the techniques of conducting surveys and preparing reports. i) Actual conduct of the surveys and preparation of the report. ii) discussions of teacher educators and student teachers regarding the latter's participation in the programmes of the development agencies. v) Training of the student teacher through simulation and role playing.) Evaluation of the total programme through discussions, questionnaire technique etc.	i) Rating done by the supervising teacher educators. ii) Sociometric technique. iii) Self evaluation by the student teacher.

Activity	Objectives	Work-situations	Procedure	Evaluation of students performance
Area- B type any activity.	<p>To enable student teachers</p> <ul style="list-style-type: none"> i) To sort out the most useful types of the productivity work for community. ii) To observe the workers at work. iii) To learn some of their skills. iv) To understand the life style of the concerned workers 	<p>It is expected that the programme should be a continuous one. As such the first phase will be conduct of the possible programme. The next three phases will concentrate the implementation part only</p> <ul style="list-style-type: none"> i) Analysing the data collected through surveys. ii) Visits to the work places and houses of the workers iii) Apprenticeship under a skilled worker. 	<ul style="list-style-type: none"> i) Analysis and interpretation of jata regarding types of productive work going on the community. ii) Observation and interviews of the workers. iii) Training of student teacher in some of the skills of the selected type of work. iv) Discussions of student teachers with teachers educators regarding the life style of the workers. 	<p>Through</p> <ul style="list-style-type: none"> a) Attitude through informal observations by the teacher educator during visit to work places and discussions held in the college. b) Skills-as reflected in the illustrative products.

Schedule – 3

Internship Programme

Mastery of teaching is not enough to be a successful teacher. Teacher has to shoulder many responsibilities other than teaching. The pre-service training will be complete only if the trainee will be introduced and guided such responsibilities. So there is a need of inclusion of Internship in B.Ed. course. B.Ed. is a professional course, in order to become an effective teacher the trainee has to go under the able guidance of trained teacher in the school. The purpose of the programme is to prepare the trainee professionally competent.

Objectives :

1. The trainee will be able to communicate the information regarding duties of the teacher other than teaching.
2. The trainee will be able to plan and execute the work done by the teacher.
3. The trainee will be able to plan and organize the co-curricular activities.
4. The trainee will be able to make familiar with the qualities of a successful teacher.
5. The trainee will be able to prepare positive attitude towards teaching profession.

Structure of the Internship Programme :

Place of Internship :

Internship programme should be organized in the practising school of the concerned college. The programme will be chalked out in consultation with the Head Masters of the concerned practising school. The college should send the students in groups. There will be no choice of school to the trainee.

Time :

The trainee should be made familiar with teaching skills internship should not be introduced prior to the implementation of practice lessons. The trainee should be sent to the school for internship only after the completion of Micro-teaching. Evaluation workshop and six observations lesson. Internship should be organized in the month of Nov./Dec./Jan. The college should plan in such a way that the groups of trainees should be sent for internship. If trainee fails to attend the Internship in planned schedule, he should be sent in the subsequent group.

Period:

Group teacher will be three with concerned group during Internship.

1. Plan the schedule before time.
2. Group teacher and group will convene the meeting with Head master and the Supervisor of the school.
3. The Head-master will communicate in the meeting about the school time-table, traditions of schools, school-discipline and nature of work to be done by the trainees.
4. The group-teacher will express the expected co-operation from the school e.g. The trainees should be given all experiences.
5. Teacher should guide the students.
6. Teachers are expected to observe three lessons of each student and give feedback suggestions.

Work to be done during Internship .

1. Practice teaching and lesson observation of the methods.
2. Preparation of unit plan and unit test.
3. Assessment of answer books and preparation of result.
4. Plan the schedule of practice lessons.
Student should seek guidance from trained teachers having five years teaching experience who will observe their lessons.
5. Student teacher will observe three lessons of experienced teacher and maintain the record in observation dairy. Take the signature of the concerned teacher in observation dairy.
6. Take the attendance of the class (2 days).
7. Demonstrate at least two lessons of value education, work experience and social service.
8. Organize one of the following programmes for students of the school. e.g. Competition, variety entertainment programme, exhibition.
9. Assess at least one tutorial/ Home assignments of school student related with trainee's method.
10. Prepare a list of teaching aids in the school and classify them.
11. Visit to the Library, Laboratory and Computer Lab of the school and see there the record of maintenance in the register.
12. Prepare the record of practical work related with the theory paper.
e.g. Collection of data for action research.
Administer the Psy. Tests to the students.

Plan of Action to be done during Internship :

<u>No. of Days</u>	<u>Activity</u>
Day 1st	Attend the morning assembly of the school. Observe a lesson of the school – teacher. Observe the school. Practice teaching, lesson observation.
Day 2nd	Begin your class with a prayer, Attendance of students Practice teaching, lesson observation. Begin to collect a data for action research. Planning of cultural activity.
Day 3rd	Practice teaching, lesson observation. Observe second lesson. Data collection for action research. Preparation of cultural activity.
Day 4th	Administer a test to students. Practice teaching, lesson observation. Visit to the Lab/Lib. Finish data collection for action research. Preparation of outline for cultural activity.
Day 5th	Prayer, Attendance. Practice teaching, lesson observation. Administration of Psy. Test. Starting of cultural activities.
Day 6th	Prayer. Practice teaching, lesson observation. Vote of thanks to the Head-master, Supervisor, teacher for the co-operation for Internship.

Cultural Activities :

Celebrating days : Birth/Death anniversary, National festivals, Maths day, population day, Geography day, Environmental day.

Competitions : Elocution, Essay, Drawing, Handwriting, Fancy dress, Sports

Variety entertainment programme : Group dance, group songs, one act play, street play etc.

Quiz: Prepare questions related to all subjects.

A Specimen of result sheet for test :

School _____

Std. _____ Div. _____ Subject _____

Teaching topic:

Sr.No.	Name of the Student	Question wise marks	Total Marks
1.			
2.			
3.			
4.			
5.			

Students passed –

Students failed -

Students absent

mean of the group –

Signature

Report Writing :

- * It includes the live experiences in the school, school, plant, facilities and difficulties.
- * Attach a sheet of programmes took under value Education. Social service, work experience.
- * It includes a school programme starting assembly till end. e.g. prayer student - teacher relationship. Attach a test result.

Submit the report after/before a week of Internship.

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Teacher and Education in Emerging Indian Society

Objectives :

To enable the student teacher to –

- 1) Understand general nature of Indian society past, present and emerging.
- 2) Understand meaning and goals of education.
- 3) Understand the inter-relation between the goals of life and goals of education.
- 4) Understand the concept of social change and also the role of education in bringing out the social change.
- 5) Appreciate contribution of Indian and Western educationalist to education.
- 6) Acquaint with the agencies of education and their role.
- 7) Acquaint him with the new dimensions of education.
- 8) Understand the problems relating to the education of the disadvantaged group of Indian society.
- 9) Adopt teaching as a profession and also to grasp the role of teacher in shaping the emerging Indian society.
- 10) Develop favorable attitude towards teaching profession and to develop awareness for the need of code of conduct.
- 11) Locate salient characteristics of a teacher such as attitude, aptitude, interest, values, effectiveness etc.

Unit 1 : Education :

- a) Meaning of education : Etymological and comprehensive from Indian and Western point of view.
- b) Functions of Education.
- c) Goals of Education : In 1) Ancient India, 2) Colonial India, 3) Modern India – with special reference to Kothari Commission, NPE 1986 and 1992.

Unit 2 : Contribution of educational thinkers :

- a) Western thinkers –
 - 1) Russeau
 - 2) John Dwey.
- b) Indian thinkers -
 - 1) Mahatma Fule
 - 2) Swami Vivekanand
 - 3) M.K. Gandhi

Unit 3 : Indian Society :

- a) Nature of ancient Indian society – Varnas, Ashramas, Rinas, Four fold goals of life, Castes, sub-castes and their postcolonial effects on Indian education.
- b) Present society - Nature of the present Indian society. Various divisive and unifying forces influencing this present society – social, economic, political, religious, linguistic and regional.
- c) Emerging Indian society – Nature of emerging Indian society (1950-2000) Invisaged in the preamble of the Indian constitution. Nature of the desirable society in future perspectives (2001-2020) envisaged in the preamble of the Indian constitution.

Unit 4 : Social Change :

- a) Meaning of social change.
- b) Factors influencing social change.
- c) Role of education in promoting desired social change.
- d) Interdependence of education and society with special reference to 21st century.

Unit 5 : School and community :

- a) School as a social institution as a formal agency of education and its role and functions.
- b) Interdependence of school and community- school as a community development centre in urban and rural society.
- c) Social and other informal agencies – family, peer groups, reference group, cultural organization and mass media.

Unit 6 : New dimensions of education in emerging Indian society :

- a)
 1. Life long education concept and need.
 2. Value education concept, need, ways and means
 3. Education for democratic citizenship–concept,need,ways & means.
 4. Education for National Integration– concept,need, ways and means.
 5. Education for International understanding and peace - concept, need, ways and means.
- b)
 - 1 Education as means of human resource development.
 2. Education and modernization.

Unit 7 : Equalization of Educational opportunity :

1. Meaning of equality of educational opportunity at primary level, secondary level and higher level.
2. Measures to promote equality of educational opportunity among the following socially and economically deprived classes.
 - a) Scheduled Castes.
 - b) Scheduled Tribes.
 - c) Women.
 - d) Economically disadvantaged groups.

Unit 8 : Teacher and teaching profession :

- a) Status of teacher in ancient and modern Indian society.
- b) Characteristics of a teacher.
- c) Changing role of teacher in 21st century.
- d) Nature of teaching profession and its difference from other professions.
- e) Ethics and code of conduct for teacher.
- f) Professional development of teacher.

List of Recommended Books and References :

1. The teacher and education in Emerging Indian Society. NCERT (1983)
2. Teacher and education in Indian society – J.C. Agrawal.
3. Education in Ancient India – Altekar A.S.
4. Education in the Emerging Indian Society – Brahrua Kigraj. Bana Publishers & Distributors, Sambalpur. (Orissa)
5. Philosophical and sociological bases of education – Bhatia K.K. and Narang C.L.
6. Education and Human Resource Development – Rao V.K.R.V., Asia Publishing house, 1966.
7. Education in Emergency Indian Society – J.P. Naik
8. Formal, non formal education. – J.P. Naik.
9. Sociological Approach to Education – S. S. Mathur.
10. Human values and education – S.P. Ruhela.
11. Educational philosophy and sociology – J.S. Walia.
12. Future studies – B.K. Passi & Sahoo.
13. Future class rooms in India. Vikas Publishing House. – R.P. Singh.
१४. शैक्षणिक तत्तज्ञान आणि शैक्षणिक समाजशास्त्र, - म. वा. कुंडले.
१५. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - भाग - १ व भाग - २, वीरकर पी.के.
१६. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - डॉ. पाटील दि.हे., डॉ. झांबरे म.आ.
१७. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - भाग - १ व भाग - २, गाजरे आर.व्ही., ज्योती महंत.
१८. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - डॉ. प्र. श्रा. चौघरी
१९. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - कुलकर्णी विश्वंभर, डॉ. सुधा काळदाते
२०. अध्यापक भुमिका व कार्य - ल.मा. शिवणेकर
२१. उदयोन्मुख भारतीय समाजाचे शिक्षण व शिक्षक - सुरेश करंदीकर
२२. मूल्य शिक्षण - सुरेश करंदीकर
२३. अनौपचारिक शिक्षण - जे.पी. नाईक

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PSYCHOLOGY OF LEARNING & TEACHING

Course - II

Objectives :

To enable the student teacher

- 1) To get acquainted with the meaning nature and scope of psychology of learning and teaching.
- 2) To understand the development of the learner and its importance in learning process (with special reference to childhood and adolescence period)
- 3) To understand the need of guidance and counselling to adolescence.
- 4) To understand the nature of personality, individual differences and mental health.
- 5) To understand the need of identifying learner with special needs.
- 6) To understand group structure and dynamics as relevant to school groups in general and class room groups in particular.
- 7) To understand the process of learning and higher mental processes involved in learning.
- 8) To understand the principles of teaching to facilitate learning.
- 9) To apply the knowledge of various psychological experiments, tests in the school situation.

Unit 1 - Psychology of learning & teaching

- 1.1 Meaning, nature and scope of psychology of learning and teaching.
- 1.2 Uses of psychology of learning and teaching to the teacher.
- 1.3 Methods of studying learner's behaviour –
Methods –
 - a) Objective observation
 - b) Experimental method
 - c) Case-study method

Unit 2 - Development of the learner

- 2.1 Concept and general characteristics of development.
- 2.2 Stages of development –
 - a) General characteristics of Infancy
 - b) Characteristics of childhood and adolescence period with reference to –
 - i) Physical and motor development
 - ii) Cognitive development (including piaget theory)
 - iii) Emotional and Aesthetic development
 - iv) Moral and social development
- 2.3 Guidance and Counselling to adolescent.

Unit 3 - The learner as an individual

- 3.1 Concept of personality.
- 3.2 Factors influencing development of personality (Genetic and Environmental).
- 3.3 Characteristics of integrated personality.
- 3.4 Nature and causes of individual differences.
- 3.5 Maladjustment among learners -- symptoms and causes.
- 3.6 Promoting mental health among learners.
- 3.7 Educational importance of mental health at school level.

Unit 4 - Learners with special needs

- 4.1 Need of identifying learner with special needs, problems and suggestions –
 - a) Physically disabled child (orthopedic and sensory).
 - b) Mentally retarded child.
 - c) Learning disabled child.
 - d) Slow learner.
 - e) Gifted child.
- 4.2 Juvenile delinquency – meaning, nature, causes and preventive measures.

Unit 5 - Intelligence

- 5.1 Concept of intelligence.
- 5.2 Theories of intelligence (Spearman's Two Factor Theory Thurstone's Multi Factor Theory and Gardenr's Theory of Multiple Intelligence)
- 5.3 Measurement of intelligence and educational importance of intelligence.
- 5.4 Emotional intelligence – concept, nature and educational importance.

Unit 6 - Classroom as Group and Group process

- 6.1 Meaning and characteristics of group.
- 6.2 Causes of group formation.
- 6.3 Concept of group dynamic.
- 6.4 Meaning of leadership and characteristics of a leader.
- 6.5 Training of leadership in school and the role of the teacher.

Unit 7 - Learning and Teaching

- 7.1 Learning – Concept, nature and characteristics of learning process.
- 7.2 General principles of learning methods. (Trial and Error, conditioning, Insight learning)
- 7.3 Gagne's theory of learning.
- 7.4 Factors influencing learning. (related to learner, task, school and home)
- 7.5 Measurement of learning – learning curve, plateau stage, educational importance of learning curve.
- 7.6 Transfer of learning – meaning, types and educational importance.
- 7.7 Teaching – concept, Glaser's Basic teaching model.

Unit 8 - Mental process related to learning

- 8.1 Memory
 - a) meaning and process of memory.
 - b) Forgetting - meaning and causes of forgetting.
- 8.2 Motivation - Concept and types, Maslow's Hierarchy of needs, techniques of enhancing learner's motivation.
- 8.3 Attention -
 - a) meaning, nature, types and characteristics.
 - b) Factors affecting attention (Internal & External)
- 8.4 Sensation and Perception
 - a) meaning and process
 - b) principles of perceptual formation (including Gestalt view)
- 8.5 Concept formation -
 - a) meaning and process
 - b) educational importance
- 8.6 Thinking -
 - a) meaning, characteristics
 - b) Instruments of thinking
 - c) Types of thinking
- 8.7 Creativity -
 - a) meaning and nature.
 - b) relation between imagination intelligence and creativity.
 - c) nourishment of creativity

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PRACTICAL WORK - C - II

Experiments in psychology –

- a) At least nine experiments and one psychological test should be performed from the following list.
- b) A journal is to be maintained by each student.
- c) Experiment batch should not be more than 20 students.
- d) The psychological test should be administered by the student-teacher during the internship programme.
- e) Each experiment should be valued out of 30 marks.

Distribution of Marks –

- | | | | |
|------|---------------------------------|---|----------|
| i) | Aim, procedure and observations | - | 7 marks |
| ii) | Introspection and conclusion | - | 8 marks |
| iii) | Educational implications | - | 15 marks |

List of Experiments –

A) Compulsory –

Sr. No.	Topic	Aim	Apparatus
1.	Learning and Transfer of Learning	To study the process of learning by trial and error method.	Mirror, star pattern, stop watch.
2.	Attention	To study the effect of division of attention on work-efficiency.	Stop watch
3.	Perception	To study the principles of organization of stimule	Figure for perception
4.	Concept formation	To study the process of concept formation	Sets of cards with different figures, stop watch
5.	Memory	To study the effect of on retention meaningfulness	A list of meaningful and non-sense syllables
B) Optional (Any Four)			
6.	Fatigue	To study the effect of fatigue by continuous mental work	Multiplication test sheet, stop watch
7.	Forgetting	To study the interference	Two lists of 16 non-sense syllables each a metronome
8.	Free association	To study the laws of association	A list of stimulus, words stop watch
9.	Suggestion	To determine suggestibility index	A sufficiently large picture, A set of questions (same of them should be suggestive)

10.	Imagination	To study the constructive imagination	Cards containing nouns and verbs, stop watch,
11.	Preservation	To study the phenomenon preservation	Stop watch
C) Psychological Test (any one)			
12.	Intelligence test	To study the natural phenomenon of intelligence	Standardized test with necessary apparatus and manual
13.	Aptitude test	To study the particular aptitude of a learner	Standardized test with necessary apparatus and manual
14.	Socio-economic test	To study the socio-economic status of learner's family	Standardized test with necessary apparatus and manual

Recommended Books –

1. Deccaco John P, The psychology of learning and instruction, Prentice Hall India, 1971.
2. Dash Murlidhar, Educational psychology, Deep and Deep Publishers, Delhi, 1988.
3. Emotional Intelligence, Dyanial Gloeman.
4. Counselling and Guidance – Rao
5. Walia, Foundations of Educational psychology, Paul Publishers, Jallunder.
6. Rastogi K.G., Educational psycology, Rastogi Publication, Meerut Ed. 1st 1983.
7. Galloway William and Klausmier H.J. Facilitate student learning, Harper and Row Publication, New York, London 1975.
8. Chauhan S.S., Advanced Educational Psychology, Vikas Publishing House Pvt. Ltd., New Delhi.
9. Howard Gardner, (1985), Frames of Mind. New York : Baisc Book Inc., Publisher.
१०. के. व्ही. कुलकर्णी, शैक्षणिक मानसशास्त्र, श्री विद्या प्रकाशन, पुणे.
११. वा.ना. दांडेकर, शैक्षणिक व प्रायोगिक मानशास्त्र, श्री विद्या प्रकाशन, पुणे.
१२. डॉ. जयताप ह. ना., शैक्षणिक मानसशास्त्र, अन्मोल प्रकाशन, पुणे.
१३. फरदीकर सुरेश, शैक्षणिक मानसशास्त्र, फडके प्रकाशन, कोल्हापूर.
१४. आफळे, बापट, शिक्षणाचे मानसशास्त्रीय अधिष्ठान, विद्या प्रकाशन, पुणे.
१५. पारसनीस न. रा., प्रगत शैक्षणिक मानसशास्त्र अधिष्ठान, नुतन प्रकाशन, पुणे.
१६. कुंडले म.बा., सर्जनशीलता, नुतन प्रकाशन, पुणे.
१७. नानकर पी.एल., सुबोध शैक्षणिक मानसशास्त्र, नुतन प्रकाशन, पुणे.

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FOUNDATIONS OF SCHOOL PRACTICES AND SPECIAL FIELDS OF EDUCATION – COURSE-III

Objectives :

To enable the pupil teacher –

- 1) To acquaint with the processes of teaching and communication in the school.
- 2) To acquaint with organization and administration of different activities in school.
- 3) To familiarize with some problems of secondary and higher secondary education.
- 4) To develop skills for computing important statistical measures and their application in school situation.
- 5) To explain the importance of discipline and student welfare activities.
- 6) To acquaint with special fields of education i.e. Population education, Adult education, Environmental education, Health education.
- 7) To acquaint with various agencies and institutions at national and state level concerned with higher education.

Unit 1 - Teaching – Communication

- a) Teaching – Nature, Process, Principles & Maxims.
- b) Communication – Nature, Process, Types, Channels, Modes.
- c) System approach – Systems analysis, Brain storming, Team teaching.

Unit 2 - Evaluation

- a) Concept, Need, Procedure, Application.
- b) Three aspects of educational evaluation.
 - i) Educational objectives.
 - ii) Learning experiences.
 - iii) Tools of evaluation.
- c) Preparation and administration of unit-test.
- d) Application of some evaluation, tools -
- Examination (Written & Oral), Check list, Rating scale, Interview, Questionnaire, Sociometry.

Unit 3 - Statistical Methods

- a) Graphical presentation of data – Histogram, frequency, polygon. Characteristics of Normal probability curve.
- b) Measures of central tendency – Mean, Median, mode.
- c) Measures of Variability – Range, Quartile deviation, Standard deviation.
- d) Percentiles and percentile rank

- e) Coefficient of correlation (Rank difference method only)
- f) Standard scores, Z score, T score.

Unit 4 - Organization , Management, Administration

- a) Organization, Management, Administration – Concept nature and difference between them.
- b) School discipline - Concept, Ways of maintaining discipline.
- c) Students welfare activities – organization.

Unit 5 - Administrative Machinery for Secondary & Higher Secondary Education in Maharashtra State

- a) Ministry of education.
- b) Directorate of education.
- c) Maharashtra State Board of Secondary and Higher Secondary Education.
- d) Maharashtra State Bureau of Text book construction and research.
- e) Secondary school code.
- f) Teacher's organization.

Unit 6 - Institutions and agencies at State & National level – with reference to their nature and function.

- a) U.G.C
- b) N.C.E.R.T.
- c) S.C.E.R.T.
- d) N.C.T.E
- e) N.A.A.C.

Unit 7 - Secondary & Higher secondary education

- A) Mudliar Commission Report, Kothari Commission Report (only Secondary & Higher Secondary Education)
- B) Problems :
 - a) Large classes.
 - b) Three language formula.
 - c) Location of higher secondary classes.
 - d) Diversification and vocationalization of courses at + 2 stage.

Unit 8 - Special Fields of Education

- a) Population Education – Concept, Need and population education through school subject.
- b) Adult Education – Concept, Need and development of adult education programme in India.
- c) Environmental Education – Concept, Need and environmental education through school subjects.
- d) Health Education – Concept, Need of awareness

Recommended Books –

1. Principles and Methods of Teaching - Bhatia & Bhatia.
2. Methods and Techniques of Teaching - S.K. Kocher.
3. Principles and Methods of Teaching - J.C. Agrawal.
4. Evaluation of Schools - W.N. Dandekar.
5. School organization - Kochhar.
6. Adult Education - Rita Sharma.
7. Current problems in education - Saffaya.
8. Adult Education - Kundu.
9. Educational Technology - Dr. C.N. Yeole.
10. Educational Technology - Usha Sharma.
11. Educational Technology - Agrawal J.C.
१२. अध्यापन शास्त्र व पध्दत - डॉ. म.बा. कुंडले
१३. शैक्षणिक मूल्यमापन - दांडकेर वा.ना.
१४. शैक्षणिक समस्या व शैक्षणिक प्रशासन - रू.गो. चौधरी
१५. शिक्षणाचे अधिष्ठान - गाजरे, चिटणीस, पाटील
१६. शालेय पध्दतीचे अधिष्ठान - गाजरे, लवणे, नानकर, पुराणिक भाग - १, २, ३
१७. शालेय शिक्षणाचे मूलधार - डॉ. पी.एस. चौधरी
१८. शैक्षणिक मूल्यमापन - सी.पी. कदम व चौधरी
१९. माध्यमिक शिक्षण संरचना व कार्यपध्दती - डॉ. ल.मा. शिवणेकर
२०. अध्यापक भूमिका व कार्य - डॉ. ल.मा. शिवणेकर

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ESSENTIALS OF COMPUTER EDUCATION,
EDUCATIONAL TECHNOLOGY &
ACTION RESEARCH – COURSE - IV

Objectives :

1. To acquaint teacher trainees with different parts of computer system and their functions.
2. To develop vocabulary of Information Communication Teaching (ICT) among teacher trainees.
3. To develop competency among teacher trainees in use of offline electronic resources (CD,ROM etc.) and on line resources (WWW)
4. To encourage teacher training in using ICT for improving classroom teaching and professional development.
5. To create general awareness among teacher trainees about ICT and its use in teaching learning.
6. To use computer as educational tool.
7. To help to understand educational technology.
8. To obtain total perspectives of the role of technologies in Modern Educational Practices.
9. To acquaint the tr-trainee with different researchodologies used in educational research.
10. To motivate the tr-trainee for action research in school problems.

Unit 1 - Essentials of Computers

- 1.1 History of Computers, generations of computers, block diagram, types of computers (micro, mini, mainframe and super) application areas of computer.
- 1.2 Terminology used in computers : Hardware, Software, types of software network.
- 1.3 Use of peripherals - floppy drive, CD-drive, scanner, modem, webcom, printer.
- 1.4 Need of operating system : Various operating system, like DOS, use of GUI, Windows 95,98, Windows server family 2000.
- 1.5 Essentials of ICT related to Internet.
ICT,LAN,WAN,INTERNET,BROWSER,E-MAIL,WEB-SURFING.

Unit 2 - Essentials of Software Tools

- 2.1 Use of Windows 98 through start button and various icons on desktop. Concept use in various windows based software.
Creating new file
Opening a file
Saving a file (Save & Save as)
Cut and Paste
Redo and Undo
Print a file
- 2.2 Microsoft Word (word-2000)
General features of M.S. Word.
Special features of M.S. Word (Auto-Correct, Auto Format, Mail-Merge)
- 2.3 M.S. Excel (excel –2000)
General features of M.S. Excel. Cell formatting and manipulation, Drawing charts, data entry from wizard.
Special features of M.S. excel. (Use of formula, functions – like Mean, Standard Deviation and creating a chart.)
- 2.4 M.S. Power Point
General features of Power Point : Slide wizard
Special features of Power Point : Character animation in slide, used of multimedia in slide.

Unit 3 – Use of various software's for effective teaching

- Use of Paint for drawing various diagrams.
- Preparing a lesson note using M.S. Word.
- Preparing lecture note using Power Point.

Unit 4 - Use of offline and online educational resources

- Use of resources generated using power point in classroom.
- Offline resources – Use of various C.A. Learning and teaching Package.
- Online resources – Searching various educational web-site on Internet. Sending and receiving E-mail to and from educational expertise.

Unit 5 - Educational Technology.

- a) Concept and meaning of educational technology.
- b) Distinction between hardware and software technologies. Their use in learning and teaching.

Unit 6 - Software and Hardware in Education Technology.

- a) Classification of audio-visual aids and their use in teaching-learning.
- b) Hardware technologies – Important accessories and their application – over head projector, film strip projector, solid projector, audio-video recording instruments– TV., VCR., VCD.

- c) Use of strategies like teleconferencing, micro-teaching, programme instruction, CAI/CAL.

Unit 7 - Research Methodology.

- a) Types of researches -
 - i) Historical
 - ii) Survey
 - iii) Qualitative research
 - iv) Experimental
- b) Use of statistics in research methodology.
Ex. Mean, medium, mode, Standard deviation, co-relation, T-value, Chi-square.

Unit 8 - Action Research.

- a) Meaning, scope and importance of action research.
- b) Identification of problems in schools and class rooms.
- c) Solving specific problems through action research.

I) Practical related to computer :

- 1) Introduction to Windows O.S.
- 2) Using window explorer –
 - a) Create new file.
 - b) Copy file.
 - c) Print file.
 - d) Delete file.
- 3) Creating document file
 - a) Using MS Word
 - b) Using MS Excel
 - c) Creating Power Point slide for representation.
- 4) Illustrate different features of web browser such as Internet explorer or Net scape navigator or use of Internet for Email and Chatting.

N.B. The portion of computer and student has to be 1 : 2.

A journal should be maintained by every student with essential printouts.

- II)** Practical work related to action research. A group project on school problem should be taken by Tr.trainee not more than five in a group. The project report (Group project) should be submitted at the time of practical examination.

Reference Books :

- 1. Advanced Microsoft Office 2000 – FLYNN, Meredith & RUTKOSKY, Nita H. (2000), New Delhi : BPB Publications
- 2. Excel for Windows' 95 - Instant Reference – HERGERT, Douglas A. (1992), SYBEX INCORPORATED.
- 3. Multimedia Technology and Applications – HILLMAN, David (1998), New York : Delmar Publishers.

4. Windows 98 for Dummies – RATHBONE, Andy : IDG Books Worldwide.
5. Computer Fundamentals – NAGPAL D.P. (2001) – New Delhi : Wheeler Publishing.
6. Computer Primer – RAJARAMAN, Ed.2 , New Delhi : Prentice – Hall of India Pvt. Ltd.
7. Windows for Dummies – RATHBONE, Andy, Delhi : Pustak Mahal.
8. Computers Today.
SANDERS, Donald H. (1988), New York, McGraw Hill Book Co.
9. Computer Fundamentals – Concepts, Systems and Applications, SINHA, P.K. (1992), New Delhi, BPD Publications.
10. Internet with Web Page/ Web Site Design Bible – UNDERDAHL, Brian and UNDERDAL, Keith (2000), New Delhi, IDG Books India (P) Ltd.
११. संगणक परिचय : प्रा. नंदकिशोर दायमा, विद्या प्रकाशन, नागपूर.
१२. राज्य अद्याचे, संगणकाचे : दिपक शिकारपूरकर, कॉन्टीनेंटल प्रकाशन, पुणे.
१३. सरस्वती कॉम्प्युटर कोर्स : संपादक - सौ. मेघना कुलकर्णी, सरस्वती ग्रंथ भांडार, पुणे.
१४. क - कॉम्प्युटरचा - रविंद्र देसाई - राजहंस प्रकाशन, पुणे
१५. कॉम्प्युटरचा वाटण्या - शशिकान्त गाजरे, नितीन प्रकाशन, पुणे.
१६. नोट्स फॉर कॉम्प्युटर कोर्स - मोघे, फडके, Vol. III,IV, IX, सम्राट प्रकाशन, मुंबई.
१७. इंटरनेट एक कल्पवृक्ष : ले. मोहन आपटे - राजहंस प्रकाशन, पुणे.
१८. बेसिक कॉम्प्युटर कोर्स - फडके, मोघे, सम्राट प्रकाशन, मुंबई.
19. Training Guide- Microsoft Office – 2000, BPB Publication, Delhi.
20. M.S. Office Manual – Dr. A.M. Malhotra, Bright Currier, Delhi.
21. MS-CIT – Book- Marathi & English.
22. Best J.W. & Kahan – Research in Education, Percentile Hall, New Delhi.
23. Sukhia, Maharota - Elements of Education
24. Corely – Action Research.
25. S.K. Kulkarni – Educational Technology.
२६. मुळे, उमाठे - शैक्षणिक संशोधन.
२७. पारसनीस - शैक्षणिक संशोधन.
२८. ब.बि. पंडित - कृती संशोधन.
२९. महाराष्ट्र राज्य शै. अनु. परिषद - कृती संशोधन.
३०. पाठय पुस्तक मंडळ पुणे - कृती संशोधन.
३१. सीमा येवले - शै. तंत्रविज्ञान.
३२. ह.ना. जगताप - शै. तंत्रविज्ञान.

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COURSE V & VI

CONTENT-CUM-METHODOLOGY OF SCHOOL SUBJECTS

The teaching trainee should select any two school subjects for course V & VI. These school subjects are Marathi (CM-1), Hindi, (CM-2), English (CM-3), Urdu (CM-4), Sanskrit (CM-5), Geography (CM-6), History (CM-7), Mathematics (CM-8), Science (CM-9) and Commerce (CM-10).

Practical Work (Area D of CM)

The following practicals to be completed by the student teachers, which is evaluated internally.

1. To prepare an improvised teaching aid.
2. To prepare and administer a unit plan and unit test and submit a report.

Student teacher will complete one practical for one school subject (CM) and another practical for another school subject (CM).

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आशयासह अध्यापन पध्दती - मराठी

उद्दिष्टे :

१. मातृभाषेचे महत्त्व समजून घेण्यास प्रशिक्षणार्थींना मदत करणे.
२. मराठी मातृभाषा म्हणून अध्यापनाची उद्दिष्टे समजून घेण्यास मदत करणे.
३. माध्यमिक आणि उच्च माध्यमिक स्तरावरील मातृभाषेच्या अभ्यासक्रम निश्चितीची तत्व समजून घेण्यास प्रशिक्षणार्थींना मदत करणे.
४. माध्यमिक आणि उच्च माध्यमिक स्तरावरील मराठी मातृभाषेचे अध्यापन करण्यास आवश्यक कौशल्यांचा विकास करणे.
५. मातृभाषेच्या अध्यापनासाठी उपयुक्त ठरणान्या अध्यापन पध्दती आणि तंत्रे यांचा परिचय करून देणे.
६. माध्यमिक आणि उच्च माध्यमिक मराठी अभ्यासक्रमातील गद्य वाङ्मय प्रकारांची स्थूल ओळख करून देणे.
७. माध्यमिक आणि उच्च माध्यमिक मराठी अभ्यासक्रमातील पद्य वाङ्मय प्रकारांची स्थूल ओळख करून देणे.
८. मातृभाषेचे अध्यापन परिणाम कारक होण्यासाठी प्रशिक्षणार्थींना सक्षम करणे.
९. अभिव्यक्ती, शुद्धलेखन, सर्जनशील लेखन याबद्दलची जाणीव निर्माण करणे.
१०. मराठीच्या अध्यापनाचे नियोजन आणि मूल्यमापन प्रशिक्षणार्थींना करता यावे यासाठी सक्षम बनविणे.

विभाग - अ

घटक १ : मातृभाषेचे महत्त्व स्थान आणि मराठीचा स्थूल परिचय

- अ) मातृभाषेचे महत्त्व.
- ब) मातृभाषेचे अभ्यासक्रमातील स्थान.
- क) मातृभाषा मराठीचा अन्य विषयांशी समवाय (संस्कृत, इंग्रजी, हिंदी, इतिहास, भूगोल, विज्ञान व गणित)
- ड) कालिक भेद, प्रांतिक भेद

घटक २ : मातृभाषेच्या अध्यापनाची उद्दिष्टे

- अ) भाषिक कौशल्याचा विकास
- ब) व्यापक / वाङ्मयीन उद्दिष्टे (साहित्याची आवड, भावना विकास, विचारशक्तीचा विकास, सौंदर्य ग्रहणक्षमता वाढविणे, सर्जनशीलता, व्यक्तिमत्त्व विकास, रसास्वाद.
- क) वर्ग अध्यापनाची उद्दिष्टे आणि स्पष्टीकरणे.

घटक ३ : मातृभाषेचा अभ्यासक्रम

- अ) माध्यमिक आणि उच्च माध्यमिक स्तरावरील मातृभाषा अभ्यासक्रम निश्चितीची तत्वे.
- ब) अभ्यासक्रमाचे प्रकार.
- क) इयत्ता ५ ते १२ वी पर्यंतच्या प्रचलित मातृभाषा पुस्तकांचा अभ्यास.
- ड) चांगल्या पाठ्यपुस्तकाचे निकष.

घटक ४ : मराठी अध्यापनाच्या विविध पध्दती तंत्रे

- अ) पध्दती - उद्गामी पध्दती, अक्वामी पध्दती, व्याख्यान पध्दती, कथन पध्दती, परिसंवाद पध्दती.
- ब) तंत्रे - प्रश्न, स्वाध्याय, पर्यवेक्षित अभ्यास, स्वयंअभ्यास, उपचारात्मक अध्यापन, नाटकीकरण, बुद्धिमंथन, चर्चा, सांघिक अभ्यास.

विभाग - ब

घटक ५ : गद्य वाङ्मय प्रकाराचे स्वरूप आणि वैशिष्ट्ये

इयत्ता ५ वी ते १२ वी पर्यंतच्या अभ्यासक्रमातील गद्य वाङ्मय प्रकाराची स्थूल ओळख.

- अ) गद्य वाङ्मय प्रकार - शब्दचित्र, आत्मवृत्त, आत्मचरित्र, लघुनिबंध, ललित निबंध, कथा, वैचारिक गद्य, प्रवासवर्णन, नाटक, नाट्यछटा, बखर, एकांकिका, चरित्र.
- ब) गद्य अध्यापनाचे हेतू.

घटक ६ : पद्य वाङ्मय प्रकाराचे स्वरूप आणि वैशिष्ट्ये

इयत्ता ५ वी ते १२ वी पर्यंतच्या अभ्यासक्रमातील पद्य वाङ्मय प्रकाराची स्थूल ओळख.

- अ) पद्य वाङ्मय प्रकार - संतकाव्य, पंतकाव्य, शाहिरी काव्य, भावगीत, लोकगीत, सुनीत, मुक्तछंद, नाट्यगीत.
- ब) पद्य अध्यापनाचे हेतू, आधुनिक कवितेचे अध्यापन.

घटक ७ : व्याकरण

- अ) शब्दविचार - विकारी, अविकारी शब्द.
- आ) वाक्यविचार - वाक्यांचे रूपांतर, वाक्यपृथ्यकरण, व्याकरण चालविणे.
- इ) शब्दसिध्दी - तत्सम, लक्ष्य, परभाषिक, उपसर्ग घटित, प्रत्यय घटित, सामासिक शब्द, समास, कृदन्ते, अभ्यस्त शब्द.
- ई) गद्य आणि पद्यातील फरक.
- उ) अक्षरगणवृत्ते - भुजंगप्रयात, वसंततिलका, शिखरणी, मालिनी, पृथ्वी, मंदारमाला
- ऊ) मात्रावृत्ते - आर्या, दिंडी, नवयष्टू.
- ए) छंद - अमंग, ओवी, मुक्तछंद.
- ऐ) अलंकार - शब्दालंकार - अनुप्रास, यमक, श्लेष.
अर्थालंकार - उपमा, उत्प्रेक्षा, स्वभावोक्ती, व्यतिरेक, चेतनगुणोक्ती, रूपक, अतिशयोक्ती.
- ओ) शब्दशक्ती - अमिधा, लक्षणा, व्यंजना.
- औ) रस आणि काव्यगुण.
- अं) वाक्प्रचार आणि म्हणी.
- अः) व्याकरण अध्यापनाचे हेतू आणि आवश्यकता.
- क) व्याकरणाचे कार्यात्मक स्वरूप आणि अध्यापन पध्दती.

घटक ८ : मातृभाषेचा अध्यापक

- अ) मातृभाषेचा अध्यापकाचे गुण.
- ब) मातृभाषा अध्यापनाची साधने.
- क) मातृभाषेच्या अध्यापनात हस्तपुस्तिकेचे महत्व.

घटक ९ : लेखन

- अ) शुध्दलेखनाचे नियम.
- ब) अनुलेखन, श्रुतलेखन.
- क) निबंधलेखन, कल्पनाविस्तार, पत्रलेखन, रसग्रहण, सारांशलेखन.
- ड) लेखनातील चूका, तपासणी आणि सुधारणा.

विभाग - क

घटक १० : नियोजन आणि मूल्यमापन

- अ) वार्षिक नियोजन, घटक नियोजन, पाठनियोजन.
- ब) प्रश्न - प्रश्नप्रकार, त्यांची वैशिष्ट्ये आणि मर्यादा.
- क) मूल्यमापनाची इतर साधने.
- ड) नैदानिक कसोट्या व उपचारात्मक अध्यापन.

विभाग - ड

प्रात्यक्षिक कार्य

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संदर्भ पुस्तके :

१. मराठी अध्यापन पध्दती - डॉ. सुरेश करंदीकर
२. मराठीचे अध्यापन - डॉ. म.बा. कुंडले
३. मातृभाषेचे अध्यापन - प्रा. चंद्रकुमार डांगे
४. मराठीचे अध्यापन व मूल्यमापन - लीला पाटील
५. मराठीचा उद्गम व विकास - कृ. पां. कुलकर्णी
६. साहित्य साधना - मा.का. देशपांडे
७. मातृभाषेचे अध्यापन - लीला पाटील
८. मराठी : अध्यापन व अध्ययन - दि.हे. पाटील, श.रा. राणे
९. मराठीचे आशययुक्त अध्यापन - प्रा.डॉ. प्र.श्री. चौधरी
१०. मातृभाषा मराठीचे अध्यापन शास्त्रीय विश्लेषण - डॉ. नलिनी पिचड, डॉ. रामदास बरकले.

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आशयासह अध्यापन पध्दती - हिंदी

उद्देश्य :

१. छात्राध्यापकों में हिंदी भाषा का स्वरूप और विशेषताएँ समझने की योग्यता विकसित करना ।
२. छात्राध्यापकों में हिंदी भाषा में व्यवहार करने की क्षमता विकसित करना ।
३. छात्राध्यापकों को द्वितीय भाषा के रूप में हिंदी शिक्षण उद्देश्यों और अपेक्षित योग्यताओं से परिचित कराना ।
४. छात्राध्यापकों को भाषा शिक्षण के प्रमुख सिद्धान्तों एवं भाषा शिक्षण की विधियों से परिचित कराना ।
५. छात्राध्यापकों को विविध प्रकार के पाठ नियोजन से परिचित करके उनमें विविध प्रकार के पाठनियोजन करने की क्षमता विकसित करना ।
६. छात्राध्यापकों को भाषा मूल्यांकन एवं भाषा परीक्षण की प्रक्रिया से परिचित करके उनमें भाषा मूल्यांकन एवं भाषा परीक्षण करने की क्षमता विकसित करना ।
७. छात्राध्यापकों में विविध प्रकार के दृक्श्राव्य साधनों का हिंदी शिक्षण में प्रयोग करने की क्षमता का विकास करना ।
८. छात्राध्यापकों में हिंदी भाषा एवं हिंदी अध्यापन के प्रति रुची निर्माण करना ।

पाठ्यक्रम

विभाग 'अ'

ईकाई - १ भाषा का स्वरूप एवं प्रकार

- १.१ भाषा की परिभाषा
- १.२ भाषा के प्रमुख लक्षण / विशेषताएँ
- १.३ भाषा के प्रमुख अंग
- १.४ भाषा के प्रकार - मातृभाषा, अन्य भाषा, राष्ट्रभाषा, राजभाषा
- १.५ भारत की राष्ट्रीय भाषा नीति एवं त्रिभाषा सूत्र
- १.६ राष्ट्रभाषा के रूप में हिंदी का महत्व

ईकाई - २ भाषा शिक्षण के उद्देश्य

- २.१ भाषा शिक्षण का अर्थ
- २.२ अन्य भाषा शिक्षण के उद्देश्य
- २.३ द्वितीय भाषा के रूप में माध्यमिक स्तरपर हिंदी शिक्षण के उद्देश्य

ईकाई - ३ अन्य भाषा शिक्षण के प्रमुख सिद्धान्त

- ३.१ लेखन से पहले भाषण
- ३.२ आधारभूत साँचों का अभ्यास
- ३.३ भाषा सिखाइए, भाषा के बारे में नही
- ३.४ अनुस्तरित वाक्य साँचों का अभ्यास
- ३.५ वार्तालाप की प्रमुखता
- ३.६ मानक उच्चारण पर बल
- ३.७ अभ्यास की प्रधानता
- ३.८ सीमित शब्दावली का चयन
- ३.९ पठित भाषा का लेखन
- ३.१० भाषा व्यवहार को प्रधानता

- ३.११ उपयुक्त गती में शुद्ध अभिव्यक्ती
- ३.१२ समस्याओं का समाधान
- ३.१३ अन्य भाषा - संस्कृती के प्रति अनुकूल अभिवृत्ती

विभाग 'ब'

ईकाई - ४ भाषा कौशल शिक्षण

- ४.१ भाषा कौशल - श्रवण, भाषण, वाचन, लेखन, भाषा कौशलों का स्वरूप उद्देश एवं महत्व
- ४.२ श्रवण कौशल शिक्षण
- ४.३ भाषा कौशल शिक्षण
- ४.४ वाचन कौशल शिक्षण की विधियाँ
- ४.५ लेखन कौशल शिक्षण

ईकाई - ५ रचना शिक्षण

- ५.१ रचना विचार
 - ५.१.१ पूर्ति अभ्यास
 - ५.१.२ वार्तालाप
 - ५.१.३ कहानी लेखन
 - ५.१.४ पत्रलेखन
 - ५.१.५ सार - लेखन
 - ५.१.६ अर्थ ग्रहण
 - ५.१.७ निबंध लेखन
 - ५.१.८ कल्पना विस्तार
 - ५.१.९ अनुवाद
- ५.२ रचना शिक्षण के उद्देश
- ५.३ रचना से तात्पर्य
- ५.४ रचना शिक्षण की विधियाँ
- ५.५ रचना प्रकार के अनुसार पाठ नियोजन
- ५.६ रचना कार्य का संशोधन

ईकाई - ६ व्याकरण शिक्षण

- ६.१ शब्द की परिभाषा - स्रोत, रचना और अर्थ के आधार पर शब्द के प्रकार
- ६.२ शब्द सिध्दी - उपसर्ग, प्रत्यय, समास, संधि
- ६.३ शब्द भेद - विकारी - संज्ञा, सर्वनाम, विशेषण, क्रिया
 - अविकारी - क्रिया विशेषण, संबंधसूचक, अव्यय, समुच्चयबोधक, विस्मयादिबोधक
- ६.४ लिंग, वचन, काल, कारक, प्रयोग
- ६.५ वाक्य - परिभाषा स्वरूप और प्रकार (अर्थ के आधार पर और रचना के आधार पर)
- ६.६ मानक हिंदी दर्तनी और विरामचिन्ह
- ६.७ मुहावरे और कहावते (कक्षा ५ वी से १२ वी तक की पाठ्यपुस्तकों में प्रयुक्त)
- ६.८ व्याकरण का अर्थ और महत्व
- ६.९ व्याकरण शिक्षण की विधियाँ एवं पाठनियोजन
- ६.१० व्याकरण शिक्षण के मार्गदर्शक तत्व
- ६.११ सामान्य त्रुटियाँ एवं त्रुटी विश्लेषण

ईकाई - ७ गद्य और पद्य शिक्षण

- ७.१ गद्य और पद्य से तात्पर्य
- ७.२ गद्य शिक्षण के उद्देश

- ७.३ गद्य शिक्षण की विधियाँ एवं पाठनियोजन
 ७.४ पद्य शिक्षण के उद्देश
 ७.५ पद्य शिक्षण की विधियाँ एवं पाठनियोजन
 ७.६ गद्य - पद्य शिक्षण में विविध अध्यापन पध्दतियों का प्रयोग

ईकाई - ८ द्वितीय भाषा शिक्षणकी विधियाँ

- ८.१ व्याकरण अनुवाद प्रणाली
 ८.२ प्रत्यक्ष प्रणाली
 ८.३ वेस्ट प्रणाली
 ८.४ गठन प्रणाली
 ८.५ अन्य भाषा शिक्षण की उपयुक्त प्रणाली

विभाग 'क'

ईकाई - ९ नियोजन तथा मूल्यांकन

- ९.१ वार्षिक नियोजन, ईकाई नियोजन, पाठ नियोजन
 ९.२ हिंदी शिक्षण में मूल्यांकन के लिए उपयुक्त साधन
 ९.३ ईकाई कसौटी
 ९.४ नैदानिक एवं उपचारात्मक अध्यापन

ईकाई - १० हिंदी शिक्षण में सहायक सामग्री

- १०.१ हिंदी शिक्षण में दृक्श्राव्य साधनों का महत्त्व, स्वरूप एवं प्रकार
 १०.२ दृक्श्राव्य साधनों को प्रकारानुसार प्रयोग
 १०.३ पाठ्यपुस्तक - महत्त्व, आदर्श पाठ्यपुस्तकों की विशेषताएँ
 १०.४ उपक्रम - विविध स्पर्धाएँ, भाषा के खेल, नियतकालिक, दिनविशेष, सरस्वती यात्राएँ

विभाग 'ड'

प्रात्यक्षिक कार्य

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सहायक ग्रंथ सूची

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| १. | डॉ. भोलानाथ तिवारी | - भाषा विज्ञान |
| २. | शर्मा लक्ष्मीनारायण | - भाषा १, २ की शिक्षण विधियाँ और पाठ नियोजन |
| ३. | सावित्री सिंह | - हिंदी शिक्षण |
| ४. | केणी, कुलकर्णी | - हिंदी अध्यापन पध्दती |
| ५. | श्रीधरनाथ मुखर्जी | - हिंदी अध्यापन |
| ६. | ग न साठे | - राष्ट्रभाषा का अध्यापन |
| ७. | दुनाखे अरविंद | - हिंदी अध्यापन पध्दती |
| ८. | केणी संगोराम | - हिंदी अध्यापन पध्दती |
| ९. | वास्कर पुष्पा | - हिंदी आशय के साथ अध्यापन पध्दती |
| १०. | बोबे वा.स. | - हिंदी अध्यापन पध्दती |
| ११. | नसीमा पठाण | - हिंदी विषय ज्ञान |
| १२. | पंडित ब.वि. | - हिंदी अध्यापन पध्दती |
| १३. | ग.ल. वर्धे | - हिंदी व्याकरण |
| १४. | थत्ते | - हिंदी व्याकरण |
| १५. | रस्तोगी, शर्मा | - हिंदी शैक्षिक व्याकरण भाग - १ और |
| १६. | भाई योगेंद्रजीत | - द्वितीय भाषा के रूप में हिंदी की शिक्षा |

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CONTENT CUM METHODOLOGY – ENGLISH

(Communicative Language Teaching)

Objectives :

- To enable the pupil-teacher.
1. To understand the role and importance of English language in India.
 2. To understand the concept, nature and importance of Content-cum-Methodology in the teaching in English.
 3. To understand the objectives of teaching and learning of English as a second language of High school and Higher Secondary stage.
 4. To be well conversant with the prescribed syllabus in English for Std. V to XII.
 5. To understand and appreciate the concept, need and importance of communicative approach to the teaching and learning of English as a second language.
 6. To acquaint himself / herself with the methodology and techniques of communicative language teaching.
 7. To acquaint himself / herself with the essential aspect of English grammar and usage.
 8. To acquaint them with planning and testing in the teaching of English.
 9. To develop positive attitude towards English as a second language.
 10. To acquaint proficiency in the communicative use of English.

Area – A

Unit – 1 Concept of Content – Cum- Methodology

- 1.1 Concept and nature
- 1.2 Need and importance of Content-cum-methodology.

Unit – 2 Nature of language

- 2.1 Definition.
- 2.2 Language as a 'structure' and language as a 'means of communication'.
- 2.3 Seven basic functions of language by Halliday.
 - a) Instrumental function : using language to get things.
 - b) Regulatory function : using language to control the behaviour of others.
 - c) Interactional function : using language to create interaction with others.
 - d) Personal function : using language to express personal feelings and meanings.
 - e) Heuristic function : using language to learn and to discover.

- f) Imaginative function : using language to create a world of imagination.
 - g) Representational function : using language to communicate information.
- 2.4 Role of English.
- 2.4.1 Importance of English in India.
 - 2.4.2 Place of English in –
 - a) India.
 - b) Educational set up in Maharashtra.
 - c) Present school curriculum.
 - 2.4.3 Objectives of teaching and learning of English at primary, secondary and Higher Secondary stage.

Area – B

Unit – 3 Approaches and methods of teaching and learning of English in its historical perspective with reference to –

- 3.1 Grammar - Translation method.
- 3.2 Direct method.
- 3.3 Structural Approach.
- 3.4 Communicative Approach.

Unit – 4 Communicative approach to the teaching and learning in English.

- 4.1 Concept of communicative language teaching (CLT).
- 4.2 Principles of communicative methodology.
- 4.3 Main features of CLT.

Unit – 5 Skill in CLT

- 5.1 Listening skill
 - Nature.
 - Types - focussed, casual.
 - Objectives of teaching and learning of listening skill.
 - Procedures and techniques to develop listening skill.
- 5.2 Speaking skill
 - Nature
 - Process of teaching speaking skill
 - Objectives of teaching and learning of speaking skill
 - Procedures and techniques to develop speaking skill
- 5.3 Reading skill
 - Objectives of teaching and learning of reading skill
 - Purposes of reading
 - Styles of reading skill –
 - i) Skimming
 - ii) Scanning
 - iii) Receptive
 - iv) Responsive
 - Procedures and techniques to develop reading skill

- 5.4 Writing skill- Nature
- Objectives of teaching and learning of writing skill.
 - Types of writing copying, dictation, conversation (transcoding), guided/free composition.
 - Procedure and technique to develop writing skills
- 5.5 Communicative skills –
- Nature of skill integration in communicative approach
 - Procedure and technique to develop communicative skills.

Unit – 6 Class room material, procedures and techniques

- 6.1 Audio-visual aids and visuals
- 6.2 Text books and teacher's handbooks
- 6.3 Language laboratory
- 6.4 Substitution tables
- 6.5 Pair work and group work
- 6.6 Role play and simulation
- 6.7 Dramatization
- 6.8 Games and problem solving

Unit – 7 Phonemic sound system of English

- 7.1 Phonemic script
- 7.2 Vowels and diphthongs
- 7.3 Consonants and consonant clusters
- 7.4 BRP and IRP
- 7.5 Phonemic transcription
- 7.6 Stress – word and sentence stress, its purpose
- 7.7 Intonation – its purpose

Unit – 8 Grammar and Usage Part – I

- 8.1 Approach towards grammar in new context
- 8.2 The concept of grammatical sentence
- 8.3 Types of grammar –
- a) Descriptive
 - b) Prescriptive
- 8.4 Kinds of grammar -
- a) Learner's grammar
 - b) Teacher's grammar
 - c) Linguist's grammar
- 8.5 Relationship between grammar and writing skill
- 8.6 What is a sentence?
- Kinds – Declarative, Imperative, Interrogative, Exclamatory.
- Functions of sentences.
- 8.7 The noun phrase – The structure of noun phrase.
- 8.8 The verb phrase – The structure of verb phrase.
- Main verb and auxiliary verb.
- 8.9 Types of sentences - Simple, complex, compound.
- 8.10 Clauses – analysis and functions.

Unit - 9 Grammar and Usage Part - II

- 9.1 Main word classes
 - a) Noun - Kind, Number.
 - b) Main verb - Verb patterns (Basic sentence patterns), regular, irregular, time, tense, aspect and uses, active / passive voice.
 - c) Adjectives - kinds.
 - d) Adverbs - kinds
- 9.2 Minor word classes
 - a) Auxiliaries - kinds
 - b) Determiners - functions
 - c) Pronouns - kinds
 - d) Prepositions - functions
 - e) Conjunctions - kinds and functions
- 9.3 Reported speech
- 9.4 Transformation - Degree, voice, either-or, neither-nor, remove too, so-that, hardly-when, If-not, unless, no sooner than, As soon as, Affirmative, Negative, Exclamatory, Interrogative, Question tag.
- 9.5 Figures of speech- simile, metaphor, Personification, Apostrophe, Hyperbole, Climax, Anti-climax, Transferred Epithet.

Area - C

Unit - 10 Planning and Evaluation

- 10.1 Planning - Year plan, Unit plan, Sub-unit plan
- 10.2 Communicative testing
- 10.3 Error analysis
 - What is error?
 - What is error analysis?
 - Types of errors
- 10.4 Diagnostic testing
- 10.5 Remedial teaching

Area - D

Practical work

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Recommended Books

1. Littlewood W. 1983 : Communicative language teaching CUP.
2. Richards J & T.S. Rodgers 1995 : Approaches and methods in language teaching : CUP.
3. Johnson K.& Keith Morrow, 1983 : Communication in the class room. Applications and methods for communicative approach, Longmans.
4. Byrne D. 1976 : Teaching oral English : Longmans.
5. Harris D. 1974 : Teaching English as a second language.

6. Randolph Quirk and Sidney Greenbaum : A university grammar of English : Longman.
7. Geetha Nagraj : English language teaching approaches, methods, techniques.
8. Leech and Svartvick 1974 – A communicative grammar of English – Longman.
9. Sardana, Kamla 1972 : A fresh look at errors in English – Classical publishing Company.
10. Teacher's handbooks.
11. Syllabus of S.S.C. from V to XII.
12. Communicative language teaching in English – Prof. Pandit B.B., Principal D.A.Suryawanshi, Prof. M.P. Kute, Nutan Prakashan, Pune.
13. A new approach to teaching of English in India – M.S. Sachdev. – Parkash Brothers – Ludhiayana.
14. Teaching of English Dr. P.S. Chaudhari, Vyanketesh Prakashan, Jalgaon.
15. English language teaching – Critical study of methods and approaches – Kripa K. Gautam, Herman Publishing House, New Delhi, 1988.

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आशयासह अध्यापन पध्दती - संस्कृत

उद्दिष्ट्ये :

१. विद्यार्थी शिक्षकास संस्कृत भाषेचे महत्त्व समजावून देणे.
२. विद्यार्थी शिक्षकास संस्कृत भाषेची आवश्यकता समजावून देणे.
३. संस्कृत भाषेतील प्राथमिक कौशल्यांशी विद्यार्थी शिक्षकांचा परिचय घडवून आणणे.
४. विद्यार्थी शिक्षकास संस्कृत भाषेतील प्राथमिक कौशल्ये आत्मसात करून घेण्यास मदत करणे. (श्रवण, भाषण, वाचन, लेखन)
५. विद्यार्थी शिक्षकास माध्यमिक स्तरावरील संस्कृत अध्यापनाच्या उद्दिष्टांशी परिचित करणे.
६. विद्यार्थी शिक्षकांचा उच्च माध्यमिक स्तरावरील संस्कृत अध्यापनाच्या उद्दिष्टांशी परिचय घडवून आणणे.
७. संस्कृत भाषा अध्ययनाच्या सिद्धान्ताशी परिचित करणे.
८. संस्कृत अध्यापनाच्या विविध पध्दतींचा परिचय करून देणे.
९. इयत्ता ८ वी ते १२ वी पर्यंतचा अभ्यासक्रम अकाल होण्यास मदत करणे.
१०. संस्कृतच्या विविध पाठनियोजन पध्दतींशी परिचय घडविणे.
११. संस्कृत भाषा अध्ययनाचे मूल्यमापन व परीक्षण यांची क्षमता निर्माण करणे.
१२. संस्कृत भाषेच्या अभ्यासाची अभिरुची विद्यार्थ्यांच्या मनात विकसित करणे.
१३. संस्कृत भाषा व इतर भारतीय भाषा यांचा तुलनात्मक अभ्यास करण्यास मदत करणे.

विभाग - अ

१. आशयासह अध्यापन पध्दती -

१.१ स्वरूप, आवश्यकता व महत्त्व.

२. संस्कृत भाषेचे महत्त्व -

- २.१ भारतीय जीवनातील संस्कृतचे स्थान व महत्त्व.
- २.२ भारतीय संस्कृतीत संस्कृत भाषेचे योगदान.
- २.३ भारतीय भाषा व संस्कृत भाषा यांचा परस्पर संबंध.
- २.४ संस्कृत भाषेचे वाङ्मयीन श्रेष्ठत्व.
- २.५ प्राचीन व अर्वाचीन विविध अभ्यासशाखा व संस्कृत यांचा परस्पर संबंध.
- २.६ आधुनिक काळात (एकविसाव्या शतकात) संस्कृत अध्ययनाची आवश्यकता व महत्त्व.

३. संस्कृत भाषा अध्यापनाची उद्दिष्ट्ये व्हे

- ३.१ प्राथमिक उद्दिष्ट्ये - (श्रवण, भाषण, वाचन व लेखन)
- ३.२ वाङ्मयीन किंवा व्यापक उद्दिष्ट्ये.
- ३.३ संस्कृत अध्ययनाची वर्गातर्गत उद्दिष्ट्ये (पाठ टाचणातील उद्दिष्ट्ये)

४. संस्कृत भाषेचा अभ्यासक्रम -

अ) गाभाभूत आशय व अध्यापन पध्दती -

- ४.१ लिपी, वर्णाक्षरे - स्वर, व्यंजने, उच्चारण स्थान, अयोग्य उच्चारणामुळे होणारे अर्थबदल, शुद्ध उच्चारणाचे महत्त्व.

- ४.२ शब्दसिद्धी - उपसर्ग, प्रत्यय, धातुसाधिते, तदिधते, कृदन्ते.
 ४.३ वाक्यरचना - स्वरूप व वैशिष्ट्ये - शब्दक्रम.
 ४.४ प्रयोजक रचना, कर्मणि रचना, सतिसप्तमी रचना.
 ४.५ विभक्ती - उपयोग व अर्थ.
 ४.६ समानार्थी व विरुद्धार्थी शब्द.
 ४.७ प्रयोग.
 ४.८ काळ व अर्थ.
 ४.९ इयत्ता ८ ते १२ वी च्या वर्गासाठी येणारी नामे - सर्वनामे, रूपसिद्धी
 इयत्ता ८ ते १२ वी च्या वर्गासाठी येणारी क्रियापदे (धातू)
 इयत्ता ८ ते १२ वी च्या वर्गासाठी असणारी रूपे ओळखणे.
 ४.१० समास
 ४.११ संधी
 ४.१२ सुभाषिते - इयत्ता ८ ते १२ वी च्या वर्गासाठी सुभाषिते पाठान्तर, सार्थ भाषान्तर, स्पष्टीकरण.
 ४.१३ सोप्या संस्कृत भाषेत दहा ओळीत रचना लेखन.
 ४.१४ विशेषणे.
 ब) माध्यमिक व उच्च माध्यमिक शाळेतील संस्कृत भाषेचा अभ्यासक्रम स्वरूप, वैशिष्ट्ये, उणीवा व मर्यादा.

५. संस्कृतचे पाठ्यपुस्तक
 ५.१ आदर्श पाठ्यपुस्तकाचे निकष.
 ५.२ प्रचलित पाठ्यपुस्तकाचे परीक्षण.

विभाग - ब

६. संस्कृत अध्यापनाच्या पध्दती
 ६.१ पाठशाळा पध्दती
 ६.२ डॉ. भांडारकर पध्दती
 ६.३ प्रत्यक्ष पध्दती
 ६.४ संस्कृत - अध्ययनाचे सिद्धान्त
७. संस्कृत व्याकरणाचे अध्यापन
 ७.१ व्याकरणाच्या अध्यापनाचे महत्त्व
 ७.२ व्याकरणाच्या अध्यापनाची उद्दिष्ट्ये
 ७.३ व्याकरणाच्या अध्यापन पध्दती
 ७.४ संस्कृतभाषा व मातृभाषा (मराठी) यातील साम्य व वेगळेपणा
८. संस्कृत गद्याचे अध्यापन
 ८.१ गद्याच्या अध्यापनाचे महत्त्व.
 ८.२ गद्याच्या अध्यापनाचे हेतु.
 ८.३ गद्याच्या अध्यापनाच्या पध्दती.
९. संस्कृत पद्याचे अध्यापन.
 ९.१ संस्कृत पद्याच्या अध्यापनाचे महत्त्व.
 ९.२ संस्कृत पद्याच्या अध्यापनाचे हेतु.
 ९.३ संस्कृत पद्याच्या अध्यापन पध्दती.

विभाग - क

१०. नियोजन व मूल्यमापन

- १०.१ पाठनियोजन, घटक नियोजन, संविधान तक्ता, घटक चाचणी, दार्षिक नियोजन.
- १०.२ संस्कृत अध्यापनासाठी उपयुक्त शैक्षणिक साधने व त्यांचे महत्त्व.
- १०.३ संस्कृतशा अध्यापक.
- १०.४ संस्कृत भाषाभिरुचीसाठी विविध उपक्रम.
- १०.५ नैदानिक कसोट्या व उपचारात्मक अध्यापन.

● मूल्यमापन -

लेखी चाचण्या, तोंडी चाचण्या, चाचण्यांचे स्वरूप व कार्यवाही.

विभाग - ड

प्रात्यक्षिक कार्य

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संदर्भसूची :

१. त्रिपाठी बाबूराम - संस्कृत व्याकरणम् - विनोद पुस्तक मंदिर, आगरा.
२. पाण्डेय राम शकल - संस्कृत शिक्षण - विनोद पुस्तक मंदिर, आगरा.
३. साठे प्रतिभा - सुबोध संस्कृत व्याकरण - नितीन प्रकाशन, पुणे
४. जोशी प्र.शं. - सुगम संस्कृत व्याकरण - नितीन प्रकाशन, पुणे

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Content Cum Methodology – Urdu

Objectives :

- To enable the pupil teacher
1. To acquire proficiencies in speaking, reading and writing urdu with a view to making his teaching urdu effective.
2. To understand the role of mother language in the education of the child in his individual and social life.
3. To acquaint him self with essential aspect of Urdu grammar, usage, composition, different forms of prose and poetry and different methods of teaching of these aspects.
4. To understand the scope of the syllabi in Urdu prescribed for standard V to XII and to develop critical attitude towards the same.
5. To acquire skills in planning gathering and evaluation in Urdu language.
6. To acquire the knowledge the effective means, techniques, apparatus and methods to realize the objectives.
7. To acquire positive attitude towards Urdu and it's teaching.

Area – A

Importance of Urdu language

Unit – 1 Importance of Urdu as a mother tongue :

- 1.1 Importance of Urdu as mother tongue and it's place in secondary schools.
- 1.2 Aims and objectives of teaching Urdu as mother tongue in secondary and higher secondary schools.

Unit – 2 Structure of Urdu language :

- 2.1 Origine of Urdu language.
- 2.2 Relation of Urdu with other languages, viz. (Hindi, Persian, Arabic)
- 2.3 Qualities of a good Urdu teacher.

Unit – 3 Critical study of Urdu text book :

- 3.1 Syllabus of Urdu as mother tongue in secondary schools in Maharashtra State and a critical study of present text books (from V to XII std.)
- 3.2 Qualities of Urdu text book.

Unit – 4 Elementary knowledge of different forms of prose :

- 4.1 Short stories, afsana and novel.
- 4.2 Drama, essay and biography (sawane).
- 4.3 Letters and Tanz-o-mazah.
- 4.4 Safarnama (Travel logue), Khakanigar (pensketch)

Unit – 5 Methods of teaching prose :

- 5.1 Nature of different methods of teaching prose.

Unit – 6 Elementary knowledge of different forms of poetry :

- 6.1 Nazm nagari.
- 6.2 Masnavi and Qaseeda.
- 6.3 Marsiyah, Rubai and Gazal.
- 6.4 Nazm-e-varra (Bank verse) and Nazme Azad (free verse)

Unit – 7 Methods of teaching poetry :

- 7.1 Nature of different methods of teaching poetry.

Area - B

Grammar

Unit – 8 Importance of grammar in Urdu language :

- 8.1 Formation of verse (prefixes-sabqe, suffixes-lahege), nouns, pronouns, adjectives, verbs and their kinds and tenses (zamane).
- 8.2 Cases (Halate failee, Halate Mafooli, Halate Exafi).
- 8.3 Numbers (Wahid -- Jama).
- 8.4 Opposite words (Mutazad Alfaz), Gender (Tazkeer-Tonees).
- 8.5 Idioms and proverbs arising out of the text books.
- 8.6 Kinds of sentences (simple, compound, complex).

Unit – 9 Figures of speech :

- 9.1 Simili (Tashbhi), Methafer (ishteara), Talmeeh.
- 9.2 Tajneese Taam, Mubalega, Husne Taleel.
- 9.3 Maratun Nazeer, Tajahule Arfana, Tazaad, Ehaam.

Unit – 10 Metere and Scansion (Bahreen and Taqti) :

- 10.1 Ilme urooz; Tareef and principles.
- 10.2 Importance urooz in urdu shaeri.
- 10.3 Bahere Mutaqarib (Masammin Saalim).
- 10.4 Bahere Hajaz (Musammia Salim).
- 10.5 Bahere Kaamil.
- 10.6 Punctuation marks (Rumooz-o-aukaf)
- 10.7 Methods of teaching grammar.

Unit – 11 Composition :

- 11.1 Correct spelling and pronunciation. (Sahi Imla-a-Talaffuz)
- 11.2 Maxims of good hand-writing.

- 11.3 Language mistakes, correction and assessments.
- 11.4 Different types of composition, essay writing, letter writing, precise, expansion of ideas, para-phrase, comprehension, story writing.
- 11.5 Methods of teaching composition.

Unit – 12 Teaching aids :

- 12.1 pictures, charts.
- 12.2 Film strips, models.
- 12.3 Projector, radio, T.V., Lingua phone etc.

Area - C

Planning and Evaluation

Unit – 13 Planning and evaluation in urdu language :

- 13.1 Preparation of yearly plan, unit plan, lesson plan in the subject.
- 13.2 Different types of portions and construction of unit tests.
- 13.3 Other tools of evaluation; interview, questionnaire, check list, rating scale.
- 13.4 Diagnostic test and remedial teaching for different area.

Area - D

Practical work

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Reference Books :

- | | | | |
|-----|---------------------------------|---|------------------------------|
| 1. | Qawaid-e-urdu | - | Maulvi Abdul Haq. |
| 2. | Hum Kaise Padhaen | - | Dr. Salamatullah. |
| 3. | Dars-e-Balagat | - | Taraqqi-e-urdu board, Delhi. |
| 4. | Hum urdu kaise padhaen | - | Moinuddin. |
| 5. | Imla Nama | - | Gopichand Narang. |
| 6. | Mazmoon Nagari | - | Akhlaque Ahmad Delhvi. |
| 7. | Urdu Zaban Ki Tadrees | - | Moinuddin. |
| 8. | Ashfe Adab Ka Ireqa | - | Mohd. Shafi Murtuza. |
| 9. | Teaching of mother tongue | - | W.N. Ryburn. |
| 10. | Fane Shaeri | - | Akhlaque Ahmad Dehelvi. |
| 11. | Urdu Qawaid – (V to VII) | - | Bal Bharti, Pune. |
| 12. | Schate Alfaaz | - | Badrul Aasan. |
| 13. | Urdu Zaban Ki Tashkeel | - | Dr. Mirza Khalil Beg. |
| 14. | Sarf-o-Nahao | - | Maulvi Abdul Hoque. |
| 15. | Tadrees-e-Urdu | - | Dr. Farman Fatehpuri. |
| 16. | Aawozgar, Tadrees-e-Urdu Number | - | Dr. Akbar Rahmani. |
| 17. | Urdu Zaban Ka irteqa | - | Dr. Shaukat Sabzawari. |
| 18. | Adabi Asnaf | - | Dr. Gyan Chand Jain. |
| 19. | Urdu Kaise Padhaen | - | Maulvi Saleem. |

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CONTENT CUM METHODOLOGY – HISTORY

Objectives : To enable the pupil-teacher.

1. To understand the concept and nature of content-cum methodology of History.
2. To understand the nature of History.
3. To understand the meaning of History.
4. To understand the modern concept of History.
5. To understand the scope of History.
6. To understand the purpose and place of History of secondary and higher secondary level.
7. To understand the aims and objectives of teaching History.
8. To decide and write instructional objectives with their specification.
9. To evaluate critically the textbook of History.
10. To understand and study the curriculum of History of secondary and higher secondary level.
11. To understand the nature of various methods of teaching History.
12. To study the methods critically.
13. To develop adequate skill in selecting and using various methods for different units.
14. To develop adequate skills in selecting and using instructional material in History.
15. To understand the concept of evaluation in relation to History.
16. To prepare and use various tools of evaluation in History.
17. To fulfill national objectives like national integration, through teaching of History.
18. To develop extra activities for developing interest in History.

Area - A

Unit -1

- 1.1 Content-cum-Methodology - A concept.
 - i) Concept of content-cum methodology.
 - ii) Nature of content-cum methodology.
 - iii) Importance of content-cum methodology.
- 1.2 Concept of History.
 - i) Etymological meaning of History.
 - ii) Various definitions of History.

- iii) Modern concept of History.
- iv) Nature and scope of History.

1.3 Types of History.

- i) Purpose and place of History in the secondary and higher secondary curriculum.
- ii) Co-relation of History with other subjects.
(Languages, Geography, Science, Mathematics.)

Unit –2

2.1 Objectives of teaching History.

- i) Objectives of teaching History of secondary and higher secondary level as prescribed by State Government.
- ii) Instructional objectives – How to decide instructional objectives for a particular unit and how to write their specifications.
- iii) Internal and external characteristics of good text book of History.

2.2 Construction of the curriculum of History.

2.2.1 Methods of designing the History curriculum.

- i) Concentric method
- ii) Chronological method.
- iii) Topical method.
- iv) Periodic method.

2.2.2 Study of different methods of teaching History.

- i) Story telling method.
- ii) Lecture method.
- iii) Discussion method.
- iv) Source method.
- v) Project method.
- vi) Dramatization (Technique)

Note : These methods should be studied from the following points.

- i) Meaning
- ii) Characteristics
- iii) Advantages
- iv) Limitations

2.2.3 Study of teaching aids.

- i) Reference Material–Source books and historical source books.
- ii) Audio – visual aids.
- iii) History room.
- iv) History teacher – His attitude, outlook creativity and nature.

Area - B

Unit – 3

3.1 Core content with respective methodology.

- i) Ancient History.
- ii) Evolution of man (paleolithic, neolithic, stone age)
- iii) Civilizations - a) Harappan b) Arab c) Greek d) Egypt.
- iv) Vedic period, Jainism and Buddhism.
- v) Dynasties – Maurya and Gupta.
- vi) Aryan Invasion.

Unit – 4

4.1 Medieval History – India

- 4.1.1 Rise and fall of Maratha Empire (1500 to 1818)
(With reference to the content in the prescribed text book)
- 4.1.2 Rise and fall of Mughal Empire (1500 to 1750)
(With reference to the content in the prescribed text book)
- 4.1.3 Religious and cultural awakening in medieval India.
Sects – Varkari, Shairva, Sufi, Sikha

Unit – 5 Medieval History – Europe

- 5.1 Fedeualism in Europe.
- 5.2 Reformation movement in Europe.
- 5.3 Renaissance.

Unit – 6 Modern History – India

- 6.1 The advent of Europeans struggle for power in India.
- 6.2 Economic, social, religious consequences of British rule in India.
- 6.3 Indian freedom movement.
From – 1857 to 1920
From – 1920 to 1947

Unit – 7 Modern History –

- 7.1 Two world wars.
- 7.2 World peace movement
(league of nations and UNO)

Unit – 8 Social reform movement in India –

- 8.1 Social reformers –
 - 8.1.1 Raja Rammohan Roy.
 - 8.1.2 Jyotiba Phule.
 - 8.1.3 Swami Vivekanand.
 - 8.1.4 Dayanand Saraswati.
 - 8.1.5 Nyayamurti Ranade.
- 8.2 Political revolution -
 - i) America
 - ii) France
 - iii) Russia
- 8.3 Industrial revolution.

Unit – 9

- 9.1 Rise of Democracy in England.
- 9.2 Socialism Communism and Internationalism.
- 9.3 Discovery of new lands and its impact.

Area – C

Unit – 10 Planning and Evaluation

- 10.1 Planning – Year plan, Unit plan, Lesson plan.
- 10.2 Testing – a) Types of Tests.
b) Characteristics and limitations.

Area – D

Practical work

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Reference Books :

- | | | |
|----|----------------------------|---|
| १) | इतिहास अध्यापन पध्दती - | सी.म. तिवारी, नुतन प्रकाशन, पुणे |
| २) | इतिहासाचे अध्यापन - | न.रा. पारसनीस, व.ज. धारूरकर, व्हीनस प्रकाशन, पुणे |
| ३) | इतिहास शास्त्र व कला - | वि.द. घाटे |
| ४) | इतिहास पाठ्यपुस्तके - | इ. ५ वी ते १२ वी |
| ५) | Teaching of History - | S.K. Kochar |
| ६) | Teaching of History - | A.K. Arora |
| | | आशयवृध्दीसाठी |
| १) | जगाचा इतिहास - | सुमन वैद्य |
| २) | जगाचा इतिहास - | ओनुरकर, महाजन |
| ३) | अर्वाचीन भारताचा इतिहास - | डॉ. प्र.न. देशपांडे |
| ४) | अर्वाचीन भारताचा इतिहास - | कोलारकर |
| ५) | भारताचा इतिहास - | जयसिंगराव पवार |
| ६) | मध्ययुगीन भारताचा इतिहास - | जयसिंगराव पवार, मा.म. देशमुख |
| ७) | मराठी रियासन - | रियासनकर सरदेसाई |

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CONTENT CUM METHODOLOGY – GEOGRAPHY

Objectives : To enable the pupil-teacher.

- 1 To understand the nature and structure of Geography.
- 2 To understand the curriculum and syllabus of Geography at secondary level.
- 3 To understand the aims and objectives (with specification of teaching Geography).
- 4 To develop adequate skills in using various methods of teaching Geography.
- 5 To develop adequate skill in using educational aids in Geography.
- 6 To develop adequate skill in preparing year plan, unit plan, lesson plan, question items, and unit test in Geography.
- 7 To understand the facts, terms, concepts and principles of Geography.
- 8 To apply facts, terms, concepts and principles of Geography.
- 9 To develop ability for self study, analysis, problem solving, critical thinking and evaluation.
- 10 To understand the concept of evaluation and use of various evaluation tools in Geography.
- 11 To promote value of National Integration and International understanding.
- 12 To develop desirable attitude and appreciate contribution of Geography to life.

Area – A

Unit – 1 Meaning, Nature and objectives of teaching Geography.

- 1.1 Concept and nature of content cum methodology.
- 1.2 Various concepts and definitions of Geography and explores of Geography.
- 1.3 Scope of Geography and its co-relation with other subjects.
- 1.4 Place of Geography in school curriculum.
- 1.5 Nature of syllabus – linear, concentric, topical.
- 1.6 Critical study of text book in light of the syllabus.
- 1.7 General objectives.
- 1.8 Instructional objectives and their specifications.

Area – B

Unit – 2 Methods, techniques and teaching aids in Geography.

2.1 Teaching methods :

- | | |
|--------------------------|-------------------------|
| a) Story telling. | b) Journey method. |
| c) Excursion method. | d) Object method. |
| e) Demonstration method. | f) Experimental method. |
| g) Regional method. | h) Project method. |

Note : These methods are to be studied from the following points of view.

- i) meaning, principle, characteristics of these methods will reference to the students at various standards.
- ii) Their limitations.

2.2 Techniques of teaching Geography.

- | | |
|----------------|----------------------|
| a) observation | b) questioning. |
| c) map reading | d) local Geography. |
| e) co-relation | f) local field work. |

2.3 Teaching aids.

- a) Non projecteried aids : maps, charts, atlas, pictures, globes, graphs, models, specimen, black board.
- b) Projecterised aids : Epidiascope, projector, T.V. slides etc. meteriological instruments, Computer, Internet.
- c) Books : Text books, Reference books, Teachers hand-book, journals, Newspaper.
- d) Geography room.

Unit – 3 Astronomical Geography

- a) Solar system, its origine, components of solar systems.
- b) The earth-shape and size, motions of the earth, rotation, revolution and their effects. Latitudes & longitudes, longitude and local time, standard time, International date line.
- c) The moon and its motions, phases of the moon, Eclips, tides and their effects on human life.

Note : i) Methodology for lower classes : Story telling, journey, demonstration, experiments

Techniques : observation, question answer, globe reading, Home Geography, working models, pictures, diagrams. To prepare models to explain the concepts.

ii) Methodology for Higher classes : (VIII to X)

lecture method, demonstration, experimental method, project method.

Techniques : observation, question-answer, local geography. Workable modes to be prepared and used.

Unit – 4 Physical Geography.

- a) structure of the earth- interior and exterior, continents and ocean and their distribution.
- b) Major land formation :
 - i) Rocks.
 - a) Volcano - causes and effect formation of igneous rocks.
 - b) Weathering - denudation and deposition formation of sedimentary rocks.
 - c) Slow crystal - vertical and horizontal movements and their effects, earthquakes, metamorphic rocks.
 - d) Work of river.
 - e) Ground water.

Note : i) Methodology : Demonstration, Excursion, Project.

Techniques : observation, local Geography

Unit – 5 Oceanography

- a) Properties of sea water.
- b) Ocean currents and their effects.
- c) Islands.

Unit – 6 Climatology.

- a) Atmosphere and climate.
- b) Pressure belts, winds and their types.
- c) Temperature and humidity.
- d) Rains and their types.
- e) Rainfall distribution in the world.

Note : i) Methodology for lower classes : Demonstration, excursion, project method.

Techniques : observation, local Geography

- ii) Methodology for higher classes : Lecture method, Heuristic, experimental project.

Techniques : observation, map & diagram reading, reading of meteorological instruments and drawing conclusion.

Unit – 7 Regional Geography

- a) Concept of natural regions.
- b) Natural regions of India.
- c) Our neighbouring countries : Pakistan, Bangladesh, Myanmar, Shrilanka, Japan and Nepal.
- d) Concept of developed and developing countries.
- e) Natural regions of the world -
 - i) Equatorial regions
 - ii) Taiga
 - iii) Steppes and prairies
 - iv) Savana
 - v) Hot Desert
 - vi) Monsoon
 - vii) Mediterranean
 - viii) Tundra.

Note : i) Methodology for lower classes : Story telling, Journey, object method, excursion,

Techniques : local Geography, observation, map-reading.

ii) Methodology for higher classes : Regional method, lecture method, project method.

Unit – 8 Human Geography

a) Man and his environment.

b) Man's basic needs and his environment.

c) Industry.

d) Trade.

e) Settlement.

f) Transportation.

Note : i) Methodology for lower classes : Journey method, Story method, excursion,

Techniques : observation, local Geography, map-reading.

ii) Methodology for higher classes : lecture method, heuristic method, project method.

Techniques : study of local Geography, map-reading, observation.

Area – C

Unit – 9 Planning and Evaluation of Geography :

a) Year Plan

b) Unit Plan

c) Lesson Plan – Various types.

Unit – 10 Testing :

a) Tools of evaluation.

b) Written test and unit test in Geography.

c) Practical examination in Geography.

d) Diagnostic tests in Geography.

Area – D

Practical work

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Reference Books :

1. All Geography text books that are sanctioned by the Department of Education, Maharashtra State for Std. V to XII.
2. Principles of General Geography - Kazi & Joshi.
3. A Back ground of physical Geography by George P. Kellaway.
4. Physical Geography - P. Lake
5. India and Pakistan - Sapte & Learmonth.
6. Geography in School - Fairgrive.
7. Handbook of suggestion in testing of Geography - (UNESCO).
8. Teaching of Geography-Rao M.S., Anmol Pub., New Delhi, 1999.
9. भूगोलाचे अध्यापन - प्रा. पाटणकर
10. भूगोल अध्ययन व अध्यापन - प्रा. डॉ. मा. गो. बापट.
11. भूगोल अध्यापन पध्दती - प्रा. डॉ. द. वा. पौंक्षे
12. प्राकृतिक भूगोल - मो. द. तावडे
13. प्राकृतिक भूविज्ञान - प्रा. दाते व सौ. दाते व शिंदे
14. भूगोलाची मुलतत्त्वे - डॉ. वाघ व वर्तक.
15. आकाशाशी जडले नाते - डॉ. जयंत नारळीकर.
16. आशयासह अध्यापन पध्दती - भूगोल - प्रा. ए.आर. राणे.
17. भूगोलातील पाठ्यांश पध्दती - एकात्मता - डॉ. द. वा. पौंक्षे
18. पर्यावरण शिक्षण - डॉ. के.एम. भांडारकर
19. पर्यावरण शिक्षण - प्रा. अहिरराव, प्रा. मगर.

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CONTENT CUM METHODOLOGY – MATHEMATICS

Objectives : To enable the pupil-teacher.

1. To understand the nature, importance and scope of mathematics for the teaching (purpose).
2. To understand the syllabus and curriculum of mathematics at secondary level for the teaching of mathematics.
3. To understand the objectives of teaching mathematics.
4. To develop the adequate skills in using various methods and techniques of teaching mathematics.
5. To develop the adequate skill in preparing year plan, unit plan, lesson plan and unit test in mathematics.
6. To develop adequate skill in preparing audio-visual aids in mathematics.
7. To correlate mathematics with life, with other school subjects and within branches in mathematics.
8. To develop mathematical outlook for the teaching purpose.
9. To make competent and skillful teacher of mathematics.

Unit – 1 Nature of Mathematics

- a) Mathematics as a structured knowledge.
- b) Mathematics as a way of thinking.
- c) Mathematics as a science of verification.
- d) Mathematics as a special language.

Unit – 2 Importance Mathematics

- a) Values of teaching Mathematics –
 - i) Practical
 - ii) Disciplinary
 - iii) Cultural
- b) Correlation – within branches, other school subjects and life.

Unit – 3 Scope and Place of Mathematics

- a) Scope of Mathematics.
- b) Place of Mathematics in school curriculum.

Unit – 4 Objectives of teaching Mathematics

- a) General objectives of teaching Mathematics.
- b) Instructional objectives of teaching Mathematics in class teaching.

Unit – 5 Methods of teaching Mathematics

- a) Concept of content cum methodology.
- b) Methods of teaching Mathematics :-
 - i) Inductive – Deductive method.
 - ii) Analytical – Synthetical method.
 - iii) Heuristic method.
 - iv) Experimental method.

Unit – 6 Techniques of teaching Mathematics

- a) Concept attainment model.
- b) Inquiry training method.
- c) Advance organizer model.
- d) Programmed learning.

Unit – 7 Planning and Evaluation

- a) Meaning and importance of –
 - i) Lesson plan
 - ii) Unit plan.
 - iii) Year plan.
- b) Preparation and use of audio-visual aids.
- c) Diagnostic tests and achievement tests.
- d) Remedial teaching.

Unit – 8 Core content of Arithmetic & Algebra with respect to methods and techniques

- a) Set theory – Concept of a set, empty set, singleton set, finite and infinite set, subset, intersection of sets, union of sets, Venn diagram.
- b) Set of numbers and properties of N.W.I.Q.R. and graphs on number line.
Properties – closer, associative, cumulative, distributive.
- c) Equations –
 - i) Linear equations.
 - ii) Quadratic equations.
 - iii) Simultaneous equations.
 - iv) Graphs.
- d) Polynomials – Algebraic and rational expressions, Factorization, H.C.F., & L.C.M.
- e) Ratio-proportion and variation : Partnership & percentage.
- f) Sequences & Series :
A.P. & G.P. sequences & series, nth term of sequence and series, sum up to n terms of sequence and series.
- g) Indices and Logarithms.

Unit – 9 Core content of Geometry with respect to methods & techniques

- 9.1 Concepts – Point, line, line segments, ray, angle, plane, parallel lines, triangle, quadrilateral, polygon, circle, congruency, similarity, symmetry of diagram.
- 9.2 Theorems (only Std. X)
 - a) Theorems of triangle.
 - b) Theorems of quadrilateral.
 - c) Theorems on circle.
- 9.3 Solid figures and mensuration - Problem on area and volume.
- 9.4 Trigonometry -
Six trigonometric ratios, problems on height and distance.
- 9.5 Plane co-ordinate geometry –

- a) Cartesian co-ordinate system
- b) Distance formula
- c) Section formula
- d) Concept of a locus

Unit – 10

- a) Introduction of computer.
- b) Preparation of a programme in computer.
- c) Application of a computer with respect to mathematics.

Area - D

Practical work

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Reference Books :

१. गणित अध्यापन पध्दती - ह.ना. जगताप.
२. अध्यापनाची प्रतिमाने - डॉ. वासंती फडके.
३. गणित अध्ययन आणि अध्यापन - डॉ. ओक व डॉ. राऊळ.
४. महाराष्ट्र शासनाचे पाठ्यपुस्तके - इ. ५ वी ते १२ वी पर्यंत.
५. आशयासह अध्यापन पध्दती - डॉ. के.एम. महाजन.
६. गणित अध्यापन पध्दती - डॉ. भा.गो. यापट.
६. शै. तंत्रविज्ञान - ह.ना. जगताप.
८. Teaching of Mathematics – K.B. Siddu.
९. Teaching of Mathematics – Chhadda & Agrawal.
१०. Teaching of Mathematics – S.M. Agrawal.
११. Content-cum-methodology – Published by NCERT.
१२. Teaching of modern Mathematics – Dr. S. Packim, Daba house.
१३. Teaching of Mathematics in new Education – N.K. Ayanagar.
१४. Text – book of standard Vth to XIIth Mathematics.

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CONTENT CUM METHODOLOGY – SCIENCE

Objectives : To enable the pupil-teacher.

1. To understand the nature and importance of content cum methodology of teaching science.
2. To understand the curriculum and syllabus of Science at secondary level.
3. To understand the general and instructional objectives of teaching science.
4. To develop adequate skills in using various methods and techniques of teaching science.
5. To develop adequate skills in preparing year plan, unit plan, lesson plan and evaluation in science.
6. To develop adequate skills in preparing audio-visual aids and improvised apparatus useful in science.
7. To organize co-curricular activities in science.
8. To understand the core content in physical science and life science.
9. To develop scientific out look.

Area – A

Nature and Importance of Subject

Unit – 1 Content cum methodology in teaching learning of science

- 1.1 Content cum methodology – Concept & Nature.
- 1.2 Need and importance of content cum methodology in teaching learning science.

Unit – 2 Meaning, Nature & Importance of Science

- 2.1 Science is a process and product.
- 2.2 Science is a structured knowledge.
- 2.3 Values of teaching science.
- 2.4 Place and Science in school curriculum.
- 2.5 Nature of science syllabus (concentric, topic wise)
- 2.6 Critical study of textbook in light and syllabus.
- 2.7 Correlation (in different branches of science and with different school subjects.)

Unit – 3 Objectives of teaching science

- 3.1 General objectives.
- 3.2 Instructional objectives with specifications (as per Bloom's Taxonomy)

Area – B

Methods and techniques of teaching science

Unit – 4.1 Methods of teaching science

- a) Laboratory.
- b) Demonstration.
- c) Inductive – deductive.
- d) Heuristic.
- e) Field – trip.

Unit – 4.2 Techniques of teaching science

- a) Problem solving.
- b) Programmed learning.
- c) Concept attainment model.
- d) Advanced organiser model.
- e) Juresprudencial model.

Unit – 5 Facilities and equipments for teaching science.

- 5.1 Science laboratory.
- 5.2 Science fair, science club.
- 5.3 Audio-visual aids.
- 5.4 Teachers hand book, Bulletin.

Unit – 6 Science teacher – His attitude, out look creativity and nature.

Unit – 7 Core content of Physical science.

- 7.1 Measurement – Area, volume, units of measurement.
- 7.2 Motion – Laws and equations.
- 7.3 Energy – Sources, types and energy problems (light, heat, sound, magnetism).
- 7.4 Periodicity and periodic table.
- 7.5 Atom structure – Electronic configuration, atomic number, atomic weight, concept of isotopes.
- 7.6 Chemical bonds and chemical reaction.
- 7.7 Methods of purification of substance.

Unit – 8 Core concept of life science

- 8.1 Classification of plants and animals.
- 8.2 Ecosystem – (concept of food chain, environment pollution)
- 8.3 Cell structure and cell division (mitosis)
- 8.4 Natural resources and its preservation. Hybridization in plants and animals its benefit.
- 8.5 Recycling of wastes.

Unit – 9 Practical work in science

Importance, organization, evaluation of practical work.

Area - C

Planning for teaching and evaluation in Science

Unit - 10 Planning and evaluation.

- 10.1 Planning - Year plan, Unit plan, daily lesson plan
10.2 Unit test, diagnostic test and remedial teaching.

Area - D

Practical work

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Reference Book :

1. Teaching of physical science -- Anmol Publications Pvt. Ltd., New Delhi, 1995.
2. Teaching of Science today and tomorrow - Siddiqui.
3. Modern Science Teaching - R.C. Sharma.
4. Science Teaching - Y.K. Yadav
5. Science Teaching - Mangal
6. Science Teaching - Kohli
7. आशययुक्त अध्यापन पध्दती - डॉ. अनंत जोशी
8. विज्ञानाचे अध्यापन - डॉ. प्रभाकर हकीम
9. शास्त्र अध्यापन पध्दती - कदम, बोंदाई
10. विज्ञान पुस्तिका - कपोले, मुक्त विद्यापीठ
11. अध्यापन प्रतिमाने - वासंती फडके
12. शालेय पुस्तके - नवीन अभ्यासक्रम

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CONTENT CUM METHODOLOGY – COMMERCE

Objectives : To enable the pupil-teacher.

1. To understand the concept and nature of commerce content cum methodology.
2. To understand the nature, importance and scope of commerce.
3. To understand the aims and objectives of teaching commerce.
4. To understand the curriculum and syllabus of commerce at secondary level.
5. To develop adequate skills in using various methods of teaching commerce.
6. To develop adequate skills in preparing year plan, unit plan, lesson plan, question items and unit test in commerce.
7. To develop ability or self study, analysis problem solving, critical thinking and evaluation.
8. To understand the concept of evaluation and use of various evaluation tools in commerce.
9. To promote value of national integration and international understanding.
10. To understand basic concepts, ideas and principles in commerce.
11. To develop desirable attitudes and appreciate contribution of commerce.

Area – A

Unit – 1 Content cum methodology in commerce teaching

- 1.1 Content cum methodology – concept and nature.
- 1.2 Importance of content cum methodology of commerce teaching.
- 1.3 Implementation of content cum methodology of teaching commerce.

Unit – 2 Commerce subject and its structure

- 2.1 Meaning and scope of commerce.
- 2.2 Importance of commerce in daily life.
- 2.3 Place of commerce in school curriculum.
- 2.4 Interrelationship of commerce with other subject.
- 2.5 Structure of commerce at school level.

Unit – 3 Teacher, text book and commerce club

- 3.1 Commerce teacher and his qualities.
- 3.2 Characteristics of good commerce text book evaluation of commerce text book.

- 3.3 Commerce club-meaning, importance and different activities of commerce club.

Unit – 4 Aims and objection of teaching commerce

- 4.1 Aims (broad objectives)
4.2 Instructional objectives and their specifications.

Area – B

Unit – 5 Methods of teaching commerce

- 5.1 Lecture method.
5.2 Discussion method.
5.3 Inductive-deductive method.
5.4 Project method.
5.5 Problem solving method.
5.6 Revision method.
5.7 Role play method.
5.8 Singal commodity method.
5.9 Historical approach method.

Note : These methods are to be studied from the following points of view.

- a) meaning, principles, and characteristics of these methods with reference to the students at various standers.
b) Their limitations.

Unit – 6 Teaching aids

- 6.1 Maps, charts, pictures, graphs, blackboard.
6.2 Text book, reference book, teachers handbook.
6.3 Epidioscope, projector, T.V., film and film strips.
6.4 Visits and tours.
6.5 Actual illustrations from the field of business.
6.6 Commercial news reported in a newspapers.

Note : These teaching aids should be studies from the point of view of nature, importants, merit and demerits.

Unit – 7 Core content of commerce

- 7.1 Trade and commerce
a) Meaning, importance and difference between trade & commerce.
b) Evolution of money, primachine and machine age.
c) Types of trade – retail and wholesale.
d) Procedure of trade transaction.
e) Role of mercantile agent.
f) Modern commercial office.
7.2 Commercial organization
a) Sole traders.
b) Partnership.
c) Co-operative societies.
d) Joint stock company.

Unit – 8 Core content of commerce

- 8.1 Marketing
- 8.2 Salesmanship and advertising.
- 8.3 Banking.
- 8.4 Transport.
- 8.5 Insurance.

Area – C

Unit – 9 Planning for teaching commerce

- 9.1 Year plan.
- 9.2 Unit plan.
- 9.3 Lesson plan.

Unit – 10 Testing

- 10.1 Tools of evaluation.
- 10.2 Written and oral test in commerce.
- 10.3 Diagnostic test in commerce.

Area – D

Practical work

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Reference Books :

1. All commerce text books (specially elements of commerce) sanctioned by the Government of Education, Maharashtra State for Std. VIII to XII.
2. Lullo B. methods of teaching commerce – M.S. University, Baroda.
3. वाणिज्य शिक्षण - उदयविर सक्सेना, विनोद पुस्तक मंदिर, आग्रा.
4. वाणिज्य शिक्षण - कृष्णचंद्रसिंह जैन (राजस्थान हिन्दी ग्रंथ अकादमी)
5. वाणिज्य अध्यापन पध्दती - प्राचार्य नानकर, प्राचार्य गाजरे, नुतन प्रकाशन, पुणे
6. आशयमुक्त अध्यापन पध्दती - संपादक डॉ. अनंत जोशी.

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