MCC/21/M.SC_/SEM.-III/FSC/1

PG CBCS

M.Sc. Semester- III Examination, 2022 FISHERIES SCIENCE

PAPER: FSC 302

Full Marks: 40

ESTD 2017 COLLEGE CONTROL ESTD 2017 COLLEGE

Time: 2 Hours

Write the answer for each unit in separate sheet

UNIT: FSC-302.1

GENETIC ENGINEERING AND BIOTECHNIQUES

F.M.: 20

GROUP-A

1. Answer any TWO from the following questions:

 $2 \times 2 = 4$

- a) What do you mean by genetic code?
- b) What is genome mapping?
- c) Write down the applications of transgenesis in fisheries field.
- d) What do you mean by recombinant vector vaccines

GROUP-B

2. Answer any TWO from the following questions:

 $2\times4=8$

- a) Write down the principles behind southern blotting.
- b) What are the basic principles of sedimentation?
- c) Write a note on electrophoretic velocity?
- d) Give an account of DNA finger printing.

GROUP-C

3. Answer any **ONE** from the following questions:

1×8=8

- a) What do you mean by ELISA? Mention the different types of ELISA used.

 Write down the application of ELISA techniques. (2+2+4)
- b) What do you mean by PCR? What are the steps involved on PCR technique?

(2+6)

(P.T.O.)

UNIT: FSC-302.2 <u>FISHERIES TECHNOLOGY AND HARBOUR ENGINEERING</u> <u>F.M.: 20</u>

ERING ESTD 2017

GROUP-A

4. Answer any TWO of the following questions:

 $2\times2=4$

- a) Write the name of two important traditional fishing crafts used in Odisha coast?
- b) What is fishing trap? Mention the name of two fishing traps used in West Bengal.
- c) What do you mean by FAD?
- d) State the function of Net Sonde.

GROUP-B

5. Answer any TWO of the following questions:

 $2 \times 4 = 8$

- a) What is artisanal fishery? What are the major characteristics of artisanal fisheries port?
- b) Draw and label the diagram of a typical trawl net used in fishing operation.
- c) Add a note on the fishing gear materials used in fishing gear construction.
- d) Briefly explain the lifesaving appliances used in fishing vessel.

GROUP-C

6. Answer any ONE of the following questions:

 $1 \times 8 = 8$

- a) What is fishing harbor? Discuss the different facilities required for construction of fishing harbor? (3+5)
- b) Differentiate between active and passive fishing gears. Write down the hazards associated with fishing harbor management. (2+4+2)
