

G-1/165/22

Roll No.

I Semester Examination, January, 2022

M.Sc.

DEFENCE STUDIES

Paper III

(Science of War)

Time : 3 Hours]

[Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 Sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.*

SECTION A

1×8=8

(Objective Type/Multiple Choice Questions)

Choose the correct answer :

1. What is the name of the heavy weight torpedo, flagged off DRDO and was delivered to the Indian Navy ?
- (a) Bramhos (b) Varunastra
(c) Akash (d) Dhanush

P.T.O.

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2. India's first indigenously developed long range Bomb (LRB) has been developed by which organisation :
- (a) ISRO (b) DRDO
(c) HAL (d) NSIL
3. Rudram-1, successfully tested by DRDO is a :
- (a) Cruise Missile
(b) Antitank Guided Missile
(c) Anti Radiation Missile
(d) Medium Range S to A Missile
4. DRDO test fired long range nuclear capable ballistic missile 'Agni 5' : The new missile falls under which category :
- (a) Air to surface (b) Air to air
(c) Surface to air (d) Surface to surface
5. Where the space programme begun in India ?
6. Name of the moderator used in the nuclear reactor :
- (a) Plutonium (b) Thorium
(c) Graphite (d) Berillium
7. Thermonuclear Bomb works on the principle of :
- (a) Fission (b) Fusion
(c) Both (a) and (b) (d) None of these

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8. Which of the following is a unique property of laser ?

- (a) Directional (b) Speed
(c) Coherence (d) Wavelength

SECTION B

6×4=24

(Short Answer Type Questions)

Note : Answer the following questions in **250** words.

Unit-I

1. Write a note on cyber security.

Or

Explain Artificial Intelligence.

Unit-II

2. Write a note on Atom Bomb.

Or

Write a note on Neutron Bomb.

Unit-III

3. Explain the Missile's components.

Or

Describe the types of Missiles.

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Unit-IV

4. Write the characteristics of Laser.

Or

Write the uses of RADAR.

SECTION C

12×4=48

(Long Answer Type Questions)

Note : Answer the following questions in **500** words.

Unit-I

1. Write an article on gradual development of science and technology in War.

Or

Explain, how was, science and technology are related to each other ?

Unit-II

2. Write an article on spread and impact of nuclear weapons.

Or

Write an essay on Atomic Reactor.

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Unit-III

3. Describe the missile family and guidance system of missile.

Or

Write an article on possible military role of space.

Unit-IV

4. Explain the military utility of laser and types of laser.

Or

Write an article on the impact of Biological and chemical weapons on mankind.

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