REPORT OF VISIT TO COLLEGE OF MILITARY ENGINEERING PUNE

Titled as: Demo session of combat equipment's by the combat engineers

Introduction: The college of Military engineering (CME)Pune, situated at Dapodi, Pune. arranged the programme of demo sessions of combat equipment's by the combat engineers.

As a part of activity, the session was divided in two parts. in first part the live demo was conducted and in the second part the all Instructors of CME gives the information, working manner of the equipment's in static gallery.

Words about college of Military Engineering Pune: College of Military Engineering is a technical and tactical engineering training institution of the Indian army corps of engineers of the Indian army. Training of combat engineers, Military engineering service, Border Roads Engineering Services (BRES) and survey is done here. College of military engineering Pune was established in 1943.

Schedule:

0745 HRS -Arrived at college of military engineering Pune.

0745-0800 HRS- Security Check.

0800-0815 HRS-Reaching the demonstration venue.

0900 HRS- Demonstration Begins.

1200-1230 HRS -Demonstration Ends.

1230-0100 HRS -Check out from demonstration site.

0100-0200 HRS -Lunch

0200-0300 HRS- Visit to museum at college of military engineering Pune.

Key Activities: Cadets of Kolhapur Institute of Technology and Rajaram College done a warm interaction with the Lieutenant Commander of Indian Navy and

Nigerian Military Personals.

Participants:

Attendance: Over 11 NCC Cadets of Kolhapur Institute of Technology and 11 NCC Cadets of Rajaram College were present.

Co-ordinator – CTO. Yogesh Chougale Sir

Guide- Mr. Maharaj Sir

Mr. Ganpule Sir

Venue- College of Military Engineering, Pune (CME, Pune)

Agenda: On 5th January 2024, the college of military engineering Pune arranged the programme of demo session of combat equipment's used by the combat engineers in the Indian army. At morning 0800 HRS, in the presence of chief guest Commandant. The programme was started in very energetic and disciplined way of the all vehicles and equipment's with the small mine works.

Combat engineers of CME had made the demo battlefield at CME. In the battle field there are 11 different components of battlefield in which the different combat vehicles, equipment's and role of combat engineers was displayed. In these battlefield GARAD XG, RAMGARH, DCB, DHAR XG, AYUB CANAL, SARVTRA, SHERA BRIDGE, MULA Dynasty, RUSH XG, RD FARADSAR, KAROWAL, ZHOB MINOR, MGB RUSH XG, TAWI RIVER, DALDALA these fields are used to show the different purposes, roles and works of combat engineers and combat equipment's used by them.

Information about the combat equipment's and combat vehicles used in programme:

- Surface Mine Clearing System (SMCS): To give a cleared lane of 4.25 M in a single pass over surface delivered scattered mines.
  SMCS have weight 1500kg, its maximum mine clearance speed is 15KM/hr its fitment time is 20 minutes and removal time is also 20 minutes. SMCS gives advantages in surface laid munitions are pushed clear of the vehicle. Disturber chain detonates surface laid mines fitted with anti-disturbance fuses.

- Full Width Mine Plough: To give cleared lane of 3.75 M in a single pass with in a mine field.
  Full width mine plough has 3200 kg weight, its cutting depth is of 175-275 mm, width of lane provide by mine plough is 3.75 m, speed of 10

km/hr is the maximum speed of clearance it have. its safe turning radius is about 150m. Full width anti plough mine is effective 100% on anti-tank mines and 90% on anti-personal mines.

- KMT 5 M TRAWL: KMT TRAWL is the main equipment use to perform operation of breaching in combat field. It carries the roller set, frame, plough and accessories of complete weight 7.5 T. Its trawling speed is of 2 to 3 km/hr its trawled area is 2 Tredway's 0.8 M wide with 1.84 unbreeched gap. Its turning radius is of 75 M and 135 M with rollers. its negotiable gradient is of 23 degrees and 32 degrees.

- Mine field marking equipment (MFME): Use to mark the planted mines in combat field. Probably used in plain semi desert and desert areas. This vehicle is semi-automatic in operation. It is of 6 by 6 TATRA with max picket depth of 45cm.

- Mechanical TR laying System using MPT: Incorporation of modern TR laying expedients (MPTS, TR laying ASSY and rebound hammer.) with

- modified contraption. The MPTs will facilitate laying of ATW CL 12 using TR laying ASSY.

- HYDREMA 910 MCV-2: This vehicle is of origin Denmark. It has the 72 chains with hammers with weight of hammer 0.9 kg. Life of chain is 6-15 Hrs. speed of hammering is 400 times per min. It consists Armoured cabin to resist blast effect. 7.62 mm Bulletproof glass sheet is fitted and have the high-pressure clearing system.

- Short Span Bridging System (SSBS): Short span bridging system is of 5m in length use in short places for locomotion in combat field. Its load class is of MLC-70. Its deployment time is of 5 minutes and have the transportation speed of 30-35km/hr.

- PMS Bridge: Used for the locomotion of combat equipment's through water. Its methods of constructions are of four types – centre line, swinging, sector arc, combination construction. Its construction timings in river are of 140 minutes.

- SARVATRA Bridge: Sarvatra bridge is 15 m bridge system of TATRA 815 VVN 8 by 8 launching system. its launching time is of 150 min. its hydraulic control is manual and electro type.

- Road Laying Truck (Chess Truck): Used in the battle field like DALDALA. length of laying drum is 10.6 m with height 2.75m. total length of track is 41.5m. track have deck of length 1.01 with height 1.30m.

- Material Handling Crane (MHC): MHC is hydraulically operated mobile crane mounted on a 6 by 6 Tate HMV to lift and shift by loads.

- CBRN Tank: CBRN tank is used to collect the sample in radioactive region where the nuclear or radioactive blasts are operated. It has the special feature of marking of samples.

Every one visited the static gallery of weapons, equipment's and vehicles used in combat field by combat engineers of CME.

Conclusion: Everyone was looking satisfied to have the such great experience of the demonstration of combat equipment's by engineers. Every cadet learns and remembers the role of engineers in combat field and how difficult is to complete the task in combat field which engineers actually solve in few hours.