

SAINIK SCHOOLS SOCIETY



ACADEMIC PLUS CURRICULUM
FOR
NEW SAINIK SCHOOLS

DAILY ROUTINE (DAY SCHOLARS)
FOR NEW SAINIK SCHOOLS

Sl No	Time/Period	Name of Activity	Remarks
1	07:30 Hrs	General assembly x 2 per Wk	Prayer, talk on current issues, announcements, National Anthem
		Special assembly x 2 per Wk	Oath taking, talk by staff/ students and conduct common value based activities specified by SSS
		School Gathering x 01 per wk	Activity as decided by school
2	08:00 – 13:30 Hrs	Academic Training/ Classes	Academic syllabus related to CBSE/State Board
3	13:30 – 14:00-Hrs	Seated Lunch at School Dining Hall	Training about all aspects of Dining Etiquettes/ Organized Meal.
4	14:00-14:30 Hrs	Rest	Lunch to be followed by quiet time/ own time for students.
5	14:30- 15:30 Hrs	Value Based Class x 2 per wk	Value based class as specified for each class by SSS.
		Value Based Activity x 2 per wk	Common value based competitions as specified by SSS.
		Skill Based Training x 01 per wk	Fire Fighting/ First Aid/ Self Defence Theory
		Skill Based Activity x 01 per wk	Fire Fighting/ First Aid/ Self Defence Practical/ Demo
6	15:45- 17:15Hrs	Sports & Games x 03 per wk	Indoor & Outdoor games based on available facilities
		Drill x 01 per wk	At Parade Ground
		NCC/Field craft Training x 02 per wk	To train students on NCC and various field craft signs/symbols/tactics etc
7	17:15- 17:30 Hrs	Return Sports Gear, Change and Leave for Home	

(Note:- Based on Physical and Geographical locations flexibility in time table to be considered)

DAILY ROUTINE (BOARDERS)
NEW SAINIK SCHOOLS

SI No	Time/Period	Name of Activity	Remarks
1	0500 to 0530 hrs	Wake up	
2	0530 to 0545 hrs	Tea & Roll Call	
3	0545 to 0600 hrs	PT Fall In	
4	0600 to 0630 hrs	PT	
5	0630 to 0715 hrs	Bath & Breakfast	
6	0730 to 1330 hrs	Join school with Day scholars	
7	1330 to 1400 hrs	Seated Lunch at School Dining Hall	Training about all aspects of Dining Etiquettes/ Organized Meal.
8	1400 to 1430 hrs	Rest	Lunch to be followed by quiet time/ own time for students.
9	1430 to 1530 hrs	Value Based Class x 01 per week	Value based class as specified for each class by SSS.
		Value Based Activity x 01 per week	Common value based competitions as specified by SSS.
		Skill Based Training x 01 per week	Fire Fighting / First Aid / Self Defence
		NCC/ Drill Training x 02 per week	NCC / Parade Training on School Ground
		Special period x 01 per week	Activity as decided by school
10	1530 to 1700 hrs	Sports & Games x 02 per week	Indoor & Outdoor games based on One School One Sport Scheme
		PT / Physical Fitness Training x 02 per week	PT for 45 min followed by athletic training for 45 min
		NCC/Field craft Training x 01 per week	To train students on various field craft signs / symbols / tactics etc.,
		Special period x 01 per week	Activity as decided by school
11	1700 to 1730 hrs	Return Sports Gear, Change	
12	1730 to 1750 hrs	Tea & Roll Call	
13	1800 to 2020 hrs	Supervised self-study	
14	2030 to 2100 hrs	Dinner	
15	2100 to 2120 hrs	Roll Call	
16	2130 to 2230 hrs	Own Time Work	
17	2200 to 2230 hrs	Lights off	

1. Academic Plus Curriculum for New Sainik Schools include the following :-
 - (a) Value Based Teaching.
 - (b) Value Based Activities.
 - (c) Basic Fire Fighting.
 - (d) Basic First Aid.
2. The Curriculum specified for a class may be adapted by the school as per the age group and understanding level of the students.
3. The sequence of Topic specified for the class may be modified if there is need. However, all topics should be covered in an academic year.
4. The School should adopt the appropriate teaching/learning methodology suitable for the topics to make class rooms interactive and interesting as per the age group of the students.
5. The Academic Plus Curriculum is subject to updates /revisions as promulgated from time to time by Sainik Schools Society.

VALUE BASED TEACHING

Class VI

1. Self Esteem
2. Gender equality
3. Unity and Integrity of India
4. Ethics, Values and morals
5. Public Speaking
6. Discipline
7. Indian Armed Forces - Indian Army
8. Eminent Indian Personality

Class VII

1. Goal Setting
2. Creativity
3. Competitive Spirit
4. Personal Hygiene
5. Communal Harmony
6. Indian Navy
7. Eminent Personalities

Class VIII

1. Future India in Science – Innovation (Atal Tinkering Labs, Atmanirbhar Bharat)
2. Patriotism
3. Character Building
4. Honour and Respect
5. Awareness of spread of Disease
6. Honesty
7. Indian Air Force
8. Eminent Indian Personality

Class IX

1. Attitude
2. Commitment on Duties
3. Adventure Sports
4. Maritime activity in India
5. Leadership qualities
6. Command Structure – Indian Navy
7. Indian Personalities
8. Central Armed Police Forces

Class X

1. Women Empowerment
2. Self-Awareness
3. Remote-Sensing
4. Eminent Personalities
5. Characteristics of an Ideal Leader
6. Indian Folk-lore, tales, dance, music and painting
7. Command Structure – Indian Air Force
8. Indian organisations - DRDO, HAL, NSTL, BHEL, BEL

Class XI

1. Harnessing the competitive spirit
2. Officer Like Qualities
3. Military Science
4. Maritime heritage of India
5. Space research of India
6. Command Structure – Indian Army

Class XII

1. Time Management
2. Inter personal skills
3. Career Guidance
4. War and Heroes
5. Defence Establishments
6. ISRO

VALUE BASED TEACHING

Class VI

1. Self Esteem
2. Gender equality
3. Unity and Integrity of India
4. Ethics, Values and morals
5. Public Speaking
6. Discipline
7. Indian Armed Forces –Indian Army
8. Eminent Indian Personality

CLASS VI			
THEME: PERSONALITY	UNIT:	SUBJECT: SELF ESTEEM	DURATION: 02 HOURS
<u>LEARNING OBJECTIVE:</u>			
<ol style="list-style-type: none"> 1. Build self-esteem by discovering their unique abilities and characteristics. 2. Self-esteem develops positive attitudes toward school and toward lifelong learning. 3. Self-esteem develops an awareness of and sensitivity to culture related issues. 			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1. Focus on the positive. 2. Only give constructive criticism. 3. Encourage students to find things they like about themselves. 4. Set realistic expectations. 5. Teach students to learn from their mistakes. 			
CONTENT			
<ol style="list-style-type: none"> 1. Meaning of Self-Esteem: Self-esteem refers to a person's overall sense of his or her value or worth. 2. Various factors: Genetics, Personality, Life experiences, Age, Health, Thoughts, Social circumstances, the reactions of others, Comparing the self to others. 3. Self-Esteem and Personality: Self-esteem may develop or fail to develop in an individual. Influences of self-esteem on the personality. 4. Self-Esteem vs. Self-Concept: Self-esteem is not self-concept, although self-esteem may be a part of self-concept. Self-concept is the perception that we have of ourselves, our answer when we ask ourselves. 5. Self-Esteem vs. Self-Confidence: Self-esteem is not self-confidence; self-confidence is about your trust in yourself and your ability to deal with challenges, solve problems, and engage successfully with the world. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Games/Activities on Self-Esteem 2. Chart on difference between Self–Esteem and Self-Confidence 			

CLASS VI**THEME:**UPHOLDING OF HUMAN
VALUE SYSTEMS**UNIT:****SUBJECT:**

GENDER EQUALITY

DURATION:

02 HOURS

LEARNING OBJECTIVES:

1. Students acquire knowledge on gender differences.
2. Students learn the rights and the equality of genders.

PEDAGOGICAL PROCESS:

1. Knowledge on gender and their physical differences and changes.
2. The rights of gender should be discussed.
3. To teach the equality in various places.

CONTENT

1. Access to resources and opportunities regardless of gender, including economic participation and decision-making; and the state of valuing different behaviours and aspirations regardless of gender.

2. History of human societies, Gender Bias, Efforts to fight inequality, The effect of gender inequality on health, Violence against women, Investigation and prosecution of crimes against women and girls, Harmful social practices indicating gender bias, Economic empowerment of women, Girls' access to education, Political participation of women, Political gender equality, Gender stereotypes, Informing women of their rights.

3. Importance of Gender Equality (Gender equality prevents violence against women and girls. It's essential for economic prosperity. Societies that value women and men as equal are safer and healthier. Gender equality is a human right).

ACTIVITIES

1. Workshops on gender sensitivity.
2. Seminars on rights and equality

CLASS VI			
THEME: PRIDE AND LOVE TOWARDS NATION	UNIT:	SUBJECT: UNITY AND INTEGRITY OF INDIA	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. Understand the value of Independence. 2. Realize the harmful effects of divisions and disintegration. 3. Develop a sense of Patriotism, co-operation and belongingness. 4. Understand the concept of checks and balance in real life. 			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1 Preparation of pictures of various freedom fighters 2 Newspaper Articles 3. Movies and shows 4. Videos on Nationalist Movement 			
CONTENT			
<u>HISTORY OF INDIAN INEPENDENCE</u>			
<ol style="list-style-type: none"> 1. Briefly discuss the Indian independence movement and bring out the sacrifices made by our National heroes. 2. Contribution of people from all regions (North, South, East, West) towards Indian Independence. 3. Partition and Independence in 1947. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Articles on Freedom Fighters. 2. Videos / Films on Freedom Fighters. 3. Drama 			

CLASS VI

THEME:
UPHOLDING OF HUMAN
VALUE SYSTEMS

UNIT:

SUBJECT:
ETHICS AND MORAL VALUES

DURATION:
02 HOURS

LEARNING OBJECTIVE:

1. Demonstrate ethical awareness, the ability to do ethical reflection, and the ability to apply ethical principles in decision-making.
2. Specific abilities and skills to make moral decisions using ethics.
3. Students should develop, demonstrate and act out their ethical abilities.

PEDAGOGICAL PROCESS:

1. The ethics is usually addressed under several themes, moral education being the most common conception of it.
2. Introducing ethics as a practical concept to the educational context makes the moral dimension of education clear and visible.

CONTENT

1. **Ethics:** Ethics is based on well-founded standards of right and wrong that prescribe what humans ought to do, usually in terms of rights, obligations, benefits to society, fairness, or specific virtues.
2. **Four Branches of Ethics**
 - (a) Descriptive Ethics.
 - (b) Normative Ethics.
 - (c) Meta Ethics.
 - (c) Applied Ethics.
3. **Ancient Ethics versus Modern Ethics:** Ancient Indian ethics is about living a good and virtuous life according to the ethical virtues, that is, to become a virtuous person, while the modern notion of ethics is primarily focused on self-interest and interest of other people.

ACTIVITIES

Story Telling, Anecdotes, Giving Situations and analysing response

CLASS: VI			
THEME:	UNIT:	SUBJECT:	DURATION:
PERSONALITY DEVELOPMENT		PUBLIC SPEAKING	02 HOURS
<u>LEARNING OBJECTIVES:</u> To help the students develop public speaking skills.			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1. Organizing 10-15 minutes section-wise morning assembly on all academic learning days. 2. Minimum three students may speak on a day each for duration of three minutes. One may be assigned the job of commenting on the performance of the speakers. 3. The teacher has to observe the performance and guide them on a daily basis. 			
CONTENT			
<ol style="list-style-type: none"> 1. How to prepare a speech, which areas are to be stressed and how. Beginning and ending the speech. 2. How to deliver speech based on topic / purpose. 3. Speeches have different functions: - <ol style="list-style-type: none"> (a) These include being persuasive (e.g. trying to convince the audience to vote for you or debate on a topic). (b) Informative (e.g. speaking about the dangers of climate change), (c) Entertaining (e.g. a best man's speech at a wedding) or celebratory (e.g. to introduce the winner of an award). (d) Some speeches may have more than one of these aims. 4. Use of appropriate body language and nonverbal communication. 5. It's very important that speakers make eye contact with all areas of the room, ideally with every person but with large audiences that isn't possible. Many students tend to look at one spot or at the teacher. One way to practise this is to ask each student to do a short 30 second introduction and then at the end get any student who feels the speaker did not look in his/her direction to raise their hand. 			
ACTIVITIES			
Class Assembly ,Prepared talk, Extempore, Commentary, Debate, Declamation, Role play Group Discussion etc.			

CLASS VI			
THEME: QUALITIES OF GOOD CITIZENS	UNIT:	SUBJECT: DISCIPLINE	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u> To inculcate the sense of discipline in students.			
<u>PEDAGOGICAL PROCESS:</u> 1. Plan and organize interactive classes 2. Practice what you preach 3. Establish a connection with your students 4. Reward good behaviour.			
CONTENT			
<p>1. What is discipline?</p> <p>2. Importance of discipline.</p> <p>3. How to imbibe discipline in personal life.</p> <p>4. This control is not forced upon the individual. It flows out from within. Hence, discipline is spontaneous and not a mere submission to authority in an obedient manner.</p> <p>5. The term 'discipline' refers to a state of orderly conduct of an individual which is gained through training in self-control and in habits of obedience to socially approved standards of thought and action. It implies a good understanding of right conduct. The formation of desirable habits and attitudes and an adherence to such standards are just and necessary. Manner of working and living in co-operation and the subordination of individual interests to group interests. True discipline therefore provides for both individual and group welfare in a democratic society.</p> <p>(a) <u>Preventative Discipline</u> - Measures taken in advance to prevent any unacceptable behaviour is called preventative discipline.</p> <p>(b) <u>Supportive Discipline</u> - It is possible that the preventive measures do not work as perfectly as expected and things may go wrong. At this point, the teachers may give warnings and show the students the right way of doing things. This is called supportive discipline.</p> <p>(c) <u>Corrective Discipline</u> - This comes after supportive discipline. When a student has failed to show any improvement despite numerous efforts at supportive discipline, corrective disciplinary actions come into play. Punishments such as suspension, and likewise fall under corrective discipline.</p>			
ACTIVITIES			
1. Group discussions	2. Team work	3. Presentations	

CLASS VI

THEME:
INDIAN ARMED FORCES

UNIT:

SUBJECT:
INDIAN ARMY

DURATION:
2 HOURS

LEARNING OUTCOME:

The Student must be made aware of the Indian Army, Its Broad Role, Ranks and Insignia

PEDAGOGICAL PROCESS:

The student can learn through class room teaching, watching videos or documentaries, Visiting Army Units, Reading Charts/Posters

CONTENT

The Student must be made aware of the Indian Army, Its Broad Role, Ranks and Insignia by classroom teaching, pictures, charts, Book Reading, Movies, Visits, Documentaries.

CLASS VI			
THEME: EMINENT INDIAN PERSONALITY	UNIT:	SUBJECT: EMINENT INDIAN PERSONALITY AS PROMULGATED BY THE SCHOOL	DURATION: 2 HOURS
<u>LEARNING OUTCOME:</u>			
The Student must be made aware of Two great Indians and their contributions to building of our nation/Contribution to our nation			
<u>PEDAGOGICAL PROCESS:</u>			
The student can learn through class room teaching, watching videos or documentaries, Visiting Museums and galleries, Access literature in form of books and on the internet.			
CONTENT			
The School management will prescribe biographical study of two great Indian personalities from history / freedom struggle / war heroes.			
ACTIVITIES			
Book Reading, Movies, Debate, drama			

VALUE BASED TEACHING

Class VII

1. Goal Setting
2. Creativity
3. Competitive Spirit
4. Personal Hygiene
5. Communal Harmony
6. Indian Navy
7. Eminent Personalities

CLASS: VII			
THEME: QUALITIES OF GOOD CITIZENS	UNIT:	SUBJECT: GOAL SETTING	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u> To help the students understand the need for goal setting and the merits of achieving the set goals. To tune the students to gain self-confidence and develop sense of commitment to complete the accepted task.</p>			
<p><u>PEDAGOGICAL PROCESS:</u> Discuss the limits of individuals and practical ways to set realistic goals. Teacher must encourage the students to set their own goals. Some of the activities will involve working with the individual students beyond class hours.</p>			
CONTENT			
<ol style="list-style-type: none"> 1. Set upper and lower limits on students' goals to teach realistic goal setting. 2. Use games to teach goal setting in a context with low pressure and high engagement. 3. Hold one-on-one goal-setting conferences with students to give them individual attention and help them learn to assess goal difficulty. 4. Encourage students to write down their goals rather than simply creating them and leaving them float around their mind. 5. Teach effective goal setting strategies (like setting SMART goals) to increase the likelihood of success and provide feedback on student progress. <ol style="list-style-type: none"> (a) Specific Students need to clarify who, what, when, and where of their goal. Have a discussion about using words that are specific vs. those that are ambiguous, or subject to interpretation. (b) Measurable Students need to be able to know when they have reached their goal or if they are making progress toward it. Have a discussion about Quantitative vs. Qualitative measurement. (c) Attainable/Actionable Students need to be realistic about what they can achieve this school year with the time and resources they have available. While "going to college" is a worthy goal, this is far into the future for most students. Work with students to help them understand that goals must also be things students can take action on now. (d) Relevant Students should be able to explain the personal and academic benefits. Talk with them about qualities that make a goal worthwhile. (e) Timely Students need to be able to achieve the goal by the end of the school year. As students are writing have them share their goals with a single peer to help them see if a single school year is a deadline that makes sense for this goal. 6. Provide direct instruction on goal setting and include instruction on self-evaluation. 7. Provide instructions on effective learning strategies in general, as students will need these broader skills to build their goal-setting abilities. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Assignments / Projects – Individual/ Group 2. Monitoring / Evaluation by peers 			

CLASS: VII			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: CREATIVITY	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
To help the students understand the need for discovering their passions for creativity. To train the students to polish their passions and spend their leisure time productively.			
<u>PEDAGOGICAL PROCESS:</u>			
Organizing club activities like photography, numismatics, philately, quiz, creative writing, spelling bee, clay modeling, wood craft, drawing and painting, and performing arts.			
CONTENT			
<ol style="list-style-type: none"> 1. Create a compassionate, accepting environment. Since being creative requires imagination and risk taking, students need to trust that they can make a mistake in front of you. 2. Encourage students to engage in problem solving and come up with as many creative solutions as possible. Give a small problem in the class and encourage the students to come up with as many solutions as possible. 3. Encourage autonomy, imagination and out of box thinking among the students. Conduct activities such as craft work, origami, storytelling etc., in classroom intended to promote imagination and out of box thinking. 4. Give specific assignments to promote creative thinking. Try adding words like "create," "design," "invent," "imagine," "suppose," to your assignments. Adding instructions such as "Come up with as many solutions as possible" or "Be creative!" can increase creative performance. 5. Experiment with activities where students can practice creative thinking. Many teachers have suggestions for creative activities they've tried as warm-ups or quick breaks. 			
ACTIVITIES			
Assignments, Hobby clubs, Drawing, painting, wood craft, origami, poetry / story / essay writing, making items using recycled material, collection of articles/items etc			

CLASS: VII			
THEME:	UNIT:	SUBJECT:	DURATION:
PERSONALITY DEVELOPMENT		COMPETITIVE SPIRIT	02 HOURS
LEARNING OBJECTIVES: To help the students understand the need for developing competitive spirit. To train the students to face the challenges in life with vigor.			
PEDAGOGICAL PROCESS: Organizing written / verbal quiz, map pointing, spelling bee, elocution, singing and poetry/ story/essay writing competitions.			
CONTENT			
<ol style="list-style-type: none"> 1. Discuss the true spirit of competition in a healthy manner. Discuss the advantages of being competitive. 2. Bring out the areas where students lose out due to lack of competitive spirit. Also discuss the need to take winning and losing both on your stride. 3. Make the students understand that there's no need to feel ashamed of seeking help. 4. It can be easy to let yourself think small because of the fear of failure, or even the fear of making a decision. But, to accomplish great things in life, you have to be open to taking risks. With whatever challenges may arise, always think and dream big. That way, you will achieve more than what you could have ever imagined. Try not to let your thoughts get in your own way. 5. Keep up the desire to do your best at all times. If you keep on improving your own performance with respect to your past performance, you are competitive. 6. When a challenge arises, be it a big test in school or an upcoming running race, don't give up! Persistence is a huge key to overcome challenges. Giving up means that you will neither overcome the challenge nor learn from it. Power through challenges by asking for support, feeling your feelings, and making a plan to work through it. 7. Generally, there is more than one way to get something done. However, there's always just one optimal way, or best way of doing it. To work smarter rather than harder, start by working backwards. 			
ACTIVITIES			
Self-evaluation of individual performance.			

CLASS: VII			
THEME:	UNIT:	SUBJECT:	DURATION:
HEALTH AND HYGIENE		CLEANLINESS	02 HOURS
LEARNING OBJECTIVES: To help the students learn personal hygiene and lead a healthy life. Help them spread the need for personal hygiene among their friends and relatives.			
PEDAGOGICAL PROCESS: Organizing lectures by health department officials, skits and role plays, poster making and habit formation.			
CONTENT			
<p>1. Teach: The most basic of hygiene rituals. A shower every day or two is a must, and always after a rigorous sports practice or outdoor play. Equip them with wash clothes and soap. Talk about gingivitis, cavities, and bad breath. Always have floss and mouthwash on hand.</p> <p>2. Encourage frequent hand-washing, especially before eating and after using the bathroom, sneezing, or playing with pets. Make sure your students know to scrub with warm soapy water for at least 15 seconds, rinse and dry. Tell them the risks of preventable infections and transmittable viruses.</p> <p>3. Body odour usually becomes evident on reaching puberty. Discuss the difference between deodorant, which controls bacteria while adding fragrance, and antiperspirant, which is supposed to stop or limit sweating.</p> <p>4. Many preteens find their hair gets oilier as they grow. Encourage a thorough washing every day or two. An added benefit: keeping hair clean and out of your child's face will lessen breakouts caused by oil and greasy hair products.</p> <p>5. Like hair, skin tends to become oilier as puberty. Encourage gentle face-washing once or twice a day with a mild cleanser. Most importantly, urge students to not to pick at any pimple or blackhead on face. Not only will germ fingers worsen the bump, but picking causes inflammation, spreads the oil, and can leave permanent scars.</p> <p>6. Advise your students to clip weekly and cut nail straight across to prevent ingrown nails. Try to nix nail-biting by teaching about possible infections to the nail or surrounding skin. Mention that it spreads germs from your fingers to your mouth and inside your body.</p> <p>7. Tell your student about different ways bacteria can harm body. Advise them not to share hairbrushes as it spreads germs.</p> <p>8. Help girl students feel comfortable asking questions or raising concerns about all aspects and associated hygiene related to menstruating.</p>			
ACTIVITIES			
Lectures, Demonstrations, Regular medical check-up, peer group evaluation			

CLASS: VII

THEME:
PRIDE AND LOVE TOWARDS
NATION

UNIT:

SUBJECT:
COMMUNAL HARMONY

DURATION:
02 HOURS

LEARNING OBJECTIVES: To help the students develop tolerance to social divisions. To equip them to love and respect others' beliefs and customs.

PEDAGOGICAL PROCESS: Imparting knowledge about creating a classless society, celebrating all religious festivals, making posters depicting communal harmony.

CONTENT

1. Love, affection and fraternity among people irrespective of their religion and caste bring communal harmony.
2. Constitution of India endorses communal harmony as the basic right and the fundamental duty of every citizen.
3. Communal harmony is the great nature of India, where diverse religions and people with different religious beliefs co-exist.
4. Communal harmony is a requirement for internal peace, security, growth and development.
5. India is a vast country where people, in spite of, practicing different religions live with fraternity and togetherness.
6. The rich tradition of tolerance, the feeling of togetherness and assimilation has kept the identity of our country intact.
7. Communal harmony depends on the theme of 'Unity in Diversity'.
8. Another force driving the communal harmony is secularism.
9. Communal harmony prevents any kind of discriminations among religions and its practitioners.
10. 20th August of every year, as 'Sadbhawna Diwas', is dedicated to spreading communal harmony among people.

ACTIVITIES

Celebrations of Days/ Events, Poster making, Dramatics, Talks by Students

CLASS VII

THEME:
INDIAN ARMED FORCES

UNIT:

SUBJECT:
INDIAN NAVY

DURATION:
02 HOURS

LEARNING OUTCOME:

The Student must be made aware of the Indian Navy, Its Broad Role, Ranks and Insignia

PEDAGOGICAL PROCESS:

The student can learn through class room teaching, watching videos or documentaries, Visiting Naval Units

CONTENT

The Student must be made aware of the Indian Navy, Its Broad Role, Ranks and Insignia through discussion, pictures, and documentaries.

CLASS VII			
THEME: EMINENT INDIAN PERSONALITY	UNIT:	SUBJECT: EMINENT INDIAN PERSONALITY AS PROMULGATED BY THE SCHOOL	DURATION: 02 HOURS
<u>LEARNING OUTCOME:</u>			
The Student must be made aware of Two great Indians and their contributions to building of our nation/Contribution to our nation			
<u>PEDAGOGICAL PROCESS:</u>			
The student can learn through class room teaching, watching videos or documentaries, Visiting Museums and galleries, Access literature in form of books and on the internet.			
CONTENT			
The School management will prescribe biographical study of two great Indian personalities from history / freedom struggle / war heroes.			
ACTIVITIES			
Book Reading, Movies, drama			

VALUE BASED TEACHING

Class VIII

1. Future India in Science – Innovation (Atal Tinkering Labs, Atmanirbhar Bharat)
2. Patriotism
3. Character Building
4. Honour and Respect
5. Awareness of spread of Disease
6. Honesty
7. Indian Air Force
8. Eminent Indian Personality

CLASS VIII			
THEME: SCIENTIFIC TEMPER	UNIT:	SUBJECT: FUTURE INDIA IN SCIENCE – INNOVATION	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u> To inculcate Scientific temper and logical thinking among the Students. To know the way of life that uses the scientific method and which may, consequently include questioning, observing physical reality, testing, hypothesizing, analysis and communication.</p>			
<p><u>PEDAGOGICAL PROCESS:</u> Conducting Science workshops and Idea competitions. Motivating children to take part in science fair and science challenge competitions</p>			
CONTENT			
<p>1. Developing scientific temper and promoting Science Encourage students to take up science as a subject. Explain the science and technology behind objects / gadgets of daily use.</p> <p>2. Various schemes for the promotion of Science to be discussed.</p> <p>(a) MANAK (Million Minds Augmenting National Aspiration and Knowledge) - Launched to encourage scientific innovation among school children of class VI to X.</p> <p>(b) Knowledge and Awareness Mapping Platform (KAMP) - An initiative to assess and encourage scientific temper in students in the age group of 10 to 18 years. KAMP will also facilitate the participation of students in the India International Science Festival (IISF).</p> <p>(c) SERB Distinguished Investigator Award (SERB-DIA) - A scheme to empower exceptional scientists.</p> <p>(d) Scheme for Young Scientists and Technologists (SYST) - To encourage young scientists to come up with science-based solutions to existing/futuristic problems.</p> <p>(e) Development of innovation hubs in different parts of the country.</p> <p style="padding-left: 40px;">(aa) Atmanirbhar Bharat (ab) Atal Tinkering Lab</p>			
ACTIVITIES			
<p>1. Science workshops 2. Science seminars 3. Science fair 4. Industry visit</p>			

CLASS VIII			
THEME: PRIDE AND LOVE TOWARDS NATION	UNIT:	SUBJECT: PATRIOTISM, NATIONAL SYMBOLS	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u> Creating a sense of national unity that bounds to respect other nations and to refrain from the dignity of the nations in young people and creates broad conditions for the management, education, labour and creativity of society, which is an important social stratum.			
<u>PEDAGOGICAL PROCESS:</u> Organizing field trips. Celebrating all religious festivals. Organizing house talk by students, every day.			
CONTENT			
<ol style="list-style-type: none"> 1. Respect Nation and National Symbols Discuss country's national symbols like National Flag, National Anthem etc. 2. Conduct functions on Republic day and Independence day in the school. Watch the telecast of Independence Day and Republic Day parade on television. 3. Duties of Citizens – Duties of citizens listed in constitution. Protecting national property, following civic rules. 4. Accept Diversity-India is a land of diversity-different people and their varying cultural heritage-value others and accept their difference -unity of the country. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Field trip 2. Theme dance. 3. Music 4. Painting 			

CLASS VIII			
THEME: QUALITIES OF GOOD CITIZENS	UNIT:	SUBJECT: CHARACTER BUILDING	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u> To build and improve Student's mental and moral characteristics. It is to build some degree of discipline where by a Student makes sacrifices and faces hardship to solve a problem or achieve a goal.			
<u>PEDAGOGICAL PROCESS:</u> Organizing debate and group discussions. Documentary films and movies related to good character.			
CONTENT			
<p>1. Pillars of character: True character, behaviour, trustworthiness, responsibility, respect, caring, fairness and citizenship, Courage, diligence, and integrity.</p> <p>2. Encourage good role models to Students: Positive character role models in history and literature. Dramatize some inspirational story. Behaviours of current world leaders, sports figures and celebrities as well-Foundation of respect, Self-respect and respect for others.</p> <p>3. Build a caring community: A caring attitude, a zero-tolerance policy on name-calling and character assaults or bullying. Describe the "random acts of kindness" concept and reward students when they demonstrate it.</p> <p>4. Volunteerism: The virtues and importance of volunteerism, introduce volunteer programs in classroom and school.</p>			
<u>ACTIVITIES</u>			
<p>1. Dramatization</p> <p>2. Workshops</p> <p>3. Biography of great people</p>			

CLASS VIII			
THEME: UPHOLDING OF HUMAN VALUE SYSTEMS	UNIT:	SUBJECT: REMEMBERING MARTYRS	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u> Students will understand the contribution of heroes like martyrs, sacrifice, significant role in uniting people and the country and role in the struggle for the freedom of India.			
<u>PEDAGOGICAL PROCESS:</u> Guest lectures by social leaders and defence personalities. Documentary films and movies to children.			
CONTENT			
<ol style="list-style-type: none"> 1. Various Indian revolutionary and freedom struggle movements and learn about martyrs, observe martyrs' day in school. 2. Discuss stories of martyrs and those who laid down their lives for the nation. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Documentaries 2. Movies 3. Painting 4. Story telling 			

CLASS VIII			
THEME: HEALTH AND HYGIENE	UNIT:	SUBJECT: AWARENESS OF SPREAD OF DISEASE	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u> The primary aims of school hygiene education is to improve behaviour through useful practices connected to personal, water, food, domestic and public hygiene. Also, it aims to protect water and food supplies and to safely manage environmental factors.</p>			
<p><u>PEDAGOGICAL PROCESS:</u> Lectures cum demonstrations on Hygiene and sanitation by medical officers and medical experts.</p>			
<u>CONTENT</u>			
<p>1. Cleanliness: Cleanliness in classroom, hostels, playgrounds, auditoriums, gatherings etc.</p> <p>2. Hygiene and Sanitation: Hygiene and sanitation process. Purification of the environment from microorganisms causing diseases, measure taken for cleaning and hygiene. Purification of foreign substances, microorganisms, drugs, cleaning agents and all visible sources of pollution from the environment.</p> <p>3. Food Safety: Explain the importance of food safety, risk of food poisoning, destroying physical, chemical and biological of hazards. Food borne disease can cause a health problem for kids, pregnant and elderly consumers. Food borne disease may ends up with death.</p> <p>4. Disinfection: Disinfection is the process of purifying foodstuffs and surfaces that are contacted with foodstuffs from microorganisms except spores that can cause disease by various methods. It is made by chemical substances or heat. The chemicals used for disinfection are called "disinfectants".</p> <p>5. Food borne Diseases: Discuss about microorganisms, which are transmitted to foodstuffs from various sources, multiply rapidly under appropriate conditions. Microorganisms cause lacking qualities of foods and lead to food borne diseases or poisoning.</p>			
ACTIVITIES			
<p>1. Guest lecture 2. Demonstration classes 3. Poster making 4. Slogan making fixing in the school campus</p>			

CLASS VIII			
THEME: QUALITIES OF GOOD CITIZENS	UNIT:	SUBJECT: HONESTY	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
The learner will:			
<ol style="list-style-type: none"> 1. Define honesty from the dictionary and give examples and synonyms. 2. Reflect on the value of honesty. 			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1. Talk about honesty 2. Recognize positive behaviours. 3. Read and respond. 			
<u>CONTENT</u>			
<ol style="list-style-type: none"> 1. What is being honest? 2. Why to be honest? 3. Importance of honesty in relationships. 4. Honesty or truthfulness is a facet of moral character that connotes positive and virtuous attributes such as integrity, truthfulness, straightforwardness, including straightforwardness of conduct, along with the absence of lying, cheating, theft, etc. Honesty also involves being trustworthy, loyal, fair, and sincere. 5. The more honest you are, the easier it is to trust you. Not only will others trust you, but you can also feel more confident when trusting others. Develop attitude towards good and honest deeds. 6. Ways to Teach Children to Be Honest <ol style="list-style-type: none"> (a) Reward the Truth (b) Speak the Truth, including hard truth 7. Don't put them to the test 8. Explain consequences of not being honest and truthful. 9. Follow through on promises made by individuals. 10. Take care of other people's belongings. 11. Find honest friends. 			
<u>ACTIVITIES</u>			
Story-telling, Movies, videos, honest leaders documentary films and movies			

CLASS VIII			
THEME: INDIAN ARMED FORCES	UNIT:	SUBJECT: INDIAN AIR FORCE	DURATION: 02 HOURS
<u>LEARNING OUTCOME:</u> The Student must be made aware of the Indian Air Force, Its Broad Role, Ranks and Insignia			
<u>PEDAGOGICAL PROCESS:</u> The student can learn through class room teaching, watching videos or documentaries, visiting Indian Air Force Units			
CONTENT			
The Student must be made aware of the Indian Air Force, Its Broad Role, Ranks and Insignia through Classroom teaching, charts, diagrams, book Reading, Movies, Visits, Documentaries.			

CLASS VIII			
THEME: EMINENT INDIAN PERSONALITY	UNIT:	SUBJECT: EMINENT INDIAN PERSONALITY AS PROMULGATED BY THE SCHOOL	DURATION: 02 HOURS
<u>LEARNING OUTCOME:</u> The Student must be made aware of Two great Indians and their contributions to building of our nation/Contribution to our nation			
<u>PEDAGOGICAL PROCESS:</u> The student can learn through class room teaching, watching videos or documentaries, Visiting Museums and galleries, Access literature in form of books and on the internet.			
CONTENT			
The School management will prescribe biographical study of two great Indian personalities from history / freedom struggle / war heroes.			
ACTIVITIES			
Book Reading, Movies, Debate, Drama			

VALUE BASED TEACHING

Class IX

1. Attitude
2. Commitment on Duties
3. Adventure Sports
4. Maritime activity in India
5. Leadership qualities
6. Command Structure – Indian Navy
7. Indian Personalities
8. Central Armed Police Forces

CLASS: IX			
THEME: PERSONALITY	UNIT:	SUBJECT: ATTITUDE	DURATION: 2 HOURS
<u>LEARNING OBJECTIVES:</u>			
1	To develop positive attitude towards self, family, society and the Institutions of democracy.		
2	To inculcate responsible behavior towards people, practices, beliefs and customs.		
3	To practice and predict outcomes of right attitude		
<u>PEDAGOGICAL PROCESS:</u>			
Class room teachings, Videos and talks, Role plays by the students, Establishing Clubs.			
CONTENT			
1.	Define the term 'attitude' and its relevance in day to day activities. How can we best define an attitude? How do we form attitudes about anything?		
2.	Components of attitude - Affective, Cognitive and Behavioral. Multi-component model of attitude.		
3.	The structure of attitudes. Two basic perspectives on attitude structure. How positive and negative attitudes are formed and evaluated?		
4.	One-dimensional perspective of attitudes. Two-dimensional perspective of attitudes.		
5.	The psychological functions or needs that are served by attitudes. Three primary functions of needs attitudes: Object appraisal, social adjustment and externalization.		
6.	How attitudes are measured? Concentrating on direct and indirect strategies that psychologists have developed to measure attitudes.		
7.	Explicit measures of attitude		
ACTIVITIES			
1.	Clearly studying and noticing various activities of students- dressing sense, use of vocabulary, Body styles at different places.		
2.	Noticing and rewarding students displaying positive attitude / outlook.		

CLASS: IX			
THEME:	UNIT:	SUBJECT:	DURATION:
PRIDE AND LOVE TOWARDS NATION		COMMITMENT TO DUTIES	2 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. To provide complete knowledge and understanding about the Rights, duties, Values and Responsibilities. 2. To inculcate courage and confidence for the effective practice of rights and universally accepted principles. 3. To lead and appreciate simple and productive life. 4. To become role model. 			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1. Class room teachings, Videos and talks by the successful personalities, Role plays by the students, as is feasible. 2. A copy of Fundamental Rights , Directive Principles of State Policy , accepted Values and Practices should be placed in the class room 			
CONTENT			
<ol style="list-style-type: none"> 1. Commitment to Duties: Commitment is a key factor that influences every individual' work and performance for the betterment of the system. Commitment is individual's psychological attachment to the particular event or system. Students with high levels of commitment work harder are emotionally attached to their families, schools, and country and make more effort to carry out the goals of any organization. 2. Theory of organizational commitment : Affective commitment: Continuance commitment: Normative commitment: 3. Democratic Institutions and their functioning: The constitution is the living document of Systems and Practices that enforces rules and regulation. Citizen and his duties besides Fundamental rights. Democratic institutions and the method of functioning. 4. Different methods to inculcate Commitment of Duty: Every child must be made aware about the list of personal commitments they must make and follow. <ol style="list-style-type: none"> (a) Create a strong teamwork culture (b) Communicate clear goals and expectation to the Students (c) Be transparent and encourage open communication (d) Maintain ethics in the classroom (e) Foster a positive learning culture (f) Develop trust (g) Encourage innovation in leaning and practicing (h) Provide constructive feedback and not criticism 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Teachers constantly should talk about developing values and correct approaches at various places. 2. Students should continuously observe each other's commitment, and evaluate their own performances. 			

CLASS IX			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: ADVENTURE SPORTS	DURATION: 2 HOURS
LEARNING OBJECTIVES: The objective of the Adventure Sports is to provide a carefully Planned stimulating environment which will help each individual and excellent foundation for creative learning and independence.			
PEDAGOGICAL PROCESS: Basic explanation of benefits of adventure / sports to be discussed in classroom. Hike, educational excursion, rock climbing, para-sailing, para gliding, rappelling, obstacles, horse riding, kayaking- activities as and when possible to be conducted by the professional trainers.			
CONTENT			
<p>1. The Adventure Learning Cycle: Thrill, excitement and fun, Exposure to nature, Self-assessment, Overcome fears and develop self-confidence, Enhancement of decision making power, channelizing of Energy, Stress booster, Information and knowledge enhancement, Development of balanced and positive attitude towards life, Build, concentration, Encouragement to social relationship and team work, Develop motor and cognitive skills, creative learning, Inculcate the values among the children.</p>			
ACTIVITIES			
Exposure to Hiking, Kayaking, Outdoor Camps, Horse riding , Para sailing etc. as and when possible.			

CLASS: IX			
THEME: SCIENTIFIC TEMPER	UNIT:	SUBJECT: NAUTICAL SCIENCE	DURATION: 2 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. To develop an aptitude and interest towards naval science. 2. To develop basic interest towards shipping, construction, management and life saving practice. 3. To get an idea of life saving techniques in emergency situations and develop a sense of responsibility. 			
<u>PEDAGOGICAL PROCESS:</u>			
Demonstration through ship model, videos, practical work, construction of miniature models, visit to ship yards and weather stations.			
CONTENT			
General knowledge of a ship, basics of ship Construction, Ship propulsion technology, Lifesaving equipment on board ships.			
ACTIVITIES			
Show / demonstrate model of a Ship.			

CLASS IX			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: LEADERSHIP QUALITIES	DURATION: 2 HOURS
<u>LEARNING OBJECTIVE:</u> Students will develop right attitude towards integrity, honesty, humility, self-discipline and accountability.			
<u>PEDAGOGICAL PROCESS:</u> Teacher must bring out the essential aspects of leadership qualities using an interactive way with full participation of students.			
CONTENT			
<ol style="list-style-type: none"> 1. Introduction 2. Values to be followed <ol style="list-style-type: none"> (a) Integrity: Integrity is a core quality that every leader must possess. (b) Honesty: Honesty includes telling the truth (not lying), not hiding the truth (deceiving), and acting in a way that is morally right (not stealing, cheating). Honesty is important in how we all work together in society. (c) Active Listening: Good leaders listen to people with great attention and sincerity. Acquiring this skill is not easy; it needs self- awareness and humility to respect others' thoughts. (d) Fair Attitude: A person understands that nothing significant has ever been achieved with an attitude that is unfair and biased. Even if it does, the sustainability of the outcome is always questionable. (e) Humility: Humility is not the first trait that comes to mind when we think about leadership. But it is one of the essential qualities of a good leader. (f) Care for Others: A person understands the importance of appreciating and recognizing others and creating mutual respect and understanding within the organization. (g) Self-Discipline: When you are self-disciplined and set an example, you motivate others to follow. (h) Accountability: Being a responsible leader is not an easy task. It means being answerable to the actions and decisions made by you and by those you lead. (j) Empathy: Empathy is in understanding others' needs and what goes into their mind. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Games for different values. 2. Worksheet. 			

CLASS IX			
THEME: INDIAN ARMED FORCES	UNIT:	SUBJECT: COMMAND STRUCTURE	DURATION: 2 HOURS
<u>LEARNING OUTCOME:</u>			
<p>The Student must be made aware of the Command Structure of the Indian Navy. On completion the Student must be able to Differentiate between various commands of the IN and their role. He/she should be able to acquire knowledge on different platforms of Indian Navy</p>			
<u>PEDAGOGICAL PROCESS:</u>			
<p>The student can learn through class room teaching and seeing the organisational chart.</p>			
CONTENT			
<ul style="list-style-type: none"> • Indian Navy's Command structure to be explained • Naval HQs, Eastern, Western and Southern Naval Command • Eastern and Western Naval Fleets. 			

THEME: EMINENT INDIAN PERSONALITY	UNIT:	SUBJECT: EMINENT INDIAN PERSONALITY AS PROMULGATED BY THE SCHOOL	DURATION: 2 HOURS
<u>LEARNING OUTCOME:</u> The Student must be made aware of Two great Indian personalities and their contributions to building of our nation/Contribution to our nation.			
<u>PEDAGOGICAL PROCESS:</u> The student can learn through class room teaching, watching videos or documentaries, Visiting Museums and galleries, Access literature in form of books and on the internet.			
CONTENT			
The School management will prescribe biographical study of two great Indian personalities from history / freedom struggle / war heroes.			
ACTIVITIES			
Book Reading, Movies, Debate, drama			

CLASS - IX

THEME: INDIAN ORGANISATIONS	UNIT:	SUBJECT: CENTRAL ARMED POLICE FORCES	DURATION: 02 HOURS
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LEARNING OUTCOME:

The Student must be made aware of Central Armed Forces of India – I Border Security Force (BSF), Central Reserve Police Force (CRPF), Central Industrial Security Force (CISF), Indo-Tibetan Border Police (ITBP) and the Sashastra Seema Bal (SSB) -Ranks and insignia.

PEDAGOGICAL PROCESS :

The student can learn through class room teaching, watching videos or documentaries, Visiting various CAPF units

CONTENT

Role, responsibilities and structure of

- BSF, CRPF, CISF, ITBP and SSB.
- Rank structure and insignia of the Central Armed Forces.

VALUE BASED TEACHING

Class X

1. Women Empowerment
2. Self-Awareness
3. Remote-Sensing
4. Eminent Personalities
5. Characteristics of an Ideal Leader
6. Indian Folk-lore, tales, dance, music and painting
7. Command Structure – Indian Air Force
8. Indian organisations - DRDO, HAL, NSTL, BHEL, BEL

CLASS: X			
THEME:	UNIT:	SUBJECT:	DURATION:
UPHOLDING OF HUMAN VALUE SYSTEMS		WOMEN EMPOWERMENT, WOMEN SELF-AWARENESS	02 HOURS
<u>LEARNING OBJECTIVES:</u>			
The students are able understand the importance of women in family, society and in the nation. They are able to learn how to respect women and give them importance in every walk of life. They are learnt to prevent and condemn any sort of violence against women.			
<u>PEDAGOGICAL PROCESS:</u>			
The students can learn through class room teaching, watching videos or documentaries. They access more knowledge through reading newspapers. They can be given examples of the cases happened in the near past or from the surroundings.			
CONTENT			
<p>1. Domestic violence: Domestic violence is violence committed by someone in the victim's domestic or from the vicious circle. This includes partners and ex-partners, immediate family members, other relatives and family friends.</p> <p>2. Feminist Movements: The women's movement strives to end discrimination and violence against women through legal, political, and social change. They are some of the most influential social movements in the modern world. There are many such movements in India.</p> <p>3. Laws to protect Women:</p> <ul style="list-style-type: none"> (a) The Prohibition of Child Marriage Act, 2006. (b) Special Marriage Act, 1954. (c) Dowry Prohibition Act, 1961. (d) Maternity Benefit Act, 1861. (e) Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. <p>4. Discuss ways to empower women in classroom. Encourage students to participate in discussions.</p>			
<u>ACTIVITIES</u>			
<ul style="list-style-type: none"> 1. Drama 2. Group Discussion 3. Debate 4. Role Play 			

CLASS: X			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: SELF-AWARENESS	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u> The students are learnt to adopt virtues like humility, gratitude and integrity etc. They are able to lead a civilized life in a unique way. The students are taught to be the ideal, responsible and committed citizens of the country.</p>			
<p><u>PEDAGOGICAL PROCESS:</u> The students can learn through class room teaching, watching videos or documentaries. They access more knowledge through reading newspapers. They can be given examples of the leaders whom they are familiarized with.</p>			
CONTENT			
<p>1. Humility: It means being humble. It promotes the following qualities.</p> <p>(a) Spend time listening to others.</p> <p>(b) Practice mindfulness, and focus on the present.</p> <p>(c) Be grateful for what we have.</p> <p>(d) Ask for help when we need it.</p> <p>(f) Seek feedback from others on a regular basis.</p> <p>(g) Review our actions against the language of pride.</p> <p>2. Discipline: Discipline is one of the most important personality traits in everyone's life. It refers to a set of rules and regulations which are to be followed while undergoing any task or activity. It is a way of being honest, hard-working, motivated, and encouraged while doing any task.</p> <p>3 Gratitude: In positive psychology research, gratitude is strongly and consistently associated with greater happiness. Gratitude helps people feel more positive emotions, relish good experiences, improve their health, deal with adversity, and build strong relationships.</p> <p>4. Integrity: Integrity means being honest and having strong moral principles. A person with integrity behaves ethically and does the right thing, even behind closed doors.</p> <p>5. Passion: Strong amorous feeling or desire; love and affection; a strong or extravagant fondness, enthusiasm, or desire for anything: a passion for music. Passion is very much needed for excellent performance in anything we do.</p>			
ACTIVITIES			
<p>1. Meditation/ Introspection</p> <p>2. Practicing Yoga</p> <p>3. Reading</p> <p>4. Listening music</p>			

CLASS X			
THEME: SCIENTIFIC TEMPER	UNIT:	SUBJECT: REMOTE-SENSING CAPABILITIES IN INDIA	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u></p> <p>1. The students are able to develop the following inquisitive characters :</p> <p>(a) Investigating how a satellite "sees" objects on the surface of Earth.</p> <p>(b) Asking doubts on the concepts of reflected and absorbed visible light.</p> <p>(c) Feeling wonder about infrared light and how it is related to the temperature of an object and the emission of light.</p> <p>(d) Exploring the ideas of spectra and false color images.</p> <p>(e) Examining remote sensing images of Mars, Io, and Titan in a search for the signatures of life in the Solar System.</p>			
<p><u>PEDAGOGICAL PROCESS:</u> The students can learn through class room teaching, watching videos or documentaries. They access more knowledge through reading books and doing exercises.</p>			
CONTENT			
<p>1. Sensing and recording: Remote sensing is the process of detecting and monitoring the physical characteristics of an area by measuring its reflected and emitted radiation at a distance (typically from satellite or aircraft). Special cameras collect remotely sensed images, which help researchers "sense" things about the Earth</p> <p>2. Advantages of Remote sensing: Remote sensing has the advantage of speed and statistical analysis.</p> <p>3. Analyzing and applying information: Remote sensing is a technique used to collect data about the earth without taking a physical sample of the earth's surface. A sensor is used to measure the energy reflected from the earth</p> <p>4. Applications of remote sensing and earth observation: Give examples of areas where remote sensing has helped in studying Geological, Environmental and Natural resources.</p>			
ACTIVITIES			
<p>1. Computer Mapping</p> <p>2. Preparing Models</p>			

CLASS: X			
THEME: EMINENT INDIAN PERSONALITY	UNIT:	SUBJECT: EMINENT PERSONALITY AS PROMULGATED BY THE SCHOOL	DURATION: 02 HOURS
<u>LEARNING OUTCOME:</u>			
The Student must be made aware of Two great Indian personalities and their contributions to building of our nation/Contribution to our nation.			
<u>PEDAGOGICAL PROCESS:</u>			
The student can learn through class room teaching, watching videos or documentaries, Visiting Museums and galleries, Access literature in form of books and on the internet.			
CONTENT			
The School management will prescribe biographical study of two great Indian personalities from history / freedom struggle / war heroes.			
ACTIVITIES			
Book Reading, Movies, Debate, drama			

CLASS: X			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: CHARACTERISTICS OF AN IDEAL LEADER	DURATION: 02 HOURS
LEARNING OBJECTIVES: The students will be able to get inspired on knowing the life history of some great leaders. They are able to admire the good characters of the leaders and try to imbibe in them.			
PEDAGOGICAL PROCESS: The students can learn through class room teaching, watching videos and listening speeches of great leaders. They access more knowledge through reading biographies and autobiographies.			
CONTENT			
<p>1. Vision: Leadership vision is the ability to concentrate on the most important aspects of self or business, such as what you want to achieve and what type of leader you aspire to be. Your vision can incorporate lessons from your past, present realities that must be addressed and your future aspirations.</p> <p>2. Inspiration: Inspiration is a feeling of enthusiasm we get from someone or something, that gives us new and creative ideas.</p> <p>3. Strategic & Critical Thinking: Strategic Thinking helps in creating a strategy that is unifying, rational and involves integrative framework for decisions related to resource utilization and direction of business.</p> <p>4. Interpersonal Communication: Interpersonal communication refers to the entire process and practice of exchanging ideas, information, and even emotional experiences that can be shared between people. It is a potent and vital force that isn't just all about words.</p> <p>5. Authenticity & Self-Awareness: "Self-awareness" is about focusing our awareness on ourself. It's our ability to notice our feelings, our physical sensations, our reactions, our habits, our behaviors, and our thoughts.</p> <p>6. Responsibility & Dependability: Being responsible means being dependable, keeping promises and honoring our commitments. A responsible person takes responsibility for his or her actions.</p> <p>6. Dependability means the quality of being able to be relied on; trustworthiness or constancy</p>			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Role Play 2. Essay Writing 3. Elocution 4. Group Discussion 			

CLASS X			
THEME: PRIDE AND LOVE	UNIT:	SUBJECT: INDIAN FOLK-LORE, TALES,	DURATION: 02 HOURS

TOWARDS NATION		DANCE, MUSIC AND PAINTINGS	
<p>LEARNING OBJECTIVES: Students can understand the history of Indian folklore- literature, tales, dance music etc. and its deep impact in fostering the national feelings. Students will be in a position to identify and appreciate the folk artists and their contribution.</p>			
<p>PEDAGOGICAL PROCESS: Learning experience activity may be enhanced by conducting stage shows, by inviting contemporary artists besides class room teaching, watching videos and documentaries. Fields trips to rural areas and historical sites may be conducted. Art clubs can be formed to inculcate creative aspects and develop cultural nationalism</p>			
CONTENT			
<ol style="list-style-type: none"> 1. Folklore and its different varieties. It includes tales, music, dance, legends, oral history, proverbs, jokes, popular beliefs, customs, and so forth within a particular population comprising the traditions (including oral traditions) of that culture, subculture, or group 2. Classification of Indian Folk lore – Rural, Tribal and the Contemporary world. 3. Introduction to popular Folktales, Folk art, Folk dance forms and folk music of the state in which the school is located. Videos / pictures to be used to explain. 4. Famous Indian folk artist in the contemporary world and India – a comparative study. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Group discussion 2. Stage Performance 3. Presentations 4. Paintings and Drawings 5. Folk festivals such as Baisakhi, Bogi, Sankranti, Pongal etc. should be celebrated in school. 			

CLASS X**THEME:**
INDIAN ARMED FORCES**UNIT:****SUBJECT:**
COMMAND STRUCTURE**DURATION:**
02 HOURS

LEARNING OUTCOME: The Student must be made aware of the Command Structure of the Indian Air Force. On completion the Student must be able to Differentiate between various commands and their role. He/she should be able to acquire knowledge on different Air craft of IAF.

PEDAGOGICAL PROCESS: The student can learn through class room teaching, watching videos or documentaries, Visiting Indian AF Units

CONTENT

1. Structure of Air HQrs and Command structure of Indian Air force.
2. Overview of various Air squadrons and their role in brief.
3. Basic knowledge of various Aircraft of IAF.
4. Pictures and videos to be shown to make recognition of Aircraft easy for students.

CLASS X			
THEME: INDIAN ORGANISATIONS	UNIT:	SUBJECT: DRDO,HAL,NSTL,BHEL,BEL	DURATION: 02 HOURS
<u>LEARNING OUTCOME:</u> The Student must be made aware of the role of Research and Development Organisation. Various indigenous organisations such as DRDO,HAL,BHEL,BEL, NSTL,NPOL etc must be introduced with emphasis on Atmanirbhar Bharat			
<u>PEDAGOGICAL PROCESS:</u> The student can learn through class room teaching, watching videos or documentaries, Visiting carious research establishments.			
CONTENT			
1. Role, responsibilities and structure of DRDO, HAL, BHEL, BEL, NSTL and NPOL.			
2. Significant achievements of the above organisations.			
ACTIVITY			
Visit to one or more of these organisations would be highly appreciated.			

VALUE BASED TEACHING

Class XI

1. Harnessing the competitive spirit
2. Officer Like Qualities
3. Military Science
4. Maritime heritage of India
5. Space research of India
6. Command Structure – Indian Army

CLASS XI			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: COMPETITIVE SPIRIT	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. Students learn emotional and social learning through competitive spirit 2. Competition among the students is getting more and more stiff in education / games / higher course. 			
<u>PEDAGOGICAL PROCESS:</u>			
<ol style="list-style-type: none"> 1. Students need guidance to understand the difference between competitive spirit and honesty 2. Teaching students the right competitive attitude which will instil in them humility, respect, and confidence. 3. It helps to increase their interest in the activity and allows them to have fun while competing with others. 			
CONTENT			
<ol style="list-style-type: none"> 1. Competitive Spirit: What is 'competitive spirit' and what is not. 2. Tips to harness the Competitive spirit: <ol style="list-style-type: none"> (a) Passion - Passion towards your objective drives you to push yourself harder than you thought possible and strive to achieve goals, propelling yourself beyond mediocrity and into the elite status. (b) Self-belief- You must have complete faith in yourself, your talent, your abilities and your internal strength if you are to become the best possible version of yourself. (c) Ensure your focus is laser-sharp - Strive to deliver excellence in everything you do. (d) Measure your growth – Formulate criteria by which you will measure your progress. Evaluate progress periodically. (e) Set high expectations - Always keep expectations for yourself at high levels, never become complacent, and you will never lose your sense of direction. 			
ACTIVITIES			
Encourage self-evaluation of progress by students.			

CLASS XI

THEME:
PERSONALITY
DEVELOPMENT

UNIT:

SUBJECT:
OFFICER LIKE
QUALITIES

DURATION:
02 HOURS

LEARNING OBJECTIVES:

1. Students will appreciate the OLQs which can be divided into four factors (Planning and Organising, Social Adjustment, Social Effectiveness, Dynamic)
2. 15 qualities of officers will be portrayed by the classroom teaching with examples.

PEDAGOGICAL PROCESS: The specific approaches promote the student-centred learning activity. The activity based approach will help students in imbibing officer like qualities.

CONTENT

1. **Effective Intelligence:** Effective Intelligence refers to the ability of the person to deal with various complex situations using the available resources and find the best effective solution.
2. **Reasoning Ability:** It refers to the ability of the student to be able to think rationally and logically. It requires the person to identify the essentials of a problem, analyze it logically and arrive at the best solution.
3. **Organising Ability:** This refers to the clarity that a person has in his/her life. It tests the ability of a person to be able to arrange things in a systematic way and also possess skills to be able to lead a group of people in a way which leads to an effective outcome.
4. **Power of Expression:** This refers to the ability of a person to be able to express oneself clearly and with ease and confidence.
5. **Social Adaptability:** It refers to the ability of an individual to be able to adjust with different surroundings, people and groups. It also includes the attitude that a person possesses in relation with other people.
6. **Cooperation:** It refers to the quality of an individual to be able to participate in a work along with other people and work in co-ordination. It implies the team spirit that one is supposed to have in order to be able to work effectively with a group of people.
7. **Sense of Responsibility:** It refers to the quality of a person to recognise and be able to fulfill his/her duty faithfully.
8. **Initiative:** It refers to the quality of a person to be able to take the lead in any task. It requires a person to be able to take the first step in any task and fulfill it with complete dedication.
9. **Self-Confidence:** It refers to the belief that a person has on himself/herself with respect to his/her abilities to complete a given task.
10. **Speed of Decision:** It refers to making sensible and effective decisions in a short period of time.
11. **Ability to Influence the Group:** It refers the ability of an individual to be able to influence a group that he/she is leading and to be able to motivate them and inspire them to achieve the required objective.

12. **Liveliness:** It refers to the ability of a candidate to be happy and lively in every situation and have a positive attitude.

13. **Determination:** It refers to the ability of a person to not give-up despite facing odd situations.

14. **Courage:** It refers to the ability of a candidate to be brave and pursue what is right in difficult situations.

15. **Stamina:** It is the ability of a person to be able to stand any form of mental or physical strain. It requires a person to possess endurance.

ACTIVITIES

1. Encourage students to display the OLQs in their day to day activities and interactions.
2. Assign specific responsibilities to students such as organising small events, participation in planning for major events, etc.,

CLASS XI			
THEME: INDIAN ARMED FORCES	UNIT:	SUBJECT: MILITARY SCIENCE	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<p style="text-align: center;">Concept and evolution of military studies. After studying the lesson, the student will be able to explain military science.</p>			
<u>PEDAGOGICAL PROCESS:</u>			
<p style="text-align: center;">Explanation and examples to be used for teaching the concepts.</p>			
CONTENT			
<p>1. Military science: Military science is the study of military processes, institutions, and behaviour, along with the study of warfare, and the theory and application of organized coercive force. It is mainly focused on theory, method, and practice of producing military capability in a manner consistent with national defence policy.</p> <p>2. Important Aspects in Military Studies: (Basic concepts)</p> <ul style="list-style-type: none"> (a) Terrain (b) Tactics (c) Maps and Astronomy (d) Leadership (e) Logistics 			
ACTIVITIES			
<p style="text-align: center;">Use charts and pictures wherever possible.</p>			

CLASS XI			
THEME: PRIDE AND LOVE TOWARDS NATION	UNIT:	SUBJECT: MARITIME HERITAGE OF INDIA	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
Students will learn about ports of India.			
<u>PEDAGOGICAL PROCESS:</u>			
Lectures / discussion mode to be followed for teaching.			
CONTENT			
<p>1. Ports of India: Ports play an important role in the overall economic development of a country. India is one of the fastest-growing and large economies in the world, with a GDP growth rate of 6.1% as of 2018-19. Approximately 95% of India's merchandise trade is done through sea ports.</p> <p>2. India's Maritime Sector: India has 12 major and 200 non-major ports. Indian ports are categorised into two parts:</p> <p>(a) Major ports (under central Govt administration) and Non-Major ports (under state Govt administration). The ports in India serve as a backbone for EXIM, international trade, coastal shipping and cruise shipping. India's top export destinations are the US, UAE, Saudi Arabia, Hong Kong, China, Germany and Republic of Korea. Key commodities handled at the Indian ports are petroleum products, coal, automobile, iron ore, engineering goods, chemicals and electronics.</p> <p>(a) POL: 37.5%</p> <p>(b) Container: 20.8%</p> <p>(c) Thermal coal: 23.1%</p> <p>(d) Iron ore: 5.8%</p> <p>3. Sagarmala: The Government of India has planned to modernise the country's ports through a project called Sagarmala. It is the flagship programme of the Ministry of Shipping and Waterways to promote and develop ports in the country by harnessing India's 7500 km-long coastline and potentially navigable waterways. Sagarmala can be a game changer for the maritime sector due to its focus on port-led development.</p>			
ACTIVITIES			
<p>1. Indian Ports and its photographs.</p> <p>2. Field trip if possible.</p>			

CLASS XI			
THEME: SCIENTIFIC TEMPER	UNIT:	SUBJECT: SPACE RESEARCH IN INDIA	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. Acquire knowledge of the Physical universe and its evolution 2. Define and use fundamental principles and techniques of space science. 			
<u>PEDAGOGICAL PROCESS:</u> Lecture, demonstrations, pictures, discussions.			
CONTENT			
<ol style="list-style-type: none"> 1. Introduction of space science: Space science, body of scientific knowledge as it relates to space exploration; it is sometimes also called astronautics. Space science draws on the conventional sciences of physics, chemistry, biology, and engineering, as well as requiring specific research of its own. 2. Basic Categories: There are four basic categories of space mission. <ol style="list-style-type: none"> (a) The sounding rocket is restricted to suborbital flights with maximum altitude between 35 and 1,300 mi (55–2,100 km). (b) Artificial satellites orbit the earth at altitudes between one hundred and several thousand miles. (c) Space probes travel to the moon and planets. (d) The final and most complex category is human spaceflight, of which the Apollo moon landings, the space shuttle, and the Skylab, Mir, and International space stations are the outstanding examples. 3. ISRO's missions and timeline from 1960s to today and discussion on Mission Mars. 			
ACTIVITIES			
Field trip to ISRO as and when possible.			

CLASS XI

THEME:
INDIAN ARMED FORCES

UNIT:

SUBJECT:
INDIAN ARMY

DURATION:
02 HOURS

LEARNING OUTCOME: The Student must be made aware of the Command Structure of the Indian Army, Its dispositions. On completion the Student must be able to Differentiate between, Corps, Division, Brigade, Battalion, regiment etc. He must also be able to acquire knowledge on various Equipment/Missiles in the Army Inventory.

PEDAGOGICAL PROCESS: The student can learn through class room teaching, watching videos or documentaries, Visiting Indian Army Units

CONTENT

1. Concepts of various formations of Indian Army, i.e., Command, Corps, Division, Brigade, Regiment, Battalion, Unit.
2. Basics of equipment, weapons and capabilities of Indian Army.

VALUE BASED TEACHING

Class XII

1. Time Management
2. Inter personal skills
3. Career Guidance
4. War and Heroes
5. Defence Establishments
6. ISRO

CLASS XII**THEME:**
PERSONALITY
DEVELOPMENT**UNIT:****SUBJECT:**
TIME MANAGEMENT**DURATION:**
02 HOURS**LEARNING OBJECTIVES:**

1. Achieve better results through effective planning and clarifying objectives. Spend more time working toward your high-value goals.
2. Refuse unreasonable requests. Keep things in perspective. .

PEDAGOGICAL PROCESS:

Bring out importance of organising and prioritising activities, plan your work and fix a schedule for each activity.

CONTENT

1. Time management is the process of organizing and planning how to divide your time between specific activities.
2. What are time management skills?
 - (a) Organisation
 - (b) Prioritisation
 - (c) Goal setting
 - (d) Communication
 - (e) Planning
 - (f) Delegation
 - (g) Stress management
 - (h) Flexibility
3. Why are time management skills important?
4. How to improve time management skills?
 - (a) Align your focus
 - (b) Use Chunking
 - (c) Determine your priorities
 - (d) Set smart goals
 - (e) Learn to say 'no'.
 - (f) Minimize distractions
 - (g) Cut back on instant answers
 - (h) Hold yourself accountable
 - (j) Use the 20-minute rule
 - (k) Outsource
 - (l) Take a break
5. Benefits of Time Management

- (a) Stress relief
- (b) More time
- (c) More opportunities
- (d) Ability to realize goals

6. Implications of Poor Time Management

- (a) Poor workflow
- (b) Wasted time
- (c) Loss of control
- (d) Poor quality of work
- (e) Poor reputation

ACTIVITIES

1. The Big Picture Challenge.
2. Circadian Rhythm.
3. Time Squared.
4. Delegation Skill Practice.

CLASS XII			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: INTER PERSONAL SKILLS	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u> Student will learn Communication Skills, Symbolic Problem Solving, Analytical Thinking, Personal and Interpersonal Skills, Academic Inquiry.			
<u>PEDAGOGICAL PROCESS:</u> The social and emotional development of students is the focus of the study. Teachers' skills which includes speaking, classroom control, teaching techniques and the use of effective communication are important.			
CONTENT			
<p>1. Types of Interpersonal Skills: Communication. Public speaking, Verbal communication, Conflict Management, Conflict resolution, Constructive criticism, Counselling, Mediating, Problem solving, Empathy, Caring etc.,</p> <p>2. Methods to Improve interpersonal skills</p> <ul style="list-style-type: none"> (a) Attend workshops or online classes (b) Identify areas for improvement, seek opportunities to build relationships (c) Be thoughtful about ways your interactions could improve (d) Ask trusted friends or colleagues for constructive criticism. (e) Observe other positive interpersonal interactions, reflect on your experience and improve (f) Look inwards, seek mentorship 			
ACTIVITIES			
<ul style="list-style-type: none"> 1. Introducing yourself. 2. Listening – talking exercise. 3. Listening – showing interest in people. 4. Responding to praise. 5. Responding to negative feedback. 6. Self-disclosure as appropriate. 			

CLASS XII			
THEME: PERSONALITY DEVELOPMENT	UNIT:	SUBJECT: CAREER GUIDANCE AND COUNSELLING	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. Students will understand the rationale for career guidance 2. Students will understand the basic knowledge and skills needed to evaluate career options. 			
<u>PEDAGOGICAL PROCESS:</u> An approach of counselling is to be adopted by the teacher in providing career guidance. Teacher must remember that every student has different sets of abilities, aspirations, needs. The career choice should therefore be made by the student him/herself. The teacher may assist the students to get clarity.			
CONTENT			
<ol style="list-style-type: none"> 1. Career guidance: Career guidance can be defined as a comprehensive, developmental program designed to assist individuals in making and implementing informed educational and occupational choices. 2. Explanation of: - <ol style="list-style-type: none"> (a) Choosing the Right Career (b) Realization of Making a Wrong Career Decision (c) Focused Career Route 3. Teacher to elaborate upon how to evaluate various career options based on students' aptitude, interest and abilities. 4. What are the career options available to students having a specific abilities, aspirations? 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Interest & preference questionnaires 2. Aptitude surveys 			

CLASS XII			
THEME: PRIDE AND LOVE TOWARDS NATION	UNIT:	SUBJECT: WAR AND HEROES	DURATION: 02 HOURS
<u>LEARNING OBJECTIVES:</u>			
<ol style="list-style-type: none"> 1. Reflect on and recognize that everyone is unique 2. Recognize and challenge gender stereotypes 3. Understand why stereotypes are harmful. 			
<u>PEDAGOGICAL PROCESS:</u> Lecture, videos and interaction between teachers and students.			
CONTENT			
Army Heroes and Their Extra Ordinary Tales of Bravery			
<ol style="list-style-type: none"> 1. Introduction 2. Discuss the sacrifice of war heroes who have shown utmost commitment to the motherland. Discussion to be based on Param Veer Chakra, Maha Veer Chakra and other Gallantry award winners. 3. Celebration of Kargil Vijay Diwas. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Display of Photographs, display of description of the bravery shown by war heroes. 2. Newspaper cutting 			

CLASS XII			
THEME: INDIAN ARMED FORCES	UNIT:	SUBJECT: DEFENCE ESTABLISHMENTS	DURATION: 02 HOURS
<p><u>LEARNING OBJECTIVES:</u> After studying the lesson, the student will be able to</p> <ol style="list-style-type: none"> 1. Distinguish between the historic transformation of Indian Armed Forces before and after independence. 2. Recognise the roles and tasks of Defence establishments. 			
<p><u>PEDAGOGICAL PROCESS:</u></p> <ol style="list-style-type: none"> 1. The teaching strategies and students learning activities must be carefully selected to support the students' achievement of the lesson's content and outcomes. 2. Help teachers create curriculum military objects based on an active and modern teaching. 			
CONTENT			
<ol style="list-style-type: none"> 1. ORGANISATION OF MINISTRY OF DEFENCE <ol style="list-style-type: none"> (a) Organisational set-up and Functions (b) The Ministry and its Departments: Department of Defence (DoD), Department of Military Affairs (DMA), Department of Defence Production (DDP), Department of Defence Research and Development (DRDO) etc 2. Location of Defence Establishments in India- Army, Navy, Air force <ol style="list-style-type: none"> (a) Universities and institutes: Institute for Defence Studies and Analyses, Defence Institute of Advanced Technology, Defence Institute of Psychological Research and National Defence University (b) Inter-services organisations: Officers Training Academy, Chennai & Gaya; Indian Military Academy, Dehradun etc. 			
ACTIVITIES			
<ol style="list-style-type: none"> 1. Field trip. 2. Photographs 3. Organizational setup chart 4. Guest lectures / talks by Serving and Retired Officers of Armed Forces. 			

CLASS - XII

THEME:
INDIAN ORGANISATIONS

UNIT:

SUBJECT:
ISRO

DURATION:
02 HOURS

LEARNING OUTCOME: Students will learn about India's Space research organisation and projects.

PEDAGOGICAL PROCESS: The student can learn through class room teaching, watching videos or documentaries, visiting various ISRO establishments.

CONTENT

Understanding the genesis of ISRO, Indian National Committee for Space Research (INCOSPAR), Indian Space Research Organisation (ISRO) was established in August 1969, in place of INCOSPAR. Department of Space (DOS), Satellite Instructional Television Experiment (SITE), Satellite Telecommunication Experiments Project (STEP), 'Kheda Communications Project (KCP) Book Reading, Watching Documentaries, Visits.

BEST PRACTICES - SELF ASSESSMENT/ MONITORING BENCH MARKS

CORE PRIMARY FOCUS

Purpose of Education.

1. NEP 2020 brings out that, Education is fundamental for achieving full human potential. Providing access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. Education must move more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields.

focus of education.

2. Effort of the schools should be focused towards making education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, flexible, and, of course, enjoyable. Education must build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for gainful, fulfilling employment.

3. Emphasis must be given on conceptual understanding rather than rote learning and learning-for-exams; creativity and critical thinking to encourage logical decision-making and innovation; ethics and human & Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice; promoting multilingualism and the power of language in teaching and learning; life skills such as communication, cooperation, teamwork, and resilience; creativity and critical thinking to encourage logical decision-making and innovation;

DIMENSIONS

4. Based on the above guidelines contained in NEP 2020, and other important aspects of school management, various dimensions of planning execution and monitoring the Teaching Learning and Organizational management are listed below:

(a) **Mission Statement.** State and describe the vision and mission of the School as one entity. All students and staff must be well conversant with the mission and work cohesively to achieve the same.

(b) **Collaboration.** Maintain high level of communication and collaboration among students, parents, staff, various departments/ sections and alumni of the school.

(c) **Specific Objectives.** List out measurable Specific Objectives separately in all areas of:

- Learner Centered Teaching learning process under the broad guidelines of NEP 2020.

- Extra Curricular Activities and participation in local, state and national level ECA competitions.
- Sports and participation in local, state and national level Sports competitions.
- Value based teaching/ learning.
- Skill learning.
- Self learning and self development.
- Developing attitude for physical and mental health consciousness.
- Physical fitness and outdoor activities.

(d) **Performance Level.** List out high standards of specific performance level of School management, Students, Teachers, Admin Staff.

(e) **Align all Standards.** Curriculum, Teaching – Learning process and assessment must remain aligned with the stated standards.

(f) **Action Plan.** Prepare separate action plan for achievement of each specific objectives and specified performance level in each area. Device plan to monitor progress and performance in each area periodically.

(g) **Professional Development.** The school must plan and provide opportunities for professional development of each staff member.

(h) **Conducive Environment.** Maintaining a conducive, caring and supporting environment is essential for all schools. Also, developing and maintaining mutual trust/ relational trust is to be a key area.

(g) **Feedback Mechanism.** The school must implement a robust, free and frank feedback mechanism at all levels to maintain high level of trust and transparency. Each Feedback/ suggestions received must be examined and the significant ones must be implemented.

(h) **Medical Emergency and Disease Management.** All inclusive plan and collaborative efforts in medical emergency handling, disease management, infectious disease/ epidemic / pandemic prevention and management must be implemented.

FIRST-AID

PROPOSAL

The aim of establishing Sainik Schools is to **prepare children academically, physically and mentally for entry into the National Defence Academy** and to develop qualities of body, mind and character which will enable the young boys & girls to become good and responsible citizens.

Affiliation of 100 new Sainik Schools is an ongoing project of Sainik Schools Society, Ministry of Defence, New Delhi. It is very important to inculcate knowledge and skills w.r.t First Aid amongst cadets of Sainik Schools at an early stage, to prepare them to tackle the situation during an emergency in a most appropriate manner.

While the schools seeking to be affiliated to the Sainik Schools have a similar academic curriculum, what distinguishes the Sainik Schools from other schools is the training paradigm regimen. The proposed syllabus for First Aid is aimed at customising the syllabi of the schools proposed to be affiliated to the Sainik Schools so that they may attain the same degree of standards of training as the Sainik Schools.

First aid training is not only a valuable life-saving course but also an essential one. Its main objective is not to treat people but to provide immediate attention to a sick or injured person at the scene of occurrence or accident. First aid helps prevent the situation from getting worse while waiting for full medical care. Pertinent to mention here that often times the action taken during the golden hour (first hour) is the crucial step in the series of action taken in saving a life. Goes without saying that First Aid is the first step in the series.

The five main aims of first aid are to:

- Preserve life
- Prevent the escalation of illness or injury
- Promote recovery
- Provide pain relief
- Protect the unconscious

It is proposed to start First Aid Training from Class VI onwards. The duration of the class may be of 30 minutes each and the frequency can be once a week. After the basic introduction class, the curriculum is to include demos, films and practicals/practice sessions by cadets.

The classwise block syllabus is planned in a progressive and gradual manner and is enriched with theory and practical classes.

FIRST AID & EMERGENCY CARE COURSE

COURSE DESCRIPTION. This course enables Cadets to have a better understanding and develop skills in giving First Aid treatment in emergencies in either the school or the community.

COURSE OBJECTIVE. The following are the objectives of course :

- (a) Understand the scope and role of First Aid.
- (b) Comprehend the ways to manage any incident.
- (c) Demonstrate the techniques of assessing a casualty.
- (d) Describe the life saving measures for an unconscious casualty.
- (e) Explain First Aid management for respiratory problems.
- (f) Describe First Aid measures for wounds and circulation issues.
- (g) Identify bone, joint and muscle injuries and provide appropriate First Aid.
- (h) Describe First Aid process for the effects of heat and cold.
- (j) Provide First Aid measures for foreign objects, poisoning, bites and stings.
- (k) Provide First Aid for emergency conditions.
- (l) Identify and give First Aid treatment in community emergencies and natural disaster.
- (m) Describe the techniques and equipments for First Aid.

COURSE OUTLINE

Unit -1. Becoming a Good Samaritan

What is a Good Samaritan?, How to prepare yourself, Protection from infection, Dealing with a casualty, Requesting help, The use of medication, Remember your own needs.

Unit – II. Managing an incident

Action in an emergency, Emergency Contact Numbers, Awareness of Map of the place, Traffic accidents, Fires, Electrical incidents, Water incidents, Major incidents/Mass casualties.

Unit – III. Assessing a Casualty

Assessing the sick or injured, Mechanisms of injury, Primary survey, Secondary survey, Head-to-toe examination, Monitoring vital signs

Unit – IV. The Unconscious Casualty

Breathing and circulation, Life-saving priorities, Unconscious adult, Unconscious child, Unconscious infant, How to use an AED

Unit- V. Respiratory problems

The respiratory system, Hypoxia, Airway obstruction, Choking adult, Choking infant, Choking child, Hanging and strangulation, Inhalation of fumes, Drowning, Hyperventilation, Asthma, Croup, Penetrating chest wound

Unit - VI. Wounds and circulation

The heart and blood vessels, Bleeding and types of wound, Shock, Severe external bleeding, Impalement, Amputation, Crush injury, Cuts and scrapes, Bruising, Blisters, Infected wound, Foreign object in a wound, Scalp and head wounds, Eye wound, Bleeding from the ear, Nosebleed, Knocked-out adult tooth, Bleeding from the mouth, Finger wound, Wound to the palm, Wound at a joint crease, Abdominal wound, Vaginal bleeding, Bleeding varicose vein

Unit - VII. Bone, Joint and muscle injuries

The skeleton, Bones, muscles and joints, Fractures, Dislocated joint, Strains and Sprains, The nervous system, Head injury, Facial injury, Lower jaw injury, Cheekbone and nose injury, Collarbone injury, Shoulder injury, Upper arm injury, Elbow injury, Forearm and wrist injuries, Hand and finger injuries, Rib injury, Fractured pelvis, Back pain, Spain injury, Hip and thigh injuries, Lower leg injuries, Knee injury, Ankle injury, Foot and toe injuries, Cramps

Unit - VIII. Effects of heat and cold

The skin, Assessing a burn, Severe burns and scalds, Minor burns and scalds, Burns to the airway, Electrical burn, Chemical burn, Chemical burn to the eye, Flash burn to the eye, Incapacitate spray exposure, Dehydration, Sunburn, Heat exhaustion, Heatstroke, Hypothermia, Frostbite

Unit - IX. Foreign objects, poisoning, bites & stings

The sensory organs, Splinter, Embedded fishhook, Swallowed foreign object, Foreign object in the eye, Foreign object in the ear, Foreign object in the nose, How poisons affect the body, Types of poisons, Swallowed poisons, Drug poisoning, Alcohol poisoning, Animal and human bites, Insect sting, Tick bite Other bites and stings, Snake bite, Stings from sea creatures, Marine puncture wound.

Unit - X. Medical conditions

Angina, Heart attack, Stroke, Diabetes mellitus, Hyperglycaemia, Hypoglycaemia, Seizures in adults, Seizures in children, Fever meningitis, Fainting, Allergy, Anaphylactic shock, Headache, Migraine, Sore throat, Earache and toothache, Abdominal pain, Vomiting and diarrhea, Childbirth, Emergency childbirth

Unit - XI. Techniques and Equipment

Removing clothing, Removing headgear, Casualty handling, First aid materials, Dressings, Cold compresses, Principles of bandaging, Roller bandages, Tubular gauze bandages, square knots, hand and foot cover, Arm sling, Elevation sling, improvised slings.

Unit - XII. Emergency First Aid

Action in an emergency, CPR for an adult, chest compression only CPR, CPR for an infant, child, Community emergencies such as fire explosions, earth quakes, flood and famine

THE BLOCK SYLLABUS FOR FIRST AID

<u>BASICS OF FIRST AID</u>	
Block I	Introduction to First Aid
Unit 1	First aid and Role of First Aid Provider
Unit 2	Emergency Contacts and Map Routes
Unit 3	Understanding Human Body
Unit 4	Health and Hygiene
Unit 5	Types of First Aid Box and Safe Practices in First Aid
Block II	Responding to Emergencies
Unit 1	Recognizing Emergencies
Unit 2	Transportation
Unit 3	Cardio Pulmonary Resuscitation and Auto mated external Defibrillator
Block III	First Aid in Accidents and Types of Injuries
Unit 1	Wounds and Bleeding
Unit 2	Head and Spinal Injuries
Unit 3	Injuries to Tissues, Bones and Joints
Unit 4	Burns
Unit 5	Foreign Bodies
Block IV	First Aid in Common and Environmental Emergencies
Unit 1	Common Emergencies
Unit 2	Extreme Heat and Cold Conditions
Unit 3	Bites and Stings
Unit 4	Altitude Illness
Unit 5	Allergies and Shock

<u>First Aid Practical</u>	
Block I	Practical Manual-I
Unit 1	Observation and assessment of the scene and the victim
Unit 2	Checking Temperature, Pulse and Respiration
Unit 3	Bandaging/Splints /Slings/ Binder
Unit 4	Methods of moving and transporting the victim
Unit 5	Location, Use and Maintenance of First Aid Box
Unit 6	First Aid with Improvisation (Scenario Based)
Unit 7	CPR and Recovery Position
Unit 8	Practicing Universal Precautions
Unit 9	Control of Bleeding
Unit 10	Wound care and Dressing

First Aid Practical

Block II	Practical Manual-II
Unit 1	Managing Injury (Head and Spinal)
Unit 2	Managing Injury (Tissues, Bones and Joints)
Unit 3	Management of Burns
Unit 4	Management of Foreign bodies
Unit 5	Management of Fits and Fainting
Unit 6	Management of Chest Pain
Unit 7	Management of Asthmatic Attacks
Unit 8	Management of High and Low Blood Sugar
Unit 9	Management of Drowning and Poisoning
Unit 10	Management of Extreme Heat and Cold Conditions
Unit 11	Management of Bites and Stings
Unit 12	Management of Altitude Illness
Unit 13	Management of Allergy & Shock

CLASS WISE SYLLABUS

Class VI – VIII	
Basic First Aid and Practical Course	
Course Duration- 24 Periods of 30 Minutes Each in a Year	
Course Syllabus	<p>Introduction to First Aid: First aid and Role of First Aid Provider; Emergency Contacts and Map Routes; Health and Hygiene; Safe Practices in First Aid.</p> <p>Responding to Emergencies: Recognizing Emergencies</p> <p>Practical Manual-I: Observation and assessment of the scene and the victim; Temperature, Pulse and Respiration; Bandaging/Splints/Slings/Binder; Methods of moving and transporting the victim; Location, Use and Maintenance of First Aid Box; First Aid with Improvisation (Scenario Based); CPR and Recovery Position; Practicing Universal Precautions; Control of Bleeding; Wound care and Dressing</p> <p>Learners must be physically able to carry out procedures required to meet the assessment criteria.</p>

Class IX – XII	
Basic First Aid and Practical Course	
Course Duration- 32 Periods of 30 Minutes Each in a Year	
Course Syllabus	<p>Introduction to First Aid: First aid and Role of First Aid Provider; Emergency Contacts and Map Routes; Safe Practices in First Aid, Responding to Emergencies; Transportation; Cardio Pulmonary Resuscitation and Auto mated external Defibrillator, First Aid in Accidents and Types of Injuries: Wounds and Bleeding; Head and Spinal Injuries; Injuries to Tissues, Bones and Joints; Burns; Foreign Bodies, First Aid in Common and Environmental Emergencies: Common Emergencies; Extreme Heat and Cold Conditions; Bites and Stings; Altitude Illness; Allergies and Shock</p> <p>Practical Manual-II: Location, Use and Maintenance of First Aid Box; Wound care and Dressing; Managing Injury (Head and Spinal); Managing Injury (Tissues, Bones and Joints); Management of Burns; Management of Foreign bodies; Management of Fits and Fainting; Management of Chest Pain; Management of Asthmatic Attacks; Management of Asthmatic Attacks; Management of High and Low Blood Sugar; Management of Drowning and Poisoning; Management of Extreme Heat and Cold Conditions; Management of Bites and Stings; Management of Altitude Illness; Management of Allergy & Shock</p>
	Learners must be physically able to carry out procedures required as per assessment criteria.

Evaluation

Unit tests, term examinations and assignments

1. Test papers
2. Final practical + oral test

The assessment shall be in the scale of equal marks for theory and practical.

SYLLABUS - CLASS VI

Total no. of sessions – 14

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** Introduction

- (a) Introduction
 - (i) What does First Aid mean?
 - (aa) Self-help
 - (ab) Help for others
 - (ac) Why First Aid?
 - (ii) Basic objectives of First Aid.
 - (iii) First Aid symbols.
- (b) List of Emergency numbers and list of persons to be contacted.
- (c) Introductory video on concept of First Aid to summarize the concept.

2. **Session 2.** Health & Hygiene (To give First Aid you yourself need to maintain good personal hygiene)

- (a) Structure of Human Body.
- (b) Hygiene and Sanitation.
- (c) Cleanliness.
 - (i) Teeth
 - (ii) Ears
 - (iii) Eyes
 - (iv) Nose and Throat
 - (v) Nails and Fingers
 - (vi) Skin
 - (vii) Clothes
 - (viii) Hair
 - (ix) Bowel
- (d) Food, Proper Rest and Balanced Diet.

3. **Session 3.**

- (a) Importance of clean drinking water.
- (b) Methods of purification of water.

4. **Session 4.**

- (a) Physical and Mental Health.
- (b) Characteristics of Good Health.
- (c) Characteristics of Healthy Mind.
- (d) Prevention, Importance of warming up before Heavy exercises and Games.

5. **Session 5 & 6.**

- (a) Occasions on which First Aid to be administered (basics).
 - (i) First aid in Drowning
 - (ii) Fire Injuries
 - (aa) Mild Burns
 - (ab) Severe Burns
 - (ac) Blisters
 - (iii) Injuries on Play Fields
 - (aa) Skin injuries
 - (ab) Soft tissue injuries
 - (ac) Joint injuries
 - (ad) Bone injuries/ Fractures
 - (iv) Electric Shock
 - (v) Poisoning
 - (vi) Heat Stroke
 - (vii) Cold Injuries
 - (viii) Shock
 - (ix) Foreign Body in the Eye
 - (x) Snake Bite
 - (xi) Scorpion Bite
 - (xii) Dog Bite

6. **Session 7.**

- (a) Types of First Aid Kits (Introduction)
 - (i) Small First Aid Box
 - (ii) Medium First Aid Box
 - (iii) Large First Aid Box
 - (iv) First Medical Responder First Aid Kit
- (b) Dimensions and Contents of Small First Aid Box.
- (c) Video of standard First Aid box followed by live demonstration of First Aid box and its contents.
- (d) Assignment – Make a First Aid Box and keep in your classroom.

7. **Session 8.**

- (a) Types of wounds.
- (b) First Aid for Wounds – Articles required.
- (c) The Roller Bandages and its application.

8. **Session 9.**

- (a) General rules of Bandages.
- (b) Procedure for First Aid of Small wounds.

9. **Session 10.**

- (a) Videos on First Aid of Small wounds.
- (b) Demonstration sessions followed by practice by cadets.

10. **Session 11.**

- (a) General Rules of handling.
 - (i) Snake Bite
 - (ii) Scorpion Bite
 - (iii) Dog Bite
- (b) Relevant videos and Demonstration sessions.

11. **Session 12.** Revision.

12. **Session 13.** Examination – written.

13. **Session 14.** Practical.

SYLLABUS - CLASS VII

Total no. of sessions – 15

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** Introduction
 - (a) First Aid and the Law.
 - (b) Dealing with an Emergency.
 - (c) Demonstration/ Video.

2. **Session 2.** Recovery Position
 - (a) How to put a person in to the recovery position.
 - (b) The initial top to toe assessment.
 - (c) Demonstration/video.

3. **Session 3.** Content of a First Aid Kit
 - (a) Content of Small First Box.
 - (b) Content of Medium First Aid Box.

4. **Session 4.** Hygiene and Hand washing
 - (a) General Hygiene Notes.
 - (b) Technique of hand washing.
 - (c) Practical/Video/Demonstration session.

5. **Session 5.** First Aid Techniques - Dressing
 - (a) Type of Dressing.
 - (b) How to apply dressing.
 - (c) Practical/Video/Demonstration session.

6. **Session 6.** First Aid Techniques – Bandages
 - (a) Types of Bandages.
 - (b) Roller Bandages.
 - (c) Crepe Bandages.

7. **Session 7.** First Aid Techniques – Evacuation Technique
 - (a) Evacuation Technique

- (i) Shoulder pull.
 - (ii) Ankle pull.
 - (b) Transport Technique
 - (i) Single helper transport.
 - (ii) Multiple helper transport.
 - (c) Demonstration for Evacuation Technique and Transport Technique
- 8. **Session 8.** Stretchers
 - (a) Loading a stretcher.
 - (b) Lifting and lowering a stretcher.
 - (c) Carrying a loaded stretcher.
 - (d) Loading a stretcher into an ambulance.
- 9. **Session 9.** Demonstration on stretcher loading techniques.
- 10. **Session 10.** Animal Bites
 - (a) Animal Bites (Dog, Cat, Monkey, Mongoose, Horse, Cow or other animal bites).
 - (b) Things to observe and enquire.
 - (c) Actions to be taken.
 - (d) When to refer to a health care facility?
- 11. **Session 11.** Snake Bites
 - (a) Types of snakes commonly found in neighborhood.
 - (b) Things to observe and enquire.
 - (c) Actions to be taken.
 - (d) When to refer to a health care facility?
- 12. **Session 12.** Insect Stings and Bites
 - (a) Types of Insects commonly found in neighborhood.
 - (b) Things to observe and enquire.
 - (c) Actions to be taken.
 - (d) When to refer to a health care facility?
- 13. **Session 13.** Revision.
- 14. **Session 14.** Examination – written.
- 15. **Session 15.** Practicals.

SYLLABUS - CLASS VIII

Total no. of sessions – 15

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** First Aid Techniques

- (d) Duty of giving First Aid and care.
- (e) Privacy.
- (f) Negligence.
- (g) Handling of Stress when giving First Aid.
- (h) Good Samaritan Protection Guidelines.

2. **Session 2.** Respiratory System and Breathing

- (d) Respiration.
 - (i) The respiratory system.
 - (ii) The respiratory muscles.
 - (iii) Mechanism of respiration.
- (e) No Breathing or Difficult Breathing
 - (i) Causes of no breathing.
 - (ii) In case of emergency things to observe and enquire.
 - (iii) Actions when the causality is not breathing or not breathing normally.
- (f) Demonstration/Video.

3. **Session 3.** Drowning

- (c) Signs of Drowning.
- (d) Things to observe and enquire.
- (e) Safety first and call for help.
- (f) Ways to remove victim out of water.
- (g) Actions – When victim is breathing.
- (h) Actions – When victim is not breathing or breathing heavily.

4. **Session 4.** Drowning - Video/Demonstration session followed by practice by cadets.

5. **Session 5.** Strangulation and Hanging
 - (d) Understanding the situation.
 - (e) Legal Aspects - Do's and Dont's.
 - (f) Actions – When victim is breathing.
 - (g) Actions – When victim is not breathing or breathing heavily.
 - (h) Practical/Video/Demonstration session.

6. **Session 6.** Chocking
 - (a) Understanding of situation.
 - (b) Things to observe and enquire.
 - (c) Actions – If the person can answer questions, can cough and can breathe.
 - (d) Actions – If the person cannot speak, cough and breathe.
 - (e) Actions – If the object did not come out and the person is still chocking.
 - (f) Actions – If the person losses consciousness.
 - (g) Actions – If the victim is a baby under one year of age.
 - (h) Chocking - Video/Demonstration session followed by practice by cadets.

7. **Session 7.** Swelling within the throat
 - (a) Understanding the situation.
 - (b) Things to observe and enquire.
 - (c) First Aid procedures.
 - (d) Practical/Video/Demonstration session.

8. **Session 8.** Asthma
 - (a) Understanding the situation.
 - (b) Signs of discomfort of victim.
 - (c) Things to observe and enquire.
 - (d) Procedure of comforting an Asthma patient.
 - (e) Practical/Video/Demonstration session.

9. **Session 9.** Small cuts and abrasions
 - (a) Things to observe and enquire.
 - (b) Hygiene.
 - (c) Procedure to stop bleeding and bandage the wound.
 - (d) Signs of infection.
10. **Session 10.** Head Injury
 - (a) Things to observe and enquire.
 - (b) Do's and Don'ts.
 - (c) Procedure of evacuation.
11. **Session 11.** Nose Bleeding
 - (a) Understanding the situation.
 - (b) Things to observe and enquire.
 - (c) First Aid Procedures.
12. **Session 12.** Bleeding of Gums
 - (a) Understanding the situation.
 - (b) First Aid Procedures.
13. **Session 13.** Revision.
14. **Session 14.** Examination – written.
15. **Session 15.** Practicals.

SYLLABUS - CLASS IX

Total no. of sessions – 15

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** First Aid Overview Flow Chart
 - (i) Draw and explain First Aid Overview Flow Chart.

2. **Session 2.** Heart, Blood Circulation, Shock
 - (g) Heart and Blood Circulation.
 - (h) Blood Pressure.
 - (i) Pulse.
 - (j) How to feel the pulse.
 - (k) Blood and how blood clots.

3. **Session 3.** Chest discomfort / Heart Attack
 - (a) Sign and Symptoms of Chest discomfort and Heart Attack in a person.
 - (b) Procedure to provide first aid to Heart Attack victim.
 - (c) Action – When the person becomes unconscious, but still breathing.
 - (d) Action – When the person stops breathing.

4. **Session 4.** Demonstration/video handling the cases of Chest discomfort and Heart Attack incidents followed by practice session.

5. **Session 5.** Bleeding.
 - (a) Types of bleeding.
 - (i) By type of blood vessel that has been damaged.
 - (aa) Arterial bleeding.
 - (ab) Venous bleeding.
 - (ac) Capillary bleeding.
 - (ii) Classification by location
 - (aa) External bleeding.
 - (ab) Internal bleeding.

- (b) Things to observe and enquire when somebody has bleeding.
 - (c) First Aid for bleeding (General)
 - (d) Actions/precautions – if an object is stuck in the wound
6. **Session 6.** Internal Bleeding
- (a) First Aid for internal bleeding.
 - (b) Do's and Don'ts.
7. **Session 7.** Video/Demonstration on handling the cases of bleeding followed by practice session by cadets.
8. **Session 8.** Wounds and Injuries
- (a) Types of wounds
 - (i) Abrasions
 - (ii) Incisions
 - (iii) Contusions (bruises)
 - (iv) Lacerations
 - (v) Puncture wounds
 - (vi) Amputations
 - (b) Complication of wounds – Bleeding, Infection.
 - (c) First Aid in case of small cuts and abrasions.
 - (d) Hygiene while giving First Aid.
9. **Session 9.** Video/Demonstration on handling cases of various types of wounds followed by practice session by cadets.
10. **Session 10.** Bleeding from varicose vein
- (a) Steps to give first aid to victim with bleeding from varicose vein.
 - (b) Video/Demonstration on handling the cases of bleeding from varicose vein followed by practice session by cadets.
11. **Session 11.** Amputation
- (a) Steps to give First Aid to amputation victim.
 - (b) Precautions to be taken.

12. **Session 12.** Strains and Sprains (Injuries to Ligaments, Muscles and Tendons)
 - (a) Causes of strains and sprains.
 - (b) Sign and symptoms of various types of strains and sprains.
 - (c) Steps to provide First Aid to victims.
 - (d) Do's and Dont's
13. **Session 13.** Revision.
14. **Session 14.** Examination – written.
15. **Session 15.** Practicals.

SYLLABUS - CLASS X

Total no. of sessions – 16

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** Diarrhoea

- (j) What is Diarrhoea, cause of Diarrhoea.
- (k) Signs and Symptoms.
- (l) Steps taken to prevent Dehydration.
- (m) ORS and preparation procedure of ORS.
- (n) Do's and Don't.
- (o) When to refer to health care facility.

2. **Session 2.** Food Poisoning

- (l) Sign and Symptoms.
- (m) How to provide First Aid.
- (n) Steps taken to prevent Dehydration.
- (o) When to refer to health care facility.

3. **Session 3.** Hypoglycaemia (blood sugar level too low)

- (e) Sign and Symptoms.
- (f) Procedure to provide First Aid.
- (g) When to refer to health care facility.

4. **Session 4.** Human Skin and Burn Wounds

- (a) Human skin and its three layers.
- (b) Skin functions – protection, sensation, temperature regulation, immunity, allowing movement and growth, excretion and synthesis of vitamins.
- (c) First, second and third degree burns.
- (d) Type of burns by origin
 - (iii) Dry Burns
 - (iv) Scalds
 - (v) Electric burns
 - (vi) Chemical burns

- (vii) Radiation burns
 - (viii) Frost Bites (Cold burns)
 - (ix) Sun Burns
- (p) Danger of Burns.
5. **Session 5.** Dry Burns and Scalds (Burns from flames, hot surfaces, steam etc)
- (a) Things to observe and enquire.
 - (b) How to rescue the victim from fire, keeping yourself safe.
 - (c) Do's and Don'ts.
 - (d) How to provide First Aid.
 - (e) When to refer a burn victim to a health care facility or hospital.
6. **Session 6.**
- (a) Demonstration / Video on how to rescue a fire victim from fire, keeping yourself safe.
 - (b) Demonstration / video on how to provide First Aid to a victim of dry burns and scalds.
7. **Session 7.** Care of small burns (small, first and second degree burns)
- (a) How to maintain hygiene.
 - (b) How to provide First Aid.
 - (c) First Aid in case of burn injuries to eyes.
8. **Session 8.** Electrical burns and Electrocutation by electricity or lightning
- (a) Precautions while attending a victim of Electrocutation and own safety.
 - (b) Things to observe and enquire.
 - (c) Sign and symptoms.
 - (d) Steps to rescue the victim.
 - (e) Steps to administer First Aid.
 - (f) Do's and Don'ts

9. **Session 9.**
- (a) Demonstration / Video on how to rescue a electrocution victim, keeping yourself safe.
 - (b) Demonstration / Video on how to provide First Aid to a victim with electric burns.
10. **Session 10.** Chemical burns
- (a) Precautions while attending a victim of chemical burns and own safety.
 - (b) Things to observe and enquire.
 - (c) Signs and symptoms.
 - (d) Steps to rescue the victim.
 - (e) Steps to administer first aid.
 - (f) Do's and Don't's.
11. **Session 11.** Sunburns, Heat Exhaustion and Heat Stroke
- (a) Reason for Sun burns, Heat Exhaustion and Heat Stroke.
 - (b) Sign and Symptoms of Heat Exhaustion and Heat Stroke
 - (c) First Aid for the cases of Heat Exhaustion and Heat Stroke.
12. **Session 12.** Frost bite
- (a) Signs and Symptoms.
 - (b) First Aid.
 - (c) Do's and Don'ts.
13. **Session 13.** Fever
- (a) Types of thermometers.
 - (b) Procedure to measure the body temperature.
 - (d) How to read the temperature on thermometer.
 - (e) Signs and symptoms of person with fever. What to observe and ask.
 - (f) How to handle seizure due to fever.
 - (g) How to administer First Aid to fever victim.
 - (h) When to refer to health care facility or hospital.

13. **Session 14**. Revision.
14. **Session 15**. Examination – written.
15. **Session 16**. Practicals.

SYLLABUS - CLASS XI

Total no. of sessions – 16

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** Psychological First Aid
 - (p) Definition of Psychological First Aid.
 - (q) Traumatic Crisis.
 - (r) How to provide Psychological First Aid.
 - (i) Behave calmly.
 - (ii) Listen to affected person.
 - (iii) General consideration when giving help.
 - (iv) Physical Contact.
 - (v) Protect against inquisitive onlookers.
 - (vi) Let the victim relieve himself by a good cry.
 - (vii) Not to leave the person alone in trauma. Etc.,
2. **Session 2.** Video on administering Psychological First Aid to victims.
3. **Session 3.** Resuscitation (Basic CPR)
 - (a) What is CPR – Cardiopulmonary Resuscitation.
 - (b) Need / importance of administering CPR.
 - (c) Things to observe and enquire before administering CPR.
 - (d) How to observe responsiveness and consciousness.
 - (e) How to observe breathing.
 - (f) How to observe the pulse.
 - (g) Resuscitation of a person not breathing or not breathing normally.
 - (h) CPR – How to give chest compressions.
 - (j) Demonstration / Video session.

4. **Session 4.** CPR
 - (a) CPR – How to give rescue births?
 - (b) Resuscitation of baby/child who is not breathing or not breathing normally.
 - (c) CPR – How to give Chest compression on a baby/child less than one year old.
 - (d) CPR – How to give rescue births to a child less than one year old.
 - (e) Do's and Don'ts – CPR.

5. **Session 5.**
 - (a) Video / demonstration session – CPR.
 - (b) Practice by cadets for administering CPR on dummy.

6. **Session 6.** Recovery Position
 - (a) How to put a person on recovery position.
 - (b) How to observe the vitals of the victim.

7. **Session 7.** Shock
 - (a) What is Shock.
 - (b) Types of Shock.
 - (c) Things to observe and ask.
 - (d) First Aid for Shock victim.

8. **Session 8.** Bone, Joints and Muscles
 - (a) The skeleton.
 - (b) The backbone or spine.
 - (c) The Ribs and Breast bone (Sternum).
 - (d) The shoulder and upper limbs.
 - (e) The pelvis and lower limbs.
 - (f) Joints.
 - (g) Muscles.

9. **Session 9.** Fractures
 - (a) Fracture and causes of fracture.
 - (b) Types of Fractures.
 - (c) Signs and symptoms when a person suffers fracture. Things to observe and ask.
 - (d) First Aid to victim in case of fracture to upper and lower limbs.
 - (e) First Aid to victim in case of head, neck or spinal injury.
 - (f) Signs and symptoms in severe injuries.
 - (g) First Aid in case of severe injuries.

10. **Session 10.** Fracture
 - (a) Demonstration followed by practice session for handling upper/lower limb fractures.
 - (b) Demonstration followed by practice session for handling spinal fractures.

11. **Session 11.** Fracture of cheek bone, nose or jaw.
 - (a) Things to observe and enquire.
 - (b) First Aid to victim of Cheek bone or Nose injury.
 - (c) First Aid to victim of Jaw injury.

12. **Session 12.** Dislocations
 - (a) Causes of dislocations.
 - (b) Things to observe and enquire.
 - (c) Signs and symptoms.
 - (d) First Aid.

13. **Session 13.** Stroke.
 - (a) What is stroke.
 - (b) What to see and enquire.
 - (c) First Aid.

14. **Session 14.** Fits – Convulsions – Seizures

- (a) What is Fits, Convulsions and Seizures.
- (b) Their signs and symptoms.
- (c) What to see and enquire.
- (d) How to administer First Aid.

15. **Session 15.** Examination – written.

16. **Session 16.** Practicals.

SYLLABUS - CLASS XII

Total no. of sessions – 08

Time per session – 60 min (can be split into two periods of 30 minutes each)

1. **Session 1.** Poisoning
 - (s) Types of Poisoning.
 - (t) Signs and Symptoms.
 - (u) How to administer First Aid.
2. **Session 2.** Emergency Child Birth (When you are at a public place)
 - (a) What to observe and enquire.
 - (b) Sign and Symptoms that labour has started.
 - (c) When to shift the patient immediately to nearest health facility or hospital.
 - (d) What to do if you have to assist in case of emergency birth.
 - (e) First Aid to new born baby.
3. **Session 3.** Management of Emergency at School.
4. **Session 4.** Management of Emergency at Work place.
5. **Session 5.** Management during Road and Traffic Accidents.
6. **Session 6.** Management of Emergencies in Rural Areas.
7. **Session 7.** Emergency Triage.
8. **Session 8.** Transport Techniques.

FIRE SAFETY

CLASS – VII



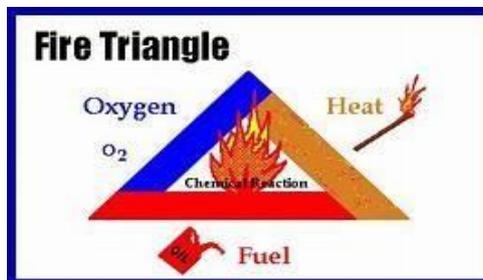
INDEX

Chapter No	Chapter Name	Number of Periods	
		Theory	Practical
I	<u>Fire</u> (a) What is fire (b) Ways to extinguish fire (c) Classification of fire (d) Characteristics of fire (e) Potential Fire Hazards	6	2
II	<u>Fire Prevention</u> (a) Fire safety precautions (b) Kitchen Fire (c) In case of a Leakage	4	2

CHAPTER-I

FIRE

(a) **What is Fire.** Fire is the result of a chemical combustion reaction, typically a reaction between oxygen in the atmosphere and some sort of a fuel. Fuel is anything that burns like wood, gasoline, petrol, natural gas etc.



Combustion is when fuel reacts with oxygen to release heat energy. Combustion can be slow or fast depending on the amount of oxygen available. Combustion that results in a flame is very fast and is called burning. Combustion can only occur between gases.

(b) **Ways to Extinguish Fire.** By eliminating any one element from the fire Tetrahedron, fire can be stopped by the following methods :-

- (i) Cooling: Using water.
- (ii) Starvation: By removing adjacent material from the site of fire.
- (iii) Smothering: By cutting off air supply.

(c) **Classification of Fire**

Class of Fire	Type of Fire	Type of Extinguisher	Extinguisher Identification	Symbol
A	Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics	Water, Dry Powder, Halon		
B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder Halon		
C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder Halon		
D	Combustible Metals or Combustible Metal Alloys	Special Agents		No Picture Symbol
K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats			

(d) **Characteristics of Fire.** In order to protect yourself from fire, it is important to understand the basic characteristics of fires. A fire has many characteristics and some of them are listed below :-

- (i) A fire can occur at any time.
- (ii) Short circuit is one of the leading causes of fire.
- (iii) In just two minutes, a residence can be engulfed in flames.
- (iv) The water is the best medium to fight fires except electrical and oil fires.
- (v) Most deaths due to fire occur at night when people are sleeping.
- (vi) Fire produces gases that make you drowsy.
- (vii) Smoke and poisonous gases are the primary killer in fires.
- (viii) Instead of being awakened by fire, you may fall into a deeper sleep.
- (ix) Asphyxiation is the leading cause of fire deaths exceeding burns.
- (x) Heat and smoke from fire can be more dangerous than the flames.
- (xi) Pouring water on electrical or oil fires will be dangerous.

(e) **Potential Fire Hazards.** The best measures to be adopted for the prevention of a fire are to eliminate potential fire hazards. Therefore, you need to know what fire hazards are and what you should do to remove them from your home or workplace. Some potential fire hazards are listed below :-

- (i) Electric wiring in poor condition.
- (ii) Electric system those are overloaded, resulting in hot wiring or connections, or failed components.
- (iii) Storage of flammable liquids.
- (iv) Storage of combustibles with insufficient protection.
- (v) Storage of combustibles near equipment that generate heat, flame or sparks.
- (vi) Smoking of cigarettes, cigars, pipes etc.
- (vii) Ignition sources such as candles, lighters, match, etc.
- (viii) Equipment that generate heat and utilizes combustibles.
- (ix) Use of cooking appliances, stoves, furnaces, boilers, heaters, ovens, etc. disregarding safety guidelines.
- (x) Poor housekeeping practices.

Please do not use power plugs more than their ratings.



CHAPTER-II

FIRE PREVENTION

A fire can occur at any time. Therefore, various measures are to be adopted in advance to prevent a fire in your building. Some of the measures need to be adopted are given below :-

- (i) Prohibit smoking in storage areas of flammable materials.
- (ii) If electrical equipment is not working properly or if it gives off an unusual odour disconnect the equipment and call the duty electrician.
- (iii) Properly replace any electrical cord that is cracked or has broken connection.
- (iv) When using extension cords, protect them from damage. Do not put them across doorways or any place where they will be stepped on or chafed. Check the amperage load specified by the manufacturer.
- (v) Do not plug an extension cord into another, and do not plug more than one extension cord into one outlet.
- (vi) Keeps all heat producing appliances away from the wall and away from anything that might burn and spread fire. Leave plenty of space for air to circulate around equipment that normally gives off heat.
- (vii) Make sure all appliances in your area such as hot plates, ovens, toasters, mixers, grinders, geezers, clothing irons are turned off when not in use.
- (viii) Use ash trays and empty them only when you are sure the ashes, matches and butts are cold.
- (ix) Keep storage areas, stairway landings and other out of way locations free of waste paper, empty cartons, dirty rags and other material that could fuel a fire.
- (x) Report all fire hazards to the institute security & fire safety wing.
- (xi) Create awareness to use fire retardant furniture's, carpets, curtains, etc.

(a) **Fire Safety Precautions.**

- (i) Don't overload outlets with multiple outlet cords or plugs. If additional outlets are required, use an IS marked multi-outlet "power strip" with its own built-in circuit breaker.
- (ii) Careless smoking, use of candles and incense, and unattended cooking appliances remain major causes of fatal fires in residential buildings. Use of fire crackers, hot work, and open fire is prohibited in all buildings.
- (iii) Keep walkways, stairwells and exits free from obstructions at all times.
- (iv) Report immediately if you observe/noticed damaged fire equipment and other fire hazards to Campus security and Fire Safety wing.

- (v) Do not open fire hydrant/hose reel water for unnecessarily use.
- (vi) Do not misuse of Fire Extinguisher.

(b) **Kitchen Fire.** Thousands of fire incidents occur every year in which many residential structures are also involved. Majority of the fire incidents, in residential houses, have actually emanated from the kitchen, while cooking food, which had been left unattended, on the stove.

- (i) Never leave your cooking unattended. The cooking vessel could overflow and extinguish the burners, causing gas to leak.
- (ii) Never get distracted. If you are called away, turn off the gas.
- (iii) Keep the flame from extending past the pot side -Turn pot handles away from the stove edge.
- (iv) Be especially careful when cooking with oil or fat. Fats and cooking oils will ignite once they have reached a certain temperature.
- (v) Never use water to put out fat and oil fires. Water can cause a fire to spread rapidly and inflict horrific burns.
- (vi) Ensure good ventilation in your kitchen by keeping the windows open.
- (vii) Never allow a child to cook without adult supervision.
- (viii) Wear tight-fitting sleeves when cooking.
- (ix) Do not place flammable or plastic items near the flame.
- (x) Close the regulator knob to OFF position when the cylinder is not in use.
- (xi) Do not bring and accumulate cylinders in kitchen (Hostel and canteen) concerned authorities please instruct to respective mess and canteen contractor/worker.

(c) **In Case of a Leakage.**

- (i) Do not panic and calm your mind.
- (ii) Do not turn on or turn off any electrical appliances in the kitchen if you think that there is a leak.
- (iii) Put out all flames, lights, incense sticks etc.
- (iv) Shut down the appliance and turn off the LPG regulator.
- (v) Immediately put on the Safety Cap on the cylinder after the regulator is switched off.
- (vi) Keep all the windows and doors open to ensure ventilation. But do not switch on electric fans or exhaust fans for this purpose.
- (vii) Get in touch with your dealer at the earliest.

(d) **Gas Bottle & Cylinder Fire.** Sound the alarm and call the firefighting services. Evacuate all personnel, except those necessary to deal with the emergency, from the danger area (particularly if in path of any cloud)

(e) **In Case of a Leak with Fire.**

(i) A small fire from a bottle may be smothered with a wet cloth or dry powder extinguisher, ONLY if it is possible to stop the leak.

(ii) Cool with water any adjacent cylinder, which cannot be moved to a safe place.

(iii) Always approach any fire or leak from upwind and using all protection available. It is best to control gas fires and not to extinguish them until the sources are cut off. Due regard should be taken of the possibility of exploding bottles and jets of flame from relief valves.

RESPONDING TO FIRE

CLASS VIII



INDEX

Chapter No	Topic	Number of Periods	
		Theory	Practical
I	<u>Responding To Fire</u> (a) In case of small fire (b) In case of large fire	6	2
II	<u>What to do in a Fire</u> (a) If you can't leave the room (b) If a window jump is impossible. (c) If you can leave the room	4	2

CHAPTER-I
RESPONDING TO FIRE

Heat and toxic smoke from fire build up with surprising speed, quickly blocking escape paths. Few people are burned to death in fires; most die from smoke inhalation. Taking fire alarms seriously and exiting buildings quickly are essential to your survival. When fire is discovered:

- (i) Activate the nearest fire alarm (if installed).
 - (ii) Notify the local Fire Department by calling: Near Fire Control Room.
 - (iii) If the fire alarm is not available, notify the site personnel about the fire emergency by the following means: By shouting Fire, Fire, Fire.
- (a) **In the Case of a Small Fire:**
- (i) Notify others nearby; call nearest Fire Control Room.
 - (ii) If it is safe to do so, use a fire extinguisher.
 - (ii) If the fire is still burning, get out.
- (b) **In the Case of a Large Fire or Smoke:**
- (i) Notify others; call nearest Fire Control Room.
 - (ii) Activate fire alarm.
 - (iii) Leave building quickly via the stairs If there are injuries, call nearest Hospital.
- (c) **Fight the fire ONLY if:**
- (i) The Fire Department has been notified.
 - (ii) The fire is small and is not spreading to other areas.
 - (iii) Escaping the area is possible by backing up to the nearest exit.
 - (iv) The fire extinguisher is in working condition and personnel are trained to use it.
- (d) **Upon being notified about the fire emergency, occupants must:**
- (i) Leave the building using the designated escape routes.
 - (ii) Assemble in a safe open area
 - (iii) Remain outside until the competent authority (Authority) announces that it is safe to re-enter.
- (e) **Designated Official, Emergency Coordinator or supervisors must:**
- (i) Disconnect utilities and equipment unless doing so jeopardizes his/her safety.
 - (ii) Coordinate an orderly evacuation of personnel.

- (iii) Perform an accurate head count of personnel reported to the designated area.
- (iv) Determine a rescue method to locate missing personnel.
- (v) Provide the Fire Department personnel with the necessary information about the facility.
- (f) **Area/Floor Monitors must:**
 - (i) Ensure that all employees have evacuated the area/floor.
 - (ii) Report any problems to the Emergency Coordinator at the assembly area.
- (g) **Assistants to Physically Challenge should:**
 - Assist all physically challenged students/visitors/staff/employees in emergency evacuation.

CHAPTER-II

WHAT TO DO IN A FIRE

STEP 1

Don't panic! Take two seconds to think. You're going to be scared, but you need to stay calm to get out alive.

STEP 2

Feel the wall / door with the back of your hand. If very hot don't go out! There is a fire behind it.

(a) If you CAN'T Leave the Room: Consider lowering yourself out of the window.

- (i) You should survive a 1 floor jump onto tar/concrete. Anything higher is questionable.
- (ii) Ideally throw a mattress out first to land on. Don't launch yourself out of the window, but hang down by your arms before dropping to the ground to minimize your fall. Bend your knees when you land.
- (iii) Do not break the window until you're about to jump as you can't stop smoke coming in afterwards.

(b) If a Window Jump is Impossible:

- (i) Fill the bath/basin with water and use dampened bed sheets, towels or clothes wedged in door cracks to stop smoke entering. Wet the walls and doors. No water? Pee on them!
- (ii) Then signal to rescuers from the window using a torch or a white sheet.

(c) If You CAN Leave the Room:

- (i) Take the room key with you if it's to hand. You may need it to rush back in.
- (ii) Smoke rises and so will be high, filling down to the floor. Keep low or better still crawl where the oxygen is low.
- (iii) Stay close to the walls to avoid panicking guests and to count doors to the fire exit.
- (iv) Do not use lift/elevator - that's an oven you don't want to be trapped in.
- (v) Do not re-enter under any circumstances until told it is safe by the fire brigade. (Better to lose a backpack than your life).

THE MOST IMPORTANT RULE

(a) **Is the Exit Corridor Filled with Smoke?**

DON'T try and cover your mouth and run through it unless you can guarantee a maximum five second clear run to the outside (if you have walked the route when you checked in you will know if you can make it or not).

If the smoke gets in your eyes they will shut and not open again. If you get trapped the smoke will then kill you, so don't try and beat it. Head back to your room.

(b) **If A Fire Starts In Your Room, Office, Etc.**

(i) Leave the room and close the door behind you to keep smoke and flames out of the hall.

(ii) Sound the fire alarm by activating the nearest pull station, and leave the building by the closest exit or by raising alarm by shouting **FIRE, FIRE, FIRE.**

(iii) Call Campus security and fire Safety wing from a safe location.

(c) **If You Hear a Fire Alarm:**

(i) Go to the door of your room and feel the door with your hand.

(ii) If the door or the knob is hot, leave it shut. (See next section: "If the room door is hot...")

(iii) Check the hall. If you can leave safely, take your keys with you, close the door behind you and go to the nearest clear exit. Use an alternate route if your path is blocked at any point

(iv) Do not use the elevator. You could be trapped or let out into a fire area

(d) **If The Room Door Is Hot, or You Are Forced Back to Your Room by Smoke.**

(i) This is the choice of last resort. Make every effort to leave the building at the fire alarm or other evidence of fire.

(ii) Let someone know you are in the room. If the phone works, call Campus Security and Safety wing.

(iii) If your window can be opened, hang a bed sheet or similar item out the window to signal the rescue team, but close the window against smoke if necessary.

Should I Try To Put Out The Fire?

Fight a fire only if it is small and you believe you can put it out without risking your safety. If the fire is small and:

- (a) An extinguisher is readily available,
- (b) you are familiar with its operation,
- (c) you can fight the fire without blocking your exit path
- (d) The extinguisher is compatible with what's burning (e.g., flammable liquids or live electric equipment, see below) Then attempt to extinguish the fire.

SAFETY TIP: The first priority in responding to a fire is preservation of life. No one is obliged to fight a fire.

Fire Extinguisher Operation

- (a) Remove the fire extinguisher from its supporting bracket carefully; extinguishers are surprisingly heavy. The lower handle on the valve will support the extinguisher when carried.
- (b) Remove the pin from the handle by pulling the ring, breaking the plastic tamper-evident seal.
- (c) Aim the nozzle at the base of the flames, squeeze the handles together, and sweep the nozzle slowly from side to side, across the width of the flames until the fire is extinguished or the extinguisher is empty. You may repeatedly start and stop the flow of the extinguisher by squeezing and releasing the top handle.
- (d) If a fire is not successfully controlled with one extinguisher, you should leave immediately. Inform to the Campus security and Safety wing, even if you successfully extinguish the fire.

Compatibility of Extinguishers and Fires. Dry chemical Powder (DCP) extinguishers are safe and effective against all ordinary types of fires). Pressurized water extinguishers are effective only against ordinary combustibles, such as paper, wood, fabric, trash, etc. They must never be used on flammable liquid/oil fires or fires involving live electrical circuits. Carbon dioxide extinguishers shaped black nozzle, no pressure gauge work only against flammable liquid fires and are safe to use around live electrical circuits. They will not extinguish fires involving ordinary combustibles and must be discharged within about 3 feet of flames to be effective.

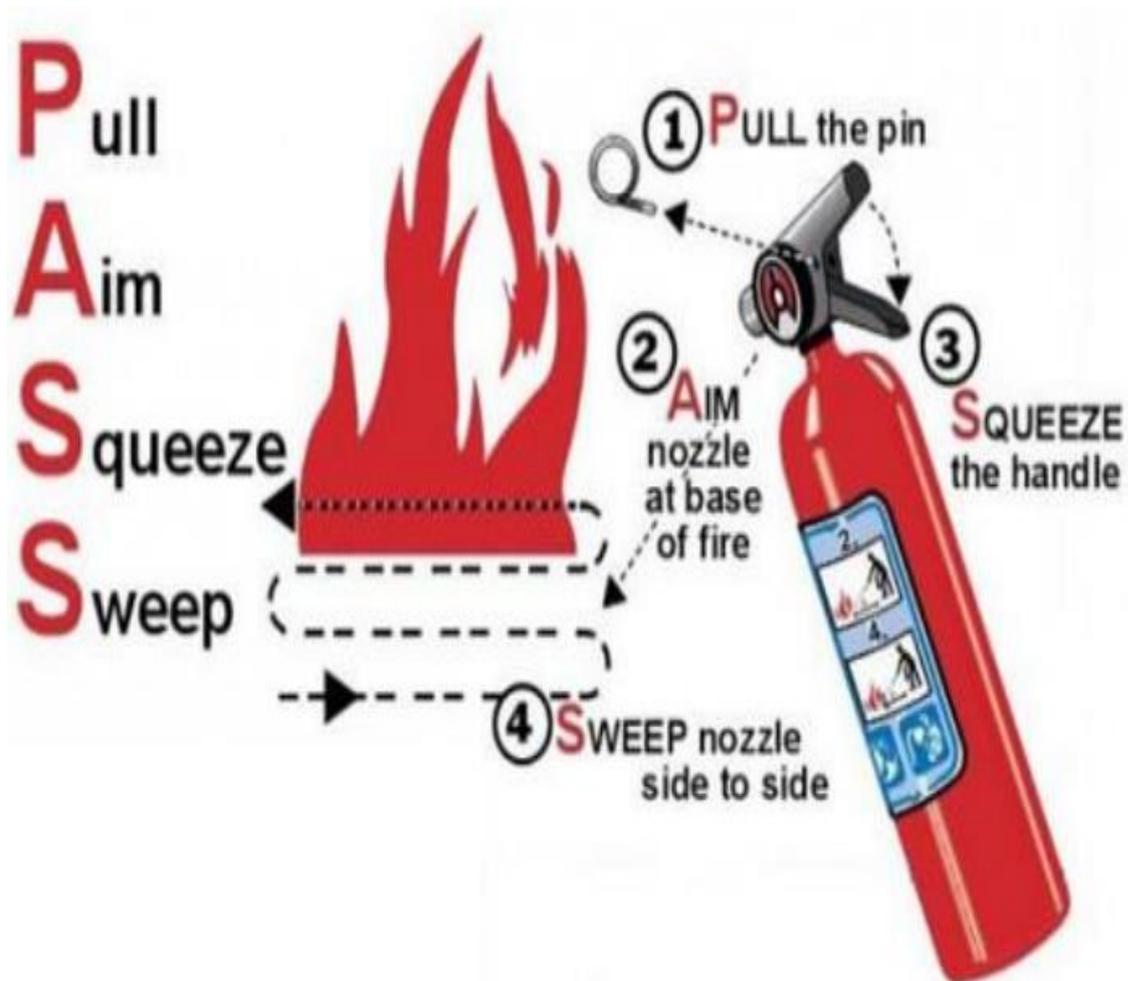
Helping a Person with Clothing or Hair on Fire

"Stop, Drop and Roll":

- (a) You must immediately get the person flat on the ground. Do not allow her or him to run.
- (b) Extinguish the flames by rolling the person on the ground. A jacket or blanket may be used to help smother the flames if immediately available.
- (c) Seconds count. Do not waste time looking for an extinguisher or water source.
- (d) Douse the person with water as soon thereafter as possible. Do not attempt to remove burned clothing.
- (e) Call Campus security and fire Safety wing.

FIRE EXTINGUISHERS

CLASS IX



INDEX

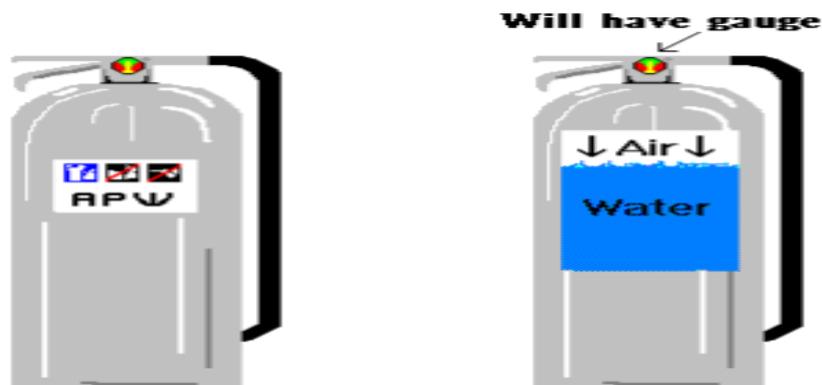
Chapter No	Chapter Name	Number of Periods	
		Theory	Practical
I	Fire Extinguishers (a) Air pressurized water Extinguisher: (b) Water (APW) Extinguishers (c) CO ₂ Fire Extinguisher	8	2
II	Rules for fighting fires (a) Know what is burning (b) Do Not Fight the Fire If: You don't have adequate or appropriate equipment.	4	2

CHAPTER-I

Fire Extinguishers



Different types of fire extinguishers are designed to fight different classes of fire. The three most common types of fire extinguishers are:



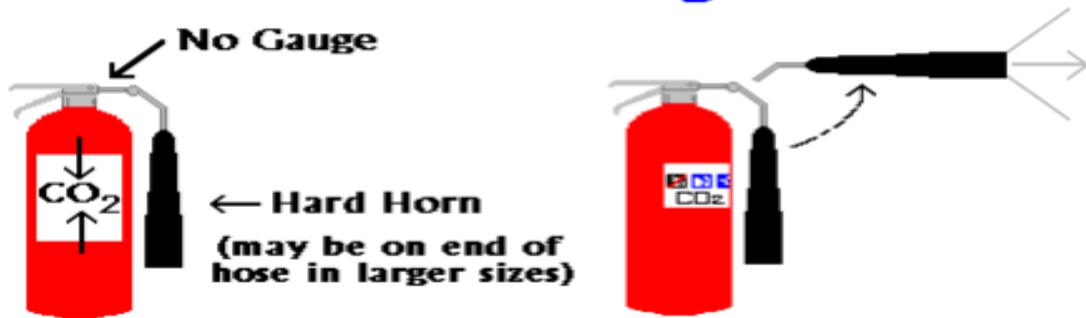
(a) **Air pressurized water Extinguisher:**

APW stands for "air-pressurized water." APWs are large, silver extinguishers that are filled about two-thirds of the way with ordinary tap water, then pressurized with normal air. In essence, an APW is just a giant squirt gun. APWs stand about 2 feet tall and weigh approximately 25 pounds when full.

(b) **Water (APW) Extinguishers** APWs are designed for Class A (wood, paper, cloth) fires only.



Carbon Dioxide Extinguisher



(i) Never use water to extinguish flammable liquid fires. Water is extremely ineffective at extinguishing this type of fire, and you may, in fact, spread the fire if you try to use water on it.

(ii) Never use water to extinguish an electrical fire. Water is a good conductor, and there is some concern for electrocution if you were to use water to extinguish an electrical fire. Electrical equipment must be unplugged and/or de-energized before using a water extinguisher on it.

(iii) APWs extinguish fire by taking away the "heat" element of the fire triangle.

(iv) APWs will be found in older buildings, particularly in public hallways, as well as in Residence Halls. They will also be found in computer laboratories. It is important to remember, however, that computer equipment must be disconnected from its electrical source before using a water extinguisher on it.

(c) **Carbon Dioxide Extinguishers**

(i) Carbon Dioxide extinguishers are filled with non-flammable carbon dioxide gas under extreme pressure. You can recognize a CO₂ extinguisher by its hard horn and lack of pressure gauge. The pressure in the cylinder is so great that when you use one of these extinguishers, bits of dry ice may shoot out the horn.

(ii) CO₂ cylinders are red and range in size from 5 lbs. to 100 lbs. or larger. In the larger sizes, the hard horn will be located on the end of a long, flexible hose.

(d) **CO₂ are designed for Class B and C (flammable liquid and electrical) fires only.**

(i) Carbon Dioxide is a non-flammable gas that extinguishes fire by displacing oxygen, or taking away the oxygen element of the fire triangle. The carbon dioxide is also very cold as it comes out of the extinguisher, so it cools the fuel as well. CO₂s may be ineffective at extinguishing Class A fires because they may not be able to displace enough oxygen to successfully put the fire out. Class A materials may also smoulder and re-ignite.

(ii) CO₂ will frequently be found in laboratories, mechanical rooms, kitchens, and flammable liquid storage areas

Dry Chemical Extinguisher (ABC)



(e) **Dry Chemical Extinguishers.** Dry Chemical Extinguishers come in a variety of types. You may see them labelled:

- (i) "DC" short for "dry chem"
- (ii) "ABC" indicating that they are designed to extinguish class A, B, and C fires.
- (iii) "BC" indicating that they are designed to extinguish class B and C fires.

"ABC" fire extinguishers are filled with a fine yellow powder. The greatest portion of this powder is composed of mono-ammonium phosphate. Nitrogen is used to pressurize the extinguishers.

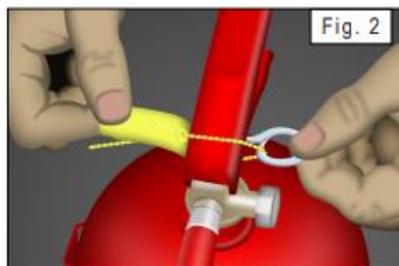
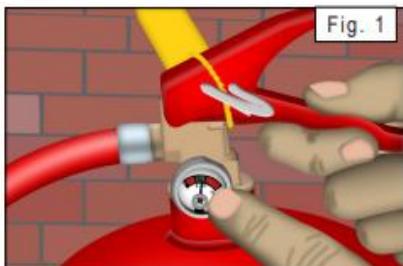
It is extremely important to identify which types of dry chemical extinguishers are located in your area.

Read the labels and know their locations! You don't want to mistakenly use a "BC" extinguisher on a Class A fire, thinking that it was an "ABC" extinguisher.

An "ABC" extinguisher will have a label like this, indicating that it may be used on class A, B and C fires.

Dry chemical extinguishers put out fire by coating the fuel with a thin layer of dust, separating the fuel from the oxygen in the air. The powder also works to interrupt the chemical reaction of fire, so these extinguishers are extremely effective at putting out fire.

These extinguishers will be found in a variety of locations. New buildings will have them located in public hallways. They may also be found in laboratories, mechanical rooms, break rooms, chemical storage areas, offices, etc.



CHAPTER -II

RULES FOR FIGHTING FIRES:

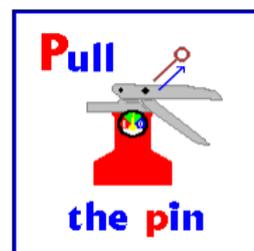
Fires can be very dangerous and you should always be certain that you will not endanger yourself or others when attempting to put out a fire. For this reason, when a fire is discovered:

- a) Assist any person in immediate danger to safety, if it can be accomplished without risk to yourself.
- b) Activate the building fire alarm system or notify the fire department by dialling 911 (or designating someone else to notify them for you). When you activate the building fire alarm system, it will automatically notify the fire department and get help on the way. It will also sound the building alarms to notify other occupants, and it will shut down the air handling units to prevent the spread of smoke throughout the building.
- c) Only after having done these two things, if the fire is small, you may attempt to use an extinguisher to put it out.

However, before deciding to fight the fire, keep these rules in mind:

(a) **Know what is burning.** If you don't know what is burning, you don't know what type of extinguisher to use. Even if you have an ABC extinguisher, there may be something in the fire that is going to explode or produce highly toxic smoke. Chances are, you will know what's burning, or at least have a pretty good idea, but if you don't, let the fire department handle it.

The fire is spreading rapidly beyond the spot where it started. The time to use an extinguisher is in the incipient, or beginning, stages of a fire. If the fire is already spreading quickly, it is best to simply evacuate the building, closing doors and windows behind you as you leave.



Pull the pin.
This will allow you to discharge the extinguisher.



Aim at the base of the fire.
If you aim at the flames (which is frequently the temptation), the extinguishing agent will fly right through and do no good. You want to hit the fuel.

(b) **Do Not Fight the Fire If:**

You don't have adequate or appropriate equipment. If you don't have the correct type or large enough extinguisher, it is best not to try to fight the fire.

You might inhale toxic smoke. If the fire is producing large amounts of smoke that you would have to breathe in order to fight it, it is best not to try. Any sort of combustion will produce some amount of carbon monoxide, but when synthetic materials such as the nylon in carpeting or foam padding in a sofa burn, they can produce highly toxic gases such as hydrogen cyanide, acrolein, and ammonia in addition to carbon monoxide. These gases can be fatal in very small amounts.

Your instincts tell you not to. If you are uncomfortable with the situation for any reason, just let the fire department do their job.

The final rule is to always position yourself with an exit or means of escape at your back before you attempt to use an extinguisher to put out a fire. In case the extinguisher malfunctions, or something unexpected happens, you need to be able to get out quickly, and you don't want to become trapped. Just remember; always keep an exit at your back.



It's easy to remember how to use a fire extinguisher if you can remember the acronym PASS, which stands for Pull, Aim, Squeeze, and Sweep.



Squeeze the top handle or lever.
This depresses a button that releases the pressurized extinguishing agent in the extinguisher.



Sweep from side to side
until the fire is completely out. Start using the extinguisher from a safe distance away, then move forward. Once the fire is out, keep an eye on the area in case it re-ignites.