FIELD CRAFT AND BATTLE CRAFT

Define Field craft?
Field Craft is an art of using the ground and the weapon available to the best of one's own advantages.

What all subjects are included in Field craft?
(a) Description of Ground.
(b) Observation and concealment.
(c) Judging distance.
(d) Recognition and description of targets.
(e) Movement with and without Arms

What are the advantages of battle craft?
Useful in tackling minor tactical problems without confusion but the basic knowledge of field signals, section & platoon formations is essential.

What all subjects are included in Battle Craft?
(a) Field signals.
(b) Section formation
(c) Fire control orders.
(d) Fire and movements.
(e) Section battle drills.

What are the various type of grounds?
(a) Broken Ground. It is uneven and is generally interspersed with nullahs, bumps and field in the ground. It is suitable for move of infantry and hinders observation of activities.
(b) Flat and Open Ground. It is even ground with little cover e.g. bushes, hedges and similar foliage. It is not suitable for move of Infantry by day.
(c) High Ground. Ground far above the general level of the area e.g. hill. It facilitates domination of area around it by observation or fire or both.
(d) Dead Ground. Ground that is hidden from an observer's view. It cannot be covered by flat trajectory weapons.

What is the procedure for description of ground?
(a) Fore Ground Up to 300 yards
(b) Middle Distance From 300 yards to 500 yards
(c) Distance Beyond 500 yards
What is the procedure for indication of ground?
(a) **General Line of Direction.** Start by giving the general line of direction by pointing out a centrally located, if possible, prominent land mark, e.g. No 1 section 500 RED HOUSE,
(b) **Boundaries.** After giving general line of direction give LEFT and RIGHT boundaries of your area e.g.
   (i) No. 1 section 'Aadha baen 600 PILI JHONPRI nam JHONPRI section ke baen wale jawan se JHONPRI tak ki line baen had'.
   (ii) Similarly indicate right boundary.
   (iii) Dived the ground into fore ground, middle and distance. Having done so start from LEFT to RIGHT systematically and describe.
   (iv) In attack describe the ground nearest to you first i.e. foreground, then middle and then distance, in defence reverse the procedure.

What is the importance of observation and concealment?
(a) A soldier who is trained in both can locate and kill his enemy without being seen himself.
(b) Ground observation of enemy provides one of the most valuable sources of information on which the plans of higher commanders are based.
(c) In defence good concealment enables a defender to mystify and deceive the enemy and in the event of an attack repel the enemy by producing fire at close range from an unexpected quarter.

What are the fundamentals for correct use of cover?
(a) Whenever possible look through the cover and not over it.
(b) If it is not possible to look through the cover, look round it rather than over it.
(c) It is necessary to look over the cover, avoid breaking straight line.
(d) The sky-line is the worst background you could choose, but if you can not avoid observing over the cover and against the sky line, use something to break your silhouette.
(e) When firing from inside a building keep well back making use of the shadow.
(f) A rough, dark and irregular background which matches your clothing, provides considerable cover from view.
(g) Isolated cover is dangerous because it will attract attention of the enemy and can be easily indicated in a fire order.
(h) Avoid sky line.
(j) Avoid regular spacing.
(k) Avoid gaps for fire position.
(l) Cross gaps as a body and at irregular interval at the double.

What are the various methods of judging distance?
(a) Unit of measure.
(b) Appearance method.
(c) Section average.
(d) Key ranges.
(e) Halving.
(f) Bracketing

When the distances are over-estimated?
(a) Light is bad.
(b) The sun is in the observer's eye.
(c) The object is small in relation to its surroundings.
(d) Looking through a valley of narrow lane e.g. street.
(e) Lying down.

When the distances are under-estimated?
(a) The light is bright.
(b) The object is large in relation to its surroundings.
(c) There is some dead ground between observer and the object.
(d) Looking up hill.

Define target and landmark?
(a) **Target.** It is an object which is indicated with a view to bring down fire on it, whenever required.
(b) **Landmarks.** Landmark is an object which is indicated and used in the embodiment of operation orders.

Describe method of indication of easy target?
(a) **Indication by Description.** An obvious target can often be described directly. For example 'No. 1 Section BRIDGE' Here BRIDGE is so obvious that no body can make a mistake in recognizing it.
(b) **Indication by Direction or Range or Both.** In slightly less obvious cases other aids should be used e.g. direction or range or both. An example of each is given below:-
   (i) **Indication by Direction.** No 1 Section BAEN BGHICHA.
   (ii) **Indication by Range.** No 1 Section 600 BAGHICHA.
   (iii) **Direction and Range.** When indicting a landmark indicate direction first and than range e.g. BAEN-600, BAGHICHA.

What is the sequence of targets?
The easy way to remember this sequence is to remember the word 'GRAD'. The sequence is as follows:-
(a) **Designation of Group.**
(b) **Range.**
(c) **Aid.**
(d) **Description.**
How to measure degree with hand?

**Hand Angles.** This is a rough method which is sufficiently accurate for practical purposes. The various degree measurements are given in the diagrams below. Remember to keep the left (LEFT) hand fully stretched and tilt it in the required direction. As the size of hand varies considerably the figures given below are approximate only. Each person should with the help of a degree scale check his hand for degrees.

What is the various methods of movement by Rifle and LMG?

(a) **Crawling by Day with Rifle**
   (i) Monkey run.
   (ii) Leopard crawl
   (iii) Walk.
   (iv) Roll.

(b) **Crawling by Day with LMG**
   (i) Knee crawl.
   (ii) Side crawl.
   (iii) Leopard crawl.

(c) **Crawling by Night**
   (i) Ghost walk.
   (ii) Cat walk.
   (iii) Kitten crawl.

What all points must be remembered while making movements?

(a) Move from cover to cover and make use of natural camouflage. Stop, observe and listen from bound to bound and do not keep moving forward the whole time.

(b) Watch your front and flanks.

(c) Crawl slows the movement and hiders observation, therefore crawl only when you must. After crawling for some distance stop, listen and observe and then crawl further.

(d) Weapons must always be kept ready for use.

(e) Look carefully and all round for enemy.

(f) Double across small gaps.

(g) If shot at, drop and crawl away to a side.

(h) Check equipment for noise.

(j) Always consider an alternative route.

(k) Do not disturb the birds, if this can be helped.
Describe various Hand signals?
These are tabulated as under:

<table>
<thead>
<tr>
<th>Ser No</th>
<th>Action</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Deploy</td>
<td>Right arm fully extended above head and waved from side to side, palm open.</td>
</tr>
<tr>
<td>(b)</td>
<td>Advance</td>
<td>Right arm swung from rear to front in 'under arm blowing' fashion</td>
</tr>
<tr>
<td>(c)</td>
<td>Halt</td>
<td>Right arm raised to full extent above head</td>
</tr>
<tr>
<td>(d)</td>
<td>Turn about</td>
<td>Right arm raised and bent above head</td>
</tr>
<tr>
<td>(e)</td>
<td>Change Direction</td>
<td>Right arm raised to front in line with shoulder. Body then turned in required direction.</td>
</tr>
<tr>
<td>(f)</td>
<td>Close</td>
<td>Right hand place on top of head, elbow to the right.</td>
</tr>
<tr>
<td>(g)</td>
<td>Quick Time</td>
<td>Right hand raised to line of shoulder, elbow close to the side.</td>
</tr>
<tr>
<td>(h)</td>
<td>Double March</td>
<td>Right fist clenched, moved up and down between thigh and shoulder several times.</td>
</tr>
<tr>
<td>(i)</td>
<td>Follow me</td>
<td>Right arm swung from rear to front above the shoulder, in 'over arm bowling' fashion.</td>
</tr>
<tr>
<td>(j)</td>
<td>Last order completed</td>
<td>Right hand to salute, then arm raised in air finger extended.</td>
</tr>
<tr>
<td>(k)</td>
<td>Last order Not understood</td>
<td>Both hands, cupped behind the ears.</td>
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<tr>
<td>(l)</td>
<td>Commander to close</td>
<td>Right arm to the side at 45 degrees to the body, first clenched.</td>
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<tr>
<td>(m)</td>
<td>Enemy in sight specific numbers</td>
<td>Both arms waved on sides 'Bird fashion' followed by number, indicated by number of fingers held up.</td>
</tr>
<tr>
<td>(n)</td>
<td>Enemy Approaching</td>
<td>Both hands open, palm inwards at waist level, with inwards scooping motion.</td>
</tr>
<tr>
<td>(o)</td>
<td>Enemy position suspected</td>
<td>Both hands, first clenched, raised to shoulder level, followed by indication of direction.</td>
</tr>
<tr>
<td>(p)</td>
<td>Enemy LMG firing</td>
<td>Right hand thumb down signal.</td>
</tr>
<tr>
<td>(q)</td>
<td>Engage Target by Fire</td>
<td>Both hands clasped above the head (boxer fashion).</td>
</tr>
<tr>
<td>(r)</td>
<td>Attack</td>
<td>Punching motion with Right or Left hand according to direction of attack.</td>
</tr>
<tr>
<td>(s)</td>
<td>Closed to Rendezvous</td>
<td>Close sign followed by both hands clasped in front of body at waist level.</td>
</tr>
<tr>
<td>(t)</td>
<td>Infantry obstacle ahead</td>
<td>Both hands crossed in front of body at the waist, palm open downwards.</td>
</tr>
</tbody>
</table>
Describe various signals with weapon and whistle?

<table>
<thead>
<tr>
<th>Signals With Weapons</th>
<th></th>
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<tbody>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>(a) Enemy in Sight in small number</td>
<td>Rifle held above the head parallel to the ground, muzzle in the direction of the enemy.</td>
</tr>
<tr>
<td>(b) Enemy in Sight in large number</td>
<td>As per (a) above, but arm moved up and down several times.</td>
</tr>
<tr>
<td>(c) Advance</td>
<td>Both arms raised to form the letter 'U'.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signals With Whistle</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>(a) Cautionary Blast</td>
<td>A short blast to draw attention to a signal or order about to be given.</td>
</tr>
<tr>
<td>(b) The Alarm Blast</td>
<td>A succession of alternate long and short whistle.</td>
</tr>
<tr>
<td>(c) Enemy Aircraft</td>
<td>A succession of short blasts.</td>
</tr>
<tr>
<td>(d) Enemy Aircraft departed</td>
<td>Two long blasts repeated at interval of five second.</td>
</tr>
</tbody>
</table>

What are the tactical groups of section?
(a) LMG group
(b) Rifle group.

Describe various section formations along with advantages and disadvantages?

<table>
<thead>
<tr>
<th>S No</th>
<th>Formation</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Single File</td>
<td>Good for control, not vulnerable to enfilade fire, useful for moving along ditches, narrow defiles and so on.</td>
<td>Bad for fire production, vulnerable to frontal fire.</td>
</tr>
<tr>
<td>(b)</td>
<td>File.</td>
<td>Good for control. Useful for moving along broad roads, wide nullahs and so on.</td>
<td>Not good for fire production, vulnerable to frontal fire.</td>
</tr>
<tr>
<td>(c)</td>
<td>Diamond.</td>
<td>Good for control, not vulnerable to enfilade fire, good for all round fire production and observation.</td>
<td>Present a good target to frontal fire. Not very good for fire production to the front.</td>
</tr>
<tr>
<td>(d)</td>
<td>Arrow-head</td>
<td>Good depth, not vulnerable to frontal fire, good for fire production, probably the best formation for crossing open ground.</td>
<td>Control more difficult than in diamond.</td>
</tr>
<tr>
<td>(e)</td>
<td>Spread-head</td>
<td>Good depth, less vulnerable to enfilade fire than arrow head, LMG group not committed immediately on contact.</td>
<td>Control difficult. Delay in fire production.</td>
</tr>
<tr>
<td>(f)</td>
<td>Extended Line</td>
<td>The formation used in the final assault. Very good for fire production (from the hip) and bayonet fighting.</td>
<td>Control difficult. Very vulnerable to enfilade fire, no depth.</td>
</tr>
</tbody>
</table>

**What are the basic considerations for fire and movement?**

(a) There should be no exposed ground without covering fire.

(b) Control by the commander.

(c) The angle of covering fire from direct firing weapons should be as wide as possible without loss of control or time.

(d) Full use should be made of all available cover. When cover is lacking the use of smoke (smoke grenade) should be considered.

(e) Full use should be made of all available weapons for covering fire.

**How the ground should be appreciated?**

It should be appreciated under the following headings:-

(a) Fire positions

(b) Observation positions.

(c) Cover from fire.

(d) Cover from view.

(e) Obstacles.

**What are the common mistakes in the use of ground?**

(a) Carelessness by troops while making a reconnaissance, such as unfolding a map in the open or not using a covered approach to an OP.

(b) Unnecessary movement in a position overlooked by the enemy.

(c) Using conspicuous landmarks such as isolated trees, bushes or cottages.

(d) Halting troops near road or track junctions or other mapped features which are always registered as targets by the enemy.

(e) Bad track discipline.

(f) Failure to guard against enemy air observation.

**What are the ideal points for selection of Fire positions?**

(a) Provide cover from fire.

(b) Provide cover from fire.

(c) Afford a good view of the ground to be watched or target to be engaged.

(d) Provide room in which to use the weapon freely.

(e) Have a covered approach.

(f) Be easy to advance from.

**What are the stages of section battle drill?**

The Section Battle Drill is divided into 4 stages.

(a) Stage I - Action on coming under effective fire.

(b) Stage II - Locating and neutralizing the enemy.
What drill will be followed for locating and neutralizing the enemy?
(a) **By Observation.** Look in the area from which the 'thump' came. The time between the 'crack' and the 'thump' gives an indication of the range. If nothing is seen after about 30 seconds or so, it is very unlikely that enemy will be located by looking.
(b) **By Fire.** The section commander will give a fire control order to a couple of rifleman to fire two shots each into likely cover. The rest of the section will observe their area of observation carefully. If there is no answer to fire, then the section commander should try another couple of rifleman at some other target. If there is still no enemy fire, either they are well trained or they have withdrawn.
(c) **By Movement.** The section commander will order one or two men to get up and double forward about 10 yards to a different cover. He might do this again if it draws no fire. If the enemy troops are there, they must be extremely well trained not to fall for these tricks and start firing at such poor targets. (A man getting up and moving fast for about 10 yards is a very difficult target to hit). If there is still no enemy reaction then the section commander must continue the advance.

What are the important points during assault of section?
(a) The section commander will lead the rifle group in person, he is normally in the centre.
(b) Covering fire will be provided for all movements in the open. The angle of the fire should be as wide as possible.
(c) When the rifle group gets down into fire position after a bound, the LMG group must move forward into a new fire position automatically. Once the LMG group is in a position from which it can support the assault from a good angle, the rifle group will move in one bound. Before the assault goes in, the rifleman armed with the grenade discharger cup and the projector strim grenade should be ordered to remove these from their rifle, if necessary.
d) Normally the assault will start at the 'walk' with firing being carried out from the shoulder or the hip (marching fire). The section doubles only during last 100 to 50 yards when the section commander gives order 'CHARGE'.
(e) No 1 and No 2 of the LMG group must carry sufficient magazines to support a normal section attack.
(f) As the assault goes in, the LMG group will fire as long as possible and then switch its fire across the objective just in front of the rifle group.

What are the important points during Reorganisation?
(a) The LMG group will rejoin the fire group 'at the double' immediately it sees the rifle group take cover after the assault.
The section commander will organize a search of the area of the objective for any enemy hiding or wounded. Rifle numbers detailed to search will be covered by other rifleman.

The section commander will check positions of rifleman and LMG group, allot arcs of observation and detail reference points.

The section commander will check:
(i) Causalities,
(ii) Ammunition expenditure, and
(iii) Refilling of LMG magazine.

The section commander will await the platoon commander for further orders.

What are the important terms used in Fire control orders?
(a) **Fire Unit.** Any number of men firing under the command of one man, usually, a section. The person responsible for giving the executive order of fire, is the fire unit commander.

(b) **Fire Direction Orders.** These are the orders which the fire unit commander receives from his superior, telling him when, at what target and with what intensity to open fire. A section commander will receive fire direction orders from his platoon commander. They include special directions about opening and withholding fire.

(c) **Fire Control Orders.** These are orders given by the fire unit commander to direct and control the fire of the section. Emphasis should be on control and supervision. These orders are the final with complete instructions after all factors have been considered and before fire is actually opened.

(d) **Arc of Fire.** This denotes the area of ground for which the fire unit is responsible and within which it will engage targets. An arc of fire, must not be confused with field of fire which is the area upon which it will be possible to fire effectively in any direction.

What are the important points which section commander must remember before giving fire control orders?
(a) **Indication.** No fire control order can be effective unless the target is clearly indicated and can be easily recognized by the men of the fire unit.

(b) **Range Visibility and Vulnerability.** It should be considered if the range, visibility and vulnerability of the target justify fire at all. Would it be better to wait and get a more vulnerable or more complete surprise?

(c) **Best Weapon to Use.** What is the best weapon to use, although the LMG is the main weapon of the section, the target may be more suitable for the fire of the riflemen only or for a combination of both weapons.

(d) **Single Round or Burst.** Should the fire be in single rounds or in burst. Should it be rapid or at the normal rate? Rapid rate is justified only on a comparatively few occasions when it allows the maximum effect to be gained from surprise
when an especially vulnerable target presents itself or to cover move in the final phase of an assault.

**What are the important rules for giving out fire control orders?**
(a) The orders should be given clearly, calmly and consciously.
(b) It should be given loudly, so as to be heard over the noise of battle but should not be louder than required.
(c) It must be given as an order, and obeyed as such.
(d) It must be given with adequate pauses, so that those being addressed may have time to take the correct action, for example, there must be time for sight adjustment after the range is ordered. No 1 Section (Pause) 300 (Pause) fire when you see a target.

**What is the sequence of fire order?**
The suggested code work is 'GRIT' each letter of which signifies stage in fire orders as follows:-

G  The Group of the section which is addressed, that is the LMG group or the whole section. An order starting with 'No 1 Section' indicates that the whole of No. 1 Section will fire. 'LMG-Group or Rifles Group' means that the group named only will fire.
R  The Range to the target. To ensure accuracy of fire and to concentrate attention on a limited area of ground.
I  The Indication of the point of aim by its description.
T  The type of fire to be employed.

**What are the essential qualities in fighting men developed by patrolling?**
Patrolling develops four essential qualities of the fighting man:-
(a) Disciplined
(b) Comradeship
(c) Aggressiveness.
(d) Alertness.

**What are the type of patrols?**
(a) Reconnaissance Patrols (Recce Patrols)
(b) Protective Patrols.

**What are the tasks of Recce of patrols?**
(a) Location and details of enemy position.
(b) Location of obstacles laid by enemy and constant plotting of features.
(c) Study enemy habits.
(d) Any other specific information asked.
What are the tasks of Protective patrols?
(a) To deny approaches to enemy patrols and obtain earliest possible information of the approach of the enemy.
(b) To gain and confirm topographical information including that of artificial obstacles.
(c) To give early warning of the enemy's intentions.
(d) To deny information to enemy patrols.
(e) To dominate 'No Man's Land'.
(f) To protect flanks by aggressive patrolling.

What are the important points to be remembered by scouts?
(a) Scouts should move from cover to cover using the correct methods of observation around cover.
(b) Scouts should move by short bound in area where enemy is suspected.
(c) A pair of scouts should move one behind another and should keep each other within easy voice control. The leading scout should often look over his shoulder to ensure that he has the second scout in visual contact. However, it is for the second scout to keep up.
(d) Scouts must always be alert.
(e) Scouts must protect each other by placing themselves in such a way that they can cover each other by fire.
(f) Scouts move as individuals making use of ground and cover.
(d) Scouts must always remain in contact with the unit through the sub-units commander.
(e) Communication are from front to rear. Contact is visual.
(j) Scouts must so move on ground and take cover in such a way that they do not give away each others position.
(k) Scouts must not bunch together on bounds.