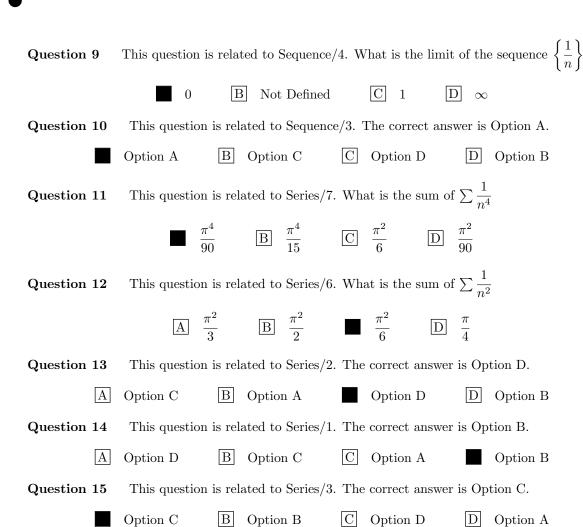
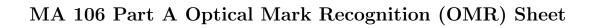


MA 106 Endsem Exam : Part A Indian Institute of Technology Bombay Date: 19th April 2023

C---i-- - 2022 II

| Timing: 9.3 | 30 to 10.30 AM | Spring | 2023, 11 | Max Mark: 20 |
|----------------|--------------------|----------------------|-------------------------|--------------------------|
| Name: | | | Div/T | utorial: |
| Roll Numb | er: | | DIV/ I | ıtorial: |
| | Please read th | e following instruct | ion before answering | the question. |
| a. The (Optica | l Mark Recognit | ion) OMR sheet wi | ill be collected back | at 10.30 AM. |
| b. There is 19 | questions in Par | t A. Every question | contains a single co | rrect answer. |
| - , - | pen to fill the co | | e OMR sheet. Ans | wer provided in the OMR |
| Question 1 | Only a perfect | response will be see | ored 1 point - otherw | vise, null score. Test/4 |
| | A Wrong | Correct | C Wrong | D Wrong |
| Question 2 | Only a perfect | response will be see | ored 1 point - otherw | vise, null score. Test/2 |
| | A Wrong | B Wrong | Correct | D Wrong |
| Question 3 | Only a perfect | response will be see | ored 1 point - otherw | vise, null score. Test/1 |
| | A Wrong | B Wrong | Correct | D Wrong |
| Question 4 | Only a perfect | response will be see | ored 1 point - otherw | vise, null score. Test/3 |
| | A Wrong | B Wrong | Correct | D Wrong |
| Question 5 | This question i | s related to Limit/4 | 4. The correct answe | er is Option A. |
| | Option A | B Option D | C Option C | D Option B |
| Question 6 | This question i | s related to Limit/S | 3. The correct answer | er is Option D. |
| $oxed{A}$ | Option C | B Option B | Option D | D Option A |
| Question 7 | This question i | s related to Limit/2 | 2. The correct answer | er is Option B. |
| | Option B | B Option C | C Option A | D Option D |
| Question 8 | This question i | s related to Sequen | ce/2. The correct an | swer is Option B. |
| | Option B | B Option D | C Option C | D Option D |





| | Er | ıcoc | de F | Rollı | num | ber | | | Division | |
|---|----|------|------|-------|-----|-----|---|---|-------------|-------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Name: |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | $\boxed{4}$ | |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | ו ח |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | Rollnumber: |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | Div./Tut.: |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| В | В | В | В | В | В | В | В | В | | |
| D | D | D | D | D | D | D | D | D | | |
| | | | | | | | | | | |

| Q1. | A | | \mathbf{C} | D | | Q9. | | В | \mathbf{C} | D |
|-----|---|---|--------------|---|--|------|---|---|-------------------------|---|
| Q2. | A | В | | D | | Q10. | | В | \mathbb{C} | D |
| Q3. | A | В | | D | | Q11. | | В | $\overline{\mathbf{C}}$ | D |
| Q4. | A | В | | D | | Q12. | A | В | | D |
| Q5. | | В | \mathbf{C} | D | | · | | _ | | |
| Q6. | A | В | | D | | Q13. | A | В | | D |
| Q7. | | В | \mathbf{C} | D | | Q14. | A | В | \mathbb{C} | |
| Q8. | | В | \mathbf{C} | D | | Q15. | | В | \mathbf{C} | D |



MA 106 Endsem Exam: Part A Indian Institute of Technology Bombay Date: 19th April 2023

| Timing: 9.30 to 10.30 AM | Spring 2023, II | Max Mark: 20 |
|--------------------------|-----------------|--------------|
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| M | ame: |
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| Τ. | ann. |

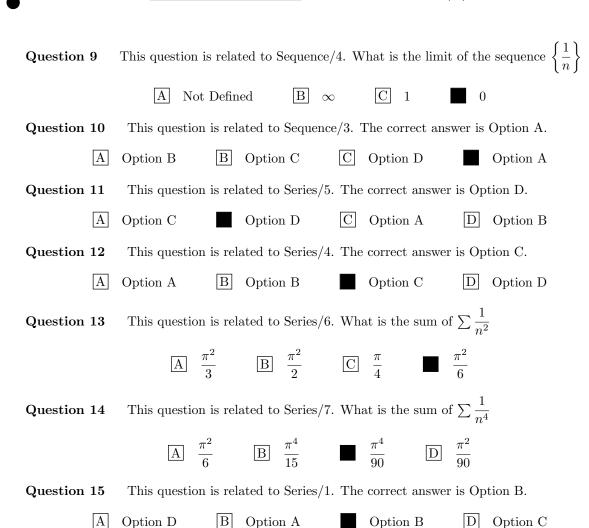
Div/Tutorial:

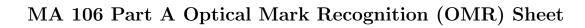
Roll Number:

Please read the following instruction before answering the question.

- a. The (Optical Mark Recognition) OMR sheet will be collected back at 10.30 AM.
- IR

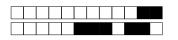
| b. There is 19 | questions in Part A. Every question contains a single correct answer. |
|----------------|---|
| - , - | pen to fill the correct choices in the OMR sheet. Answer provided in the OM only be evaluated. |
| Question 1 | Only a perfect response will be scored 1 point - otherwise, null score. Test/1 $$ |
| | A Wrong B Wrong Correct D Wrong |
| Question 2 | Only a perfect response will be scored 1 point - otherwise, null score. Test/2 $$ |
| | A Wrong Correct C Wrong D Wrong |
| Question 3 | Only a perfect response will be scored 1 point - otherwise, null score. Test/4 $$ |
| | A Wrong Correct C Wrong D Wrong |
| Question 4 | Only a perfect response will be scored 1 point - otherwise, null score. Test/3 $$ |
| | f A Wrong $f B$ Wrong $f C$ Wrong $f C$ |
| Question 5 | This question related to Limit/1. The correct answer is Option A. |
| A | Option B $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ |
| Question 6 | This question is related to Limit/2. The correct answer is Option B. |
| A | Option D $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ |
| Question 7 | This question is related to Limit/4. The correct answer is Option A. |
| A | Option C $\boxed{ B }$ Option B $$ Option A $\boxed{ D }$ Option D |
| Question 8 | This question is related to Sequence/1. The correct answer is Option A. |
| A | Option C B Option B C Option D Option A |
| | |





| Encode Rollnumber Division Name: Name: Rollnumber: Div./Tut.: B B B B B B B B B B B B B B B B B B B | | | | | | | | | | | |
|---|---|----|------|------|-------|-----|-----|---|---|-------------|-------------|
| 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 | | Er | ıcoc | de F | Rollı | num | ber | | | Division | |
| 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Name: |
| 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 A A A A | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 4 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| 5 5 5 5 5 5 5 5 5 5 5 5 6 8 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | $\boxed{4}$ | |
| 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | D 11 1 |
| 7 7 7 7 7 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | Rollnumber: |
| B B B B B B B B B B B B B B B B B B B | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 B B B B B B B B B | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | Div /Tut · |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | Div., 100 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| | В | В | В | В | В | В | В | В | В | | |
| | D | D | D | D | D | D | D | D | D | | |
| | | | | | | | | | | | |

| Q1. | A | В | | D | | Q9. | A | В | \mathbf{C} | |
|-----|---|---|--------------|---|--|------|---|---|-------------------------|-------------------------|
| Q2. | A | | \mathbf{C} | D | | Q10. | A | В | $\overline{\mathbf{C}}$ | |
| Q3. | A | | \mathbb{C} | D | | Q11. | A | | $\overline{\mathbf{C}}$ | $\overline{\mathrm{D}}$ |
| Q4. | A | В | \mathbf{C} | | | Q12. | A | В | | D |
| Q5. | A | В | \mathbf{C} | | | Q12. | П | | | |
| Q6. | A | В | | D | | Q13. | A | В | С | |
| Q7. | A | В | | D | | Q14. | A | В | | D |
| Q8. | A | В | \mathbf{C} | | | Q15. | A | В | | D |



MA 106 Endsem Exam : Part A Indian Institute of Technology Bombay Date: 19th April 2023

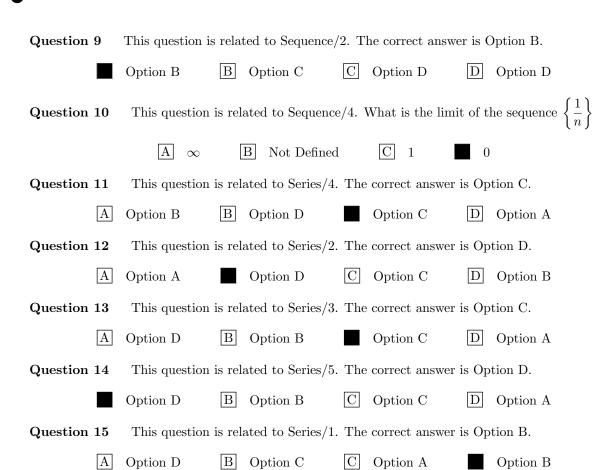
| Timing: 9.30 to 10.30 AM | Spring 2023, II | Max Mark: 20 |
|------------------------------|-----------------|--------------|
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|----|-----|---|---|---|
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| | | | | |

Div/Tutorial:

Roll Number:

| | Please read the | e following instructi | on before answering | the question. |
|----------------|--------------------|-----------------------|--------------------------|-------------------------|
| a. The (Optica | l Mark Recognit | ion) OMR sheet wil | ll be collected back a | t 10.30 AM. |
| b. There is 19 | questions in Part | A. Every question | contains a single cor | rect answer. |
| - , - | pen to fill the co | | e OMR sheet. Ansv | ver provided in the OM |
| Question 1 | Only a perfect | response will be sco | red 1 point - otherwi | ise, null score. Test/2 |
| | A Wrong | B Wrong | C Wrong | Correct |
| Question 2 | Only a perfect | response will be sco | red 1 point - otherwi | ise, null score. Test/3 |
| | Correct | B Wrong | C Wrong | D Wrong |
| Question 3 | Only a perfect | response will be sco | red 1 point - otherwi | ise, null score. Test/1 |
| | A Wrong | Correct | C Wrong | D Wrong |
| Question 4 | Only a perfect | response will be sco | red 1 point - otherwi | ise, null score. Test/4 |
| | Correct | B Wrong | C Wrong | D Wrong |
| Question 5 | This question is | s related to Limit/3 | . The correct answer | is Option D. |
| $oxed{A}$ | Option A | B Option C | C Option B | Option D |
| Question 6 | This question r | elated to Limit/1. | The correct answer is | Option A. |
| | Option A | B Option B | C Option C | D Option D |
| Question 7 | This question is | s related to Limit/4 | . The correct answer | is Option A. |
| A | Option C | Option A | C Option B | D Option D |
| Question 8 | This question is | s related to Sequence | e/1. The correct ans | swer is Option A. |
| | Option A | B Option C | C Option D | D Option B |
| | | | | |





MA 106 Part A Optical Mark Recognition (OMR) Sheet

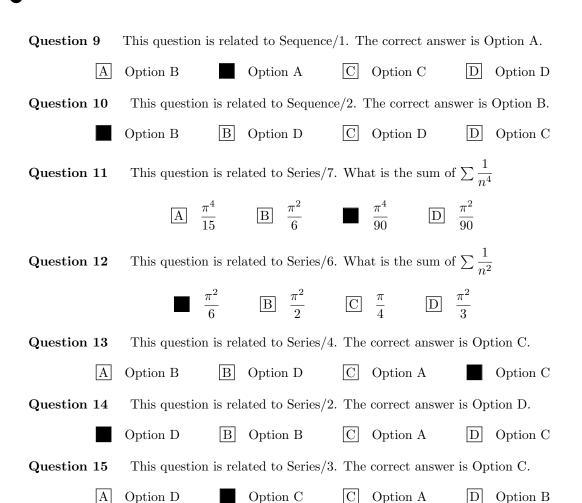
| | En | coc | de F | Rollı | num | ber | | | Division | |
|---|----|-----|------|-------|-----|-----|---|---|-------------|---------------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Name: |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | $\boxed{4}$ | |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | Rollnumber: |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | Div./Tut.: |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | <i>Div.</i> / 1do.: |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| В | В | В | В | В | В | В | В | В | | |
| D | D | D | D | D | D | D | D | D | | |
| | | | | | | | | | | |

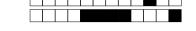
| Q1. | A | В | \mathbf{C} | | | Q9. | | В | \mathbf{C} | D |
|-----|---|---|--------------|---|--|------|---|---|--------------|-------------------------|
| Q2. | | В | \mathbf{C} | D | | Q10. | A | В | \mathbb{C} | |
| Q3. | A | | \mathbf{C} | D | | Q11. | A | В | | $\overline{\mathrm{D}}$ |
| Q4. | | В | \mathbf{C} | D | | Q12. | A | | | D |
| Q5. | A | В | \mathbf{C} | | | - | | _ | _ | |
| Q6. | | В | \mathbf{C} | D | | Q13. | A | В | | D |
| Q7. | A | | \mathbf{C} | D | | Q14. | | В | \mathbf{C} | D |
| Q8. | | В | \mathbf{C} | D | | Q15. | A | В | \mathbf{C} | |



MA 106 Endsem Exam : Part A Indian Institute of Technology Bombay Date: 19th April 2023

| Timing: 9.3 | 30 to 10.30 AM | Spring 2 | 2023, 11 | Max Mark: 20 | | | | |
|----------------|------------------------------------|---------------------|--------------------------|------------------------|----|--|--|--|
| Name: | | | Div/Tu | torial: | | | | |
| Roll Numb | oer: | | 211/ 20 | | | | | |
| | Please read the | following instructi | on before answering | the question. | | | | |
| a. The (Optica | al Mark Recogniti | on) OMR sheet wil | ll be collected back a | t 10.30 AM. | | | | |
| b. There is 19 | questions in Part | A. Every question | contains a single cor | rect answer. | | | | |
| | pen to fill the cononly be evaluat | | e OMR sheet. Ansv | ver provided in the OM | 1R | | | |
| Question 1 | Only a perfect r | esponse will be sco | red 1 point - otherwi | se, null score. Test/1 | | | | |
| | A Wrong | Correct | C Wrong | D Wrong | | | | |
| Question 2 | Only a perfect r | esponse will be sco | red 1 point - otherwi | se, null score. Test/3 | | | | |
| | Correct | B Wrong | C Wrong | D Wrong | | | | |
| Question 3 | Only a perfect r | esponse will be sco | red 1 point - otherwi | se, null score. Test/2 | | | | |
| | Correct | B Wrong | C Wrong | D Wrong | | | | |
| Question 4 | Only a perfect r | esponse will be sco | red 1 point - otherwi | se, null score. Test/4 | | | | |
| | A Wrong | Correct | C Wrong | D Wrong | | | | |
| Question 5 | This question is | related to Limit/2 | . The correct answer | is Option B. | | | | |
| A | Option D | B Option A | C Option C | Option B | | | | |
| Question 6 | This question is | related to Limit/3 | . The correct answer | is Option D. | | | | |
| $oxed{A}$ | Option B | B Option C | C Option A | Option D | | | | |
| Question 7 | This question re | elated to Limit/1. | The correct answer is | Option A. | | | | |
| $oxed{A}$ | Option D | Option A | C Option B | D Option C | | | | |
| Question 8 | This question is | related to Sequence | ee/3. The correct ans | wer is Option A. | | | | |
| A | Option D | Option A | C Option C | D Option B | | | | |





MA 106 Part A Optical Mark Recognition (OMR) Sheet

| | Encode Rollnumber | | | | | | | | Division | |
|---|-------------------|---|---|---|---|---|---|---|----------|-------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Name: |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | D 11 1 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | Rollnumber: |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | Div./Tut.: |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | Div./ 100 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| В | В | В | В | В | В | В | В | В | | |
| D | D | D | D | D | D | D | D | D | | |
| | | | | | | | | | | |

| Q1. | A | | \mathbf{C} | D | | Q9. | A | | \mathbf{C} | D |
|-----|---|---|--------------|--------|--|------|---|---|--------------|---|
| Q2. | | В | \mathbf{C} | D | | Q10. | | В | \mathbf{C} | D |
| Q3. | | В | \mathbb{C} | \Box | | Q11. | A | В | | D |
| Q4. | A | | \mathbf{C} | D | | Q12. | | В | | D |
| Q5. | A | В | \mathbf{C} | | | Q12. | | | | |
| Q6. | A | В | \mathbf{C} | | | Q13. | A | В | С | |
| Q7. | A | | $oxed{C}$ | D | | Q14. | | В | \mathbf{C} | D |
| Q8. | A | | \mathbf{C} | D | | Q15. | A | | \mathbf{C} | D |