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35506

Model Answer Paper Sem-IV

Q1.A) State the following sentences are True or False (Any **Eight**). (08)

1. False
2. True
3. True
4. True
5. True
6. False
7. True
8. False
9. True
10. True

Q1. B) Fill in the blanks (Any **Seven**) (07)

1. Mahu (MP)
2. Patiala
3. Bhagwad Geeta
4. Mumbai
5. Brain
6. Vishwabharati Vidyalay
7. Srinagar
8. Yersinia pestis
9. Kuchipudi
10. Jammu & Kashmir

Q2 A) **Explain the concept of fire and state the modes of spread of fire.**

When we light flame is produced during combustion, which is called 'fire'.

Modes of spread of fire:

- Conduction
- Convection
- Radiation
- Direct Burning

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B) State the various types of natural disasters.

- Landslide
- Hurricanes
- Flood
- Storm
- Cyclone

OR

A) Explain the concept of social welfare and discuss the contribution of NCC cadets towards social welfare.

- Tree plantation
- Blood donation
- Anti-Dowry drive
- Adult Literacy
- Human Rights
- Environmental Programs

B) Explain in brief how to control Corruption.

- End impunity
- Reform public administration and finance management.
- Promote transparency and access to information.
- Empower citizens
- Close International loopholes.

Q.3.A) Discuss the various types of fractures.

- ✓ Types of Fractures:
- ✓ Simple Fracture
- ✓ Compound Fracture
- ✓ Multiple Fracture
- ✓ Communitid Fracture
- ✓ Spiral Fracure
- ✓ Greenstick

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B) What are the different types of Wounds? Explain the mode of treatment for various wounds?

Ans:- Types Of wounds:-

- 1) Incision wound
- 2) Punctured wound
- 3) Contusion wound
- 4) Lacerated wound
- 5) Shell wound

Treatment for various wounds:-

- 1) Antiseptic Lotion
- 2) Cotton
- 3) Gauze piece
- 4) Bandage
- 5) Powder
- 6) Scissors

OR

Q.3.A) What are the steps for dismissing and falling out.

- **'Visarjan'**

Turn to the right, salute, pause and then step off.

- **'Line Tor'**

Falling out does not signify the end of the parade.

1. Salute is not given.
2. Cadets falling out, not to leave the vicinity of their place of parade or line of march.

Q.3.B) Distinguish between personal hygiene and public sanitation?

Ans:-Personal hygiene:

- a) To maintain a good and clean physique.
- b) To maintain good muscle strength.
- c) To maintain clean mouth and teeth.
- d) To maintain resistance to prevent infection.

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Public sanitation:

- a) Human excreta – faeces and urine.
- b) Stable litter – horses and cow dung.
- c) Liquid waste.
- d) Dry refuse and garbage refuse.
- e) Dead animals.

B. Explain the necessity of First Aid Box and enlist the items in first aid box.

First Aid Kit helps in any emergency. If someone is injured, cut or burned emergency first aid kit comes in handy.

Items in First Aid box:

- Adhesive Bandage
- Gauze pads
- Adhesive tape
- Cotton
- Band Aids
- Pen torch
- Latex gloves
- Needle
- Antiseptic
- Cleaning soap

OR

Q4 A) Explain the characteristics of 0.22 rifles.

- Length
- Width
- Magazine capacity
- Muzzle velocity
- Grooves in barrel
- Effective range
- Max range
- Calibre
- Ammunition
- Rate of fire

B) State and explain various types of shooting targets.

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- Group MPI
- Group Fire
- Application Fire
- Snap shooting
- Continuous snapshooting
- Advance shooting competition

OR

A. Describe in brief the lying position of firing. Give the three basic essentials of effective firing.

Lying position is the most comfortable position from which to fire. The three basic essentials of good shooting are:

- Comfortable position and firm hold.
- Correct aim.
- The aim is not disturbed when trigger is pressed.

B. What precautions you will take on firing range.

Ans:- 1) Red flag displayed the butt indicates that no firing should take place.

2) If firing is suspected during the practice weapons will be placed on the ground & firer will stand clear.

3) During inspector loading & unloading all the rifles must point towards the target

4) on the command "Nirikshankeliyejaanchshastra" rifle will be held parallel to the ground & pointing in the direction at the target

5) No one will go the target until all weapons have been unloaded inspected & permission to go has been given by the officer in charge

Q.5 Write Short note on any Three of the following.

Army

1. Setting a map

Ans:- A map is said to be set or oriented when it is placed such that it corresponds directly with the ground i.e. when true NORTH on the map points to true NORTH on the ground obviously it is easier to read a map when the object on it are pointing in the same direction as the objects on the ground. There are two methods of setting a map:-By compass and by objects in the ground.

2. Finding own position

Ans:-Methods of finding own position on Map

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- By resection method or Compass method
- By resection method without Compass method
- By inspection method

3. Camouflage and Concealment

Camouflage is the art of making use of artificial articles to achieve concealment.

Concealment is hiding oneself from enemies view and fire, with the help of Natural background.

Various factors:

- Shape
- Shadow
- Silhouette
- Surface
- Spacing
- Movement
- Shine
- Position

4) Types of knots

Ans:-1) Thumb knot

2) Overhand knot

3) Figure eight knot

4) Sheet knot

5) Double sheet Bend

6) Crossover sheet Bend

7) Reef knot

8) Thief knot

9) Carrick Bend

10) Fishermen knot

11) Bowline

12) Bowline on a Bight

13) Fishermen eye knot

14) Slipping Hitch

15) Clare Hitch

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5) Methods of judging Distance

- Ans:-1) Unit Method
2) Appearance method
3) Bracketing method
4) Section average method
5) Halving method

Q.5 Write Short note on any Three of the following.

Navy

1. Radio Telephony Procedure

Ans:- Radiotelephony procedure (Also on –air protocol and voice procedure) includes various techniques used to clarity. Simplify and standardize spoken communications over. Over two-way radios, in use by the armed forces, in civil aviation, police and fire dispatching systems, citizens band radio (CB) and Amateur radio.

2. Ensign and admiral's Flag

Ans:- Ensign from old French ensigns. "Mask, symbol, signal, flag, Standard, pennant", From latin insignia is a junior rank of a commissioned officer in the armed forces of some countries. Normally in the infantry or Navy.

Admiral is a senior rank of the Royal navy of the united kingdom, which equates to the NATO rank code outranked only by the rank admiral of the fleet. Royal navy officers holding the rank of rear admiral, vice admiral and admiral of the fleet are sometimes considered generically to be admirals.

3. Types of Anchor

- Ans:- 1) Admiralty pattern anchor,
2) Admiralty standard stockless.
3) Admiralty class (AC)-12,14
4) AC 16A and 17
5) Stocked close, stowing (Dan Forth)
6) Chattan Quick Release (CQR)

4. Elementary Sailing Tools

- Ans:- 1) Close hauled
2) Reaching
3) Running

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- 4) Sailing free
- 5) Wearing/gybing
- 6) Beating
- 7) To Luff
- 8) In irons
- 9) Port and starboard tacks

5. Securing and towing a Boat

Ans:- a) A lightly laden boat may be towed in calm weather by her painter which should be made fast with two or three turns around her towing bollard.

b) If no bollard is provided a wooden bar should be passed through the bight of the painter and placed under the two fore most thwarts.

Q.5 Write Short note on any Three of the following.

AIR

1. Functions of RADAR

Radar is a machine that uses radio waves to find other objects such as aircraft, ships and rain.

Parts of RADAR:

- Transmitter
- Antenna
- Receiver

2. Main and Tail Plane

Main Plane:

A wing is a type of fin with a surface that produces lift for flight or propulsion through the atmosphere.

Types of Main Plane:

- Straight wing
- Swept back wing
- Delta wing
- Tapered wing
- Variable geometry wing

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Tail Plane:

A tail plane also known as horizontal stabilizer is a small lifting surface located on the trail behind the main lifting surface of a fixed wing aircraft.

Types:

- Cruciform
- T-Tail

3. Fuse Lage

- Smooth skin of the required aerodynamic form.
- Sufficient strength to with stand aerodynamic loads, landing loads and handling loads.
- Sufficient stiffness to retain its current shape under all loads.
- Mounting points for engine, armament, fuel tanks and equipment.

4. Flying of Aeromodels

The necessity of choosing a large field for flying the aeromodels is obvious.

However, trees and wooded areas are the greatest hazards for the aero modeler. Trees causes air pockets and down-draughts and often 'suck' the model into their branches.

5 Advanced technology in Air wing.

- Lockheed Martin F-35
- Lockheed Martin Boeing f-22
- Eurofighter Typhoon
- Sukhoi Su-35
- Boeing F/A-18E/F Super Hornet