

Banking Theory and Practice

No. of Pages: 02
Time: 3 Hrs.

Roll No.:
No. of Questions:13

Max Marks: 75M
Pass Min : 30M

SECTION A

Answer any FIVE of the following:

5 x 5 = 25M

1. Write about kinds of Banks.
బ్యాంకులోగల వివిధ రకముల గురించి వివరించండి.
2. Write about types of deposit.
వివిధ రకాలైన డిపాజిట్ల గురించి వివరించండి.
3. What do you mean by investment banking?
Investment Banking అంటే మీ ఉద్దేశం ఏమిటి?
4. Write about RTGS and NEFT.
RTGS మరియు NEFT గురించి వ్రాయండి.
5. Write about KYC Norms.
KYC వివరాల గురించి వ్రాయండి.
6. Explain the types of customers.
వివిధ రకాల కొనుగోలు ధారుల గురించి వివరించండి.
7. What do you mean by payment gateway?
Payment Gateway అంటే ఏమిటో వివరించండి.
8. Write about holders for value.
'విలువ కలిగి ఉన్నవారు' గురించి వ్రాయండి.

SECTION B

Answer the following:

5 x 10 = 50M

9. a) Explain the functions of commercial banks.
వాణిజ్య బ్యాంకుల విధులను వివరించండి.
OR
b) Explain difference between Central Bank and Commercial Bank.
సెంట్రల్ బ్యాంక్ మరియు కమర్షియల్ బ్యాంక్ మధ్య వ్యత్యాసాన్ని వివరించండి.
10. a) Explain the merits and demerits of Unit Banking.
యునిట్ బ్యాంకింగ్ బ్యాంకింగ్ యొక్క ప్రయోజనాలను మరియు పరిమితులను వివరించండి.
OR
b) Write the advantages of electronic banking.
ఎలక్ట్రానిక్ బ్యాంకింగ్ ప్రయోజనాలను వివరించండి.

Contd.....(2)

11. a) Explain functions of Co - operative banks.
సహకార బ్యాంకుల విధులను వివరించండి.
or
b) Write about role of NABARD in rural development.
గ్రామీణాభివృద్ధిలో NABARD పాత్ర గురించి వ్రాయండి.
12. a) Explain the general relationship between banker and customer.
బ్యాంకర్ మరియు కస్టమర్ మధ్య సాధారణ సంబంధం గురించి వ్రాయండి.
or
b) Write the statutory obligations and legal rights of banker.
బ్యాంకర్ యొక్క చట్టబద్ధమైన బాధ్యతలు మరియు చట్టపరమైన హక్కులను వ్రాయండి.
13. a) Write about the duties and responsibilities of collecting banker.
Collecting Banker విధులు మరియు బాధ్యతలను గురించి వ్రాయండి.
or
b) Write about statutory protection to collecting banker.
కలెక్టింగ్ బ్యాంకర్కు చట్టబద్ధమైన రక్షణ గురించి వ్రాయండి.

శుభాకాంక్షలు

E-COMMERCE & WEB DESIGNING

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Define E-commerce and list its advantages and disadvantages.
2. Elaborate on internet marketing.
3. List types of EPS and briefly explain.
4. Define list. What are the types of lists?
5. Explain how do you add a logo to your site in WIX editor.
6. Illustrate the following tags with an example
 - i) Link tag
 - ii) Image tag
 - iii) Marque tag.
7. Give differences between commerce and e-commerce.
8. Explain how you can perform E-advertising.

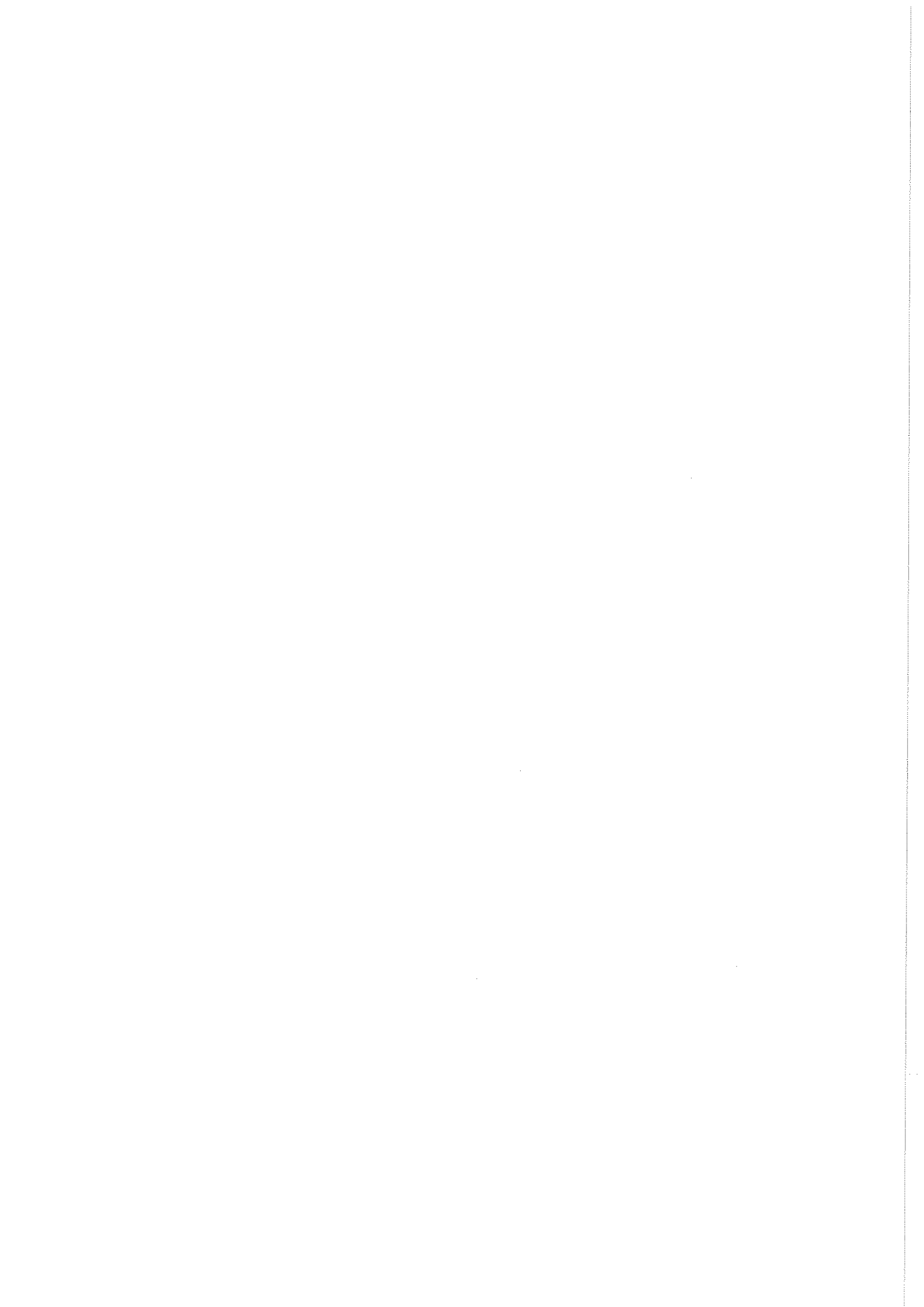
Section B

Answer the following:

5 x 10 = 50M

9. a) Illustrate the transactional issues and challenges in E-Commerce.
or
b) Explain B2B and C2C business models for E-commerce.
10. a) Define E-SCM. List the characteristics of E-SCM. What are the goals of E-SCM?
or
b) Which marketing strategy is best among traditional and E-marketing? Justify your answer.
11. a) Illustrate the steps for electronic payment.
or
b) Explain electronic payment systems.
12. a) Explain the structure of HTML program. Explain any few formatting HTML tags.
or
b) How do you create a table in HTML? Create your marksheet of previous semester using table in HTML.
13. a) Explain how to add a video from youtube and also how to retrieve a youtube URL.
or
b) Explain how to add a gallery, crop and edit gallery images, adding and setting up an icon button. Also explain how to add a link to a button.

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No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. What are the characteristics of a computer?
2. Define memory. What are the different types of memory?
3. Explain the evaluation of operating system.
4. Explain about control panel in operating system.
5. Explain about spread sheet – data management.
6. Explain about communication media & channel cable media.
7. Explain about internet & intranet.
8. Briefly explain about KDD.

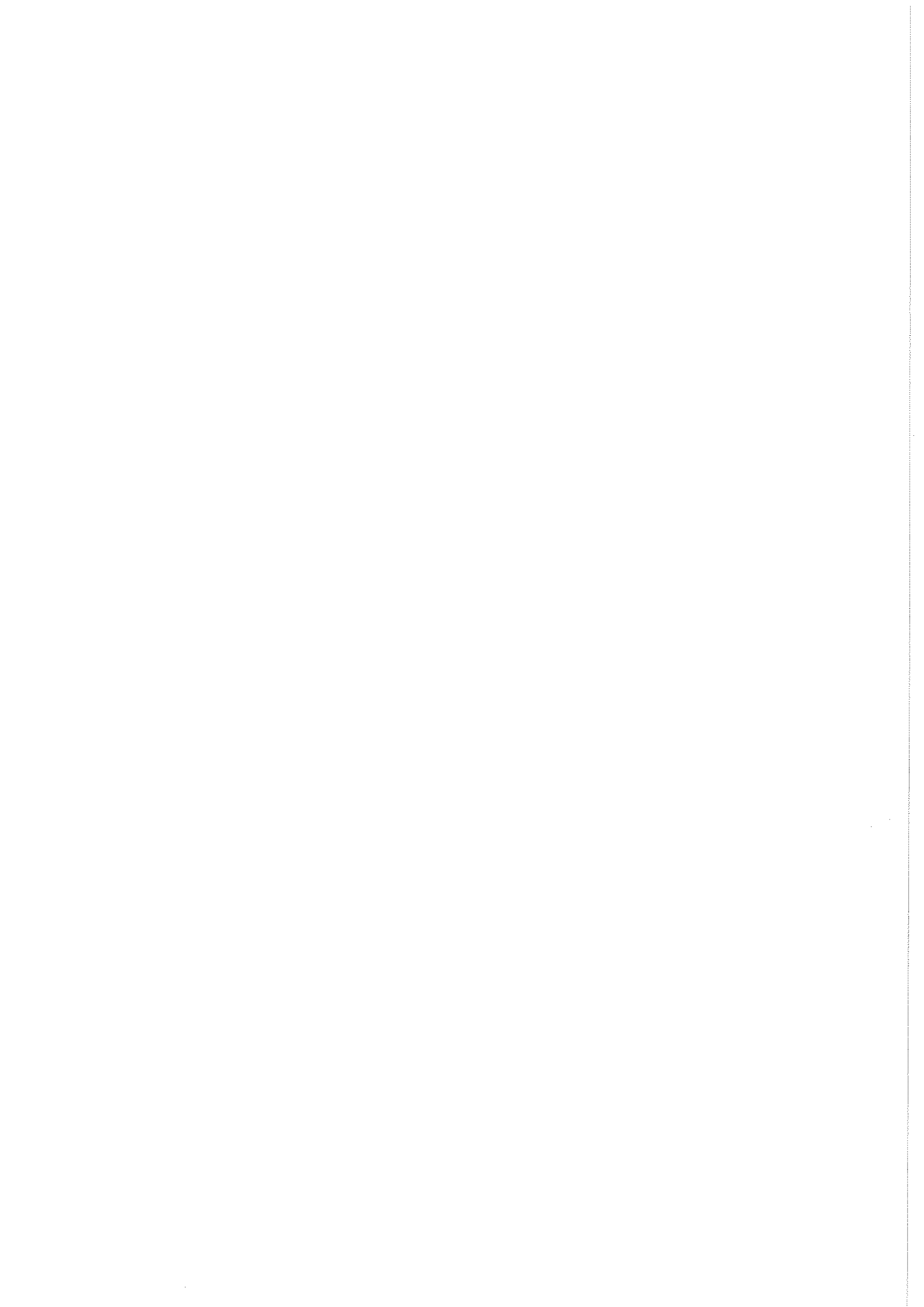
Section B

Answer the following:

5 x 10 = 50M

9. a) Explain about basic components of a computer system.
or
b) What are the Input/Output devices?
10. a) Explain different types of OS.
or
b) Explain about DOS commands (internal/external).
11. a) Briefly explain about system software and the application software.
or
b) Explain the key concepts CAD, CAM & CIM.
12. a) Define network. What are the different types of networks?
or
b) Briefly explain about analog and digital signals.
13. a) Explain about data mining and data warehouse.
or
b) Explain about artificial intelligence and business intelligence.

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Wave Optics

No. of Pages: 02

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 14

Pass Min.: 30M

Section A

Answer the following:

5 x 10 = 50M

1. a) Derive an expression for the fringe width in Fresnel Biprism experiment.
or
b) With necessary theory, describe the Newton's rings method for measuring the wavelength of a given monochromatic light.
2. a) Describe the Fraunhofer diffraction due to a double slit and discuss the intensity distribution.
or
b) Explain the construction and working of a zone plate. Distinguish between zone plate and convex lens.
3. a) Describe the construction and working of Nicol prism. Explain how it can be used as a polarizer and an analyzer.
or
b) Define specific rotation. Describe the construction and working of Laurent's half shade polarimeter.
4. a) What is chromatic aberration? Derive the condition for achromatism, when two lenses are separated by a distance.
or
b) Discuss about the step index and graded index fibres and their structures.
5. a) What is a LASER? Explain the construction and working of He – Ne laser with a neat diagram.
or
b) Explain the basic principle of holography and write the applications of holography.

Section B

Answer any THREE of the following:

3 x 5 = 15M

6. Discuss the conditions for interference of light.
7. Derive an expression for the resolving power of a grating.
8. Show that at Brewster's angle, the reflected ray is perpendicular to the refracted ray.
9. What is spherical aberration? Discuss any two methods of minimizing the spherical aberration.
10. Write any 5 applications of LASER.

Contd.....(2)

Wave Optics

Section C

Answer any TWO of the following:

2 x 5 = 10M

11. Two straight and narrow parallel slits 1mm apart are illuminated by monochromatic light. Fringes form on the screen held at a distance of 100 cm from the slits are 0.55 mm apart. What is the wavelength of the light.
12. A parallel beam of sodium light is allowed to be incident normally on a plane grating having 4250 lines per cm and a second order spectral line is observed to be deviated through 30° . Calculate the wavelength of the spectral line.
13. Calculate the specific rotation, if the plane of polarization is turned through 26.4° , traversing 20 cm length of 20% sugar solution.
14. Find the focal lengths of two lenses of an achromatic doublet of focal length 25 cm. The dispersive powers of the crown and flint glasses are 0.022 and 0.044 respectively.

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SEE AUG'23

STAT21C/31-08-2023

PROBABILITY DISTRIBUTION AND STATISTICAL METHODS

No. of Pages: 2

Roll No:	
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Max. Marks: 75M

Time: 3Hrs

Pass Min: 30M

No. of Questions: 13



SECTION - A

Answer any FIVE of the following:

5 X 5 = 25M

1. If X is a random variable following binomial distribution with mean 2.4 and variance 1.44. Find $P(x \geq 5)$ and $P(1 < x \leq 3)$.
2. Show that geometric distribution satisfies lack of memory property.
3. Define normal distribution and state its properties.
4. Obtain the mean and variance of beta distribution of Ist kind.
5. What do you mean by independence of attributes?
6. Explain the types of correlation with examples.
7. Explain multiple correlations.
8. Explain the principles of least squares.

SECTION - B

Answer the following:

5 X 10 = 50M

9. (a) Obtain the recurrence relation for the moments of a binomial distribution.
OR
(b) Find the M.G.F. of Poisson distribution and deduce its additive property.
10. (a) Define exponential distribution. Show that exponential distribution satisfies lack of memory property.
OR
(b) Show that mean, median and mode are equal in normal distribution.

Contd...(2)

11. (a) Define Yule's coefficient of association and the coefficient of colligation and with usual notation establish the relation $Q = \frac{2Y}{1+Y^2}$.

OR

- (b) Examine the consistency for the following data.

(A) = 1087, (B) = 286, (C) = 877, $(ABC) = 281$, $(\alpha\beta C) = 86$, $(AB\gamma) = 78$, $(ABC) = 57$.

12. (a) Explain the limits of correlation coefficient and effect of change of origin and scale on correlation coefficient.

OR

- (b) Find the rank correlation coefficient for the following data:

X:	68	64	75	50	64	80	75	40	55	64
Y:	62	58	68	45	81	60	68	48	50	70

13. (a) Derive regression line of Y on X and X on Y.

OR

- (b) Fit a straight line for the following data and estimate the value of Y, if X = 55.

X:	70	63	72	60	66	70	74	65	62	67	65	68
Y:	155	150	180	135	156	168	178	160	132	145	139	152

ANALYTICAL SKILLS

No. of Pages: 14

Roll No:	
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Max. Marks: 40M

Time: 2Hrs

Pass Min: 16M

No. of Questions: 80

Answer All questions:

$80 \times \frac{1}{2} = 40M$

Choose the answer from the options given and darken the respective alphabet in the OMR Sheet using blue / black ball point pen.

Choose the correct answer from the following.

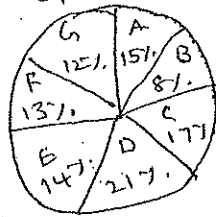
$80 \text{ question} \times \frac{1}{2} = 40M$

Directions: The following questions are based on the pie-charts given below:

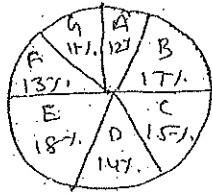
Percentage wise Distribution of students studying in Arts and Commerce in seven different institutions.

Different institutions - A, B, C, D, E, F & G

Total number of students studying Arts = 3800



Total number of students studying in Commerce = 4200



- What is the total number of students studying Arts in institutes A and G together?
 (a) 1026 (b) 1126 (c) 1226 (d) 1206 (e) 1306
- How many students from institute B study Arts and Commerce?
 (a) 1180 (b) 1108 (c) 1018 (d) 1208 (e) 1408
- The respective ratio between the number of students studying
 (a) 27:14 (b) 19:27 (c) 19:16 (d) 19:28 (e) None of these.
- The ratio between the number of students studying Arts and Commerce from institute E to that of students studying Commerce from institute D is
 (a) 12:17 (b) 12:7 (c) 19:21 (d) 17:19 (e) None of these.
- How many students from institutes B and D together study Commerce?
 (a) 1320 (b) 1302 (c) 1202 (d) 1220 (e) None of these.
- What is the value of $0.99999\dots$ in the form of P/Q ?
 (a) 1 (b) $1/2$ (c) $2/3$ (d) $7/9$ (e) None

7. $36 \times 15 - 56 \times 784 \div 112 =$
 (a) 138 (b) 238 (c) 158 (d) 258 (e) None of these

8. Find the square root of 372
 (a) 49 (b) 51 (c) 61 (d) 59 (e) None

9. Difference of any two odd numbers
 (a) odd (b) even (c) Prime (d) Composite (e) None

10. Find the least value of * so that the number $12*25253$ is divisible by 3
 (a) 3 (b) 4 (c) 1 (d) 2 (e) none

11. What is the unit digit in $(122)^{463}$
 (a) 5 (b) 6 (c) 8 (d) 1 (e) None

12. Find the L.C.M. of $\frac{1}{3}, \frac{5}{6}, \frac{2}{9}, \frac{4}{27}$ is
 (a) $\frac{1}{54}$ (b) $\frac{10}{27}$ (c) $\frac{20}{3}$ (d) $\frac{27}{3}$ (e) None

13. The difference between two numbers is 18 and their HCF and LCM are 6 and 168 respectively, what is the sum of squares of the two numbers
 (a) 2280 (b) 2260 (c) 2420 (d) 2340 (e) 2380

14. Find the total number of factors of 150
 (a) 10 (b) 14 (c) 12 (d) 16 (e) 20

Direction 15-19: study the following table and answer the questions given below.

Number of Tourists who visit different cities by different modes of transport.

cities	vehicles				
	car	Train	Bus	Bike	By Air
Delhi	192	188	172	191	174
Mumbai	180	166	178	187	182
Chandigarh	156	194	163	181	148
Dehradun	132	185	142	170	148
Musodie	149	159	155	149	183
Jaipur	168	163	158	142	174

15. What is the average number of tourists who come by trains

- (a) 190.5 (b) 188.5 (c) 175.83 (d) 137.5 (e) None

16. What is the difference between the total number of tourists who went to Mumbai and Musodie by all vehicles

- (a) 78 (b) 98 (c) 88 (d) 83 (e) None of these

17. What is percent of tourists who went to Dehradun by train to the tourists who went to Chandigarh by Air

- (a) 125 (b) 145 (c) 137 (d) 160 (e) 170

18. What is the difference between the average number of tourists who went by Air to the average number of tourists who went by Bus.
- (a) 7.58 (b) 9.97 (c) 6.83 (d) 2.30 (e) 1.75
19. What is the respective ratio between the number of tourists of Delhi by car to the number by air
- (a) 35:83 (b) 45:71 (c) 96:91 (d) 32:7 (e) None
20. If $A:B = 2:3$ and $B:C = 4:5$, find $A:B:C$
- (a) 5:25:15 (b) 4:5:3 (c) 8:12:15 (d) 9:12:20 (e) None
21. The salaries of A, B, C are in the ratio 3:5:7. If the increments of 15%, 10% & 20% are allowed respectively in their salaries then what will be the new ratio of their salaries?
- (a) 3:5:7 (b) 10:11:20 (c) 23:33:60 (d) 69:110:168 (e) None
22. 73689 are divided between A and B in the ratio 4:7. What is the difference between twice the share of B and thrice the share of A.
- (a) 36699 (b) 46893 (c) 20097 (d) 13398 (e) 26796
23. If $A:B = \frac{B}{4} = \frac{C}{5}$, then find $A:B:C = ?$
- (a) 3:4:5 (b) 4:3:2 (c) 5:4:3 (d) 6:10:9 (e) None

24) - Tanvi started a business investing ₹45000. After 8 months, Anisha joined her with a Capital of ₹52000. At the end of the year, the total Profit was ₹56165. What is the share of Profit Anisha
 (a) 21450 (b) 24440 (c) 27635 (d) 31765 (e) 15618

25) A, B and C invested Capitals in the ratio of 2:3:5. At the end of business term, they received the Profit in the ratio 5:3:12. Find the ratio of time for which they contributed their Capitals.
 (a) 10:24:25 (b) 25:24:10 (c) 18:24:25 (d) 25:10:24
 (e) None

26) A, B and C started a shop by investing 27000, 81000, 72000, respectively. At the end of 1 yr, B's share in total Profit was ₹36000. What was total Profit
 (a) 108000 (b) 116000 (c) 80000 (d) 92000 (e) None

27) A, B and C start a business. If the ratio of their periods of investments is 2:3:6 and their Profits are in the ratio of 4:5:6, then which of the following is the ratio of Capitals of A, B & C
 (a) 6:8:10 (b) 12:10:6 (c) 10:12:6 (d) 6:7:8 (e) None

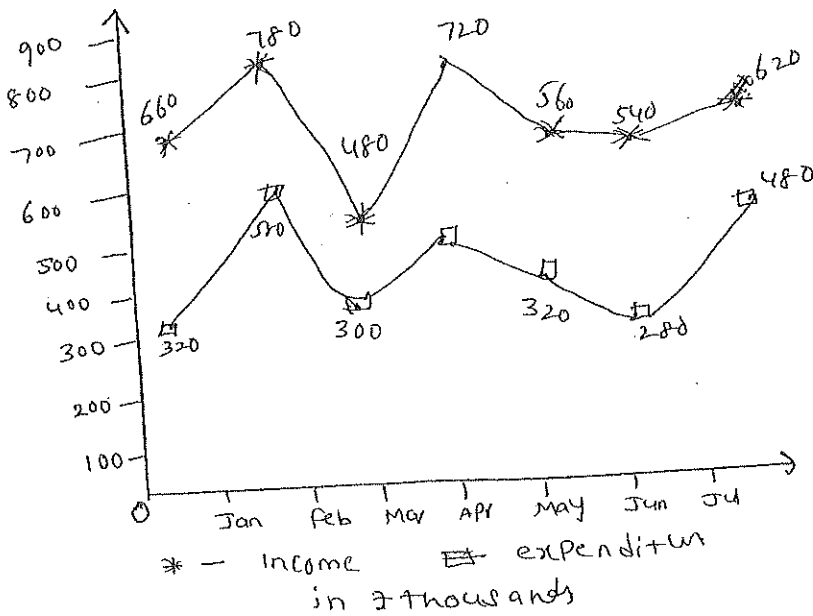
28) The ages of Hari and Harry are in the ratio 5:7. Four years from now the ratio of their ages will be 3:4. Find their present ages
 (a) 20 & 28 (b) 30 & 35 (c) 10 & 20 (d) 12 & 19 (e) None

(29). The ratio of present age of father and son is 4:1. If 4 years ago the ratio was 11:2. Find their present age
 (a) 30 & 12 (b) 48 & 12 (c) 44 & 15 (d) 30 & 10 (e) None

(30). Present age of father and his son are in the ratio 7:5. After 3 year ratio of their age become 4:3. What is the present age of his son?
 (a) 20yr (b) 15yr (c) 12yr (d) 11yr (e) None

(31). The ages of Shirish and Kunder are in the ratio of 5:6, respectively, after 8yr, the ratio of their ages will be 7:8. What is the difference in their ages.
 (a) 4yr (b) 8yr (c) 10yr (d) 12yr (e) None

Directions (Q.No): 32 to 36): Refer to the following Line Graph and answer the following



32) By what approximate Percent is the Profit earned by the Company in the month of february less than that earned in the month of January?

- (a) 32% (b) 35% (c) 41% (d) 45% (e) 50%

33) What is the difference between the total Profit in 2 thousand earned by the Company in the months of february, April and July and that earned in the months of January, March and June?

- (a) 120 (b) 130 (c) 140 (d) 160 (e) 110

34) What is the respective ratio between the Percentage Profits earned by the Company in the months of March and May?

- (a) 4:5 (b) 1:3 (c) 5:4 (d) 8:3 (e) None

35) What the approximate average expenditure of the Company in the given months? (In 2 thousand)

- (a) 385 (b) 389 (c) 365 (d) 375 (e) 370

36) In how many months, the income of a Company was more than the average income during the given months?

- (a) 1 (b) 2 (c) 3 (d) 4 (e) 5

Directions (Q.No: 37-41) Complete the series

37) 40, 30, 22, 16, ? 10

- (a) 10 (b) 12 (c) 16 (d) 15 (e) None

38) 11, 3, 6, 11, 18, ? 42

- (a) 25 (b) 29 (c) 32 (d) 35 (e) 10

(3.9) find the wrong number of the series

1, 8, 27, 64, 125, 215

- (a) 1 (b) 27 (c) 64 (d) 125 (e) 215

(40) — c b d c a — a c b — c a — b a c b — a c — d

- (a) a d d d d b (b) a d d b b b (c) b d d d d b (d) b b b d d d
(e) None.

41. W, T, P, M, I, F, B, ?, ?

- (a) Z, V (b) X, U (c) Y, U (d) X, V (e) X, Z

Directions : 42 to 47: Analyse the elements

42. 9 : 18 :: 6 : —

- (a) 24 (b) 12 (c) 18 (d) 21 (e) None.

43. 20 : 40, 200 : 400 ; 2000 : 4000 ; 8000 : ?

- (a) 1000 (b) 2000 (c) 16000 (d) 18000 (e) None

44. AFI, JOR, MRU, ?

- (a) GJN (b) HMP (c) PMO (d) RJL (e) None

45. If DELHI is coded as 7354 and CALCUTTA as 82589662. How can CALCUT be coded.

- (a) 5279431 (b) 5978213 (c) 8251896 (d) 8543691
(e) None.

46. Girl : Beautiful :: Boy : ?

- (a) Smart (b) Grail (c) Grail (d) Handsome (e) None

47. Which is wrong number of

17, 36, 53, 83, 92.

- (a) 92 (b) 53 (c) 68 (d) 83 (e) None.

Directions (Q.No - 48-52). Find the odd thing in

(48) (a) 196 (b) 225 (c) 256 (d) 282 (e) 324

(49) (a) 17 (b) 25 (c) 81 (d) 144 (e) 225

(50) (a) 6 (b) 10 (c) 20 (d) 30 (e) 42

(51) (a) 111 (b) 136 (c) 161 (d) 175 (e) 216

(52) (a) 11 (b) 19 (c) 31 (d) 49 (e) 91

(53) 52% of ? = 182

- (a) 354 (b) 350 (c) 360 (d) 380 (e) 320

(54) What fraction equivalent to 325%

- (a) $19/4$ (b) $13/4$ (c) $7/4$ (d) $9/4$ (e) None

(55) 20% of $540 \times \frac{7}{36} = ?$

- (a) 21 (b) 14 (c) 20 (d) 30 (e) 10

(56) What is the cost of 72% of $\frac{2}{3}$ of 450

- (a) 648.4 (b) 129.6 (c) 324.2 (d) 162.6 (e) None

(57) Meenal purchased a car for ₹25000 and sold it for ₹34800. What is the percent profit she made on car.

- (a) 40% (b) 39.2% (c) 38.4% (d) 38% (e) None of these

(58) Lokesh bought an article for ₹2500. He spent ₹320 on its shipping. He then sold it for ₹4089. What

- was the Percent Profit he gained in this transaction?
- (a) 38% (b) 45% (c) 46% (d) 35% (e) 48%
- (59). Prasad sold his work tools for ₹1850 and earned a profit of 25%. At what price did Prasad buy the work tools
- (a) ₹1360 (b) ₹1300 (c) 1240 (d) ₹1480 (e) None
- (60). A man sold a wristwatch for ₹2400 at a loss of 25%. At what rate should he have sold the wristwatch, to earn a profit of 25%.
- (a) 3600 (b) ₹4000 (c) ₹3500 (d) ₹3800 (e) None
- (61). Introducing Asha to guests, Bhaskar said, "Her father is the only son of my father". How is Asha related to Bhaskar
- (a) Niece (b) Grand daughter (c) Mother (d) daughter (e) none
- (62). If B says that his mother is the only daughter of A's mother, then what is the relation of A with B?
- (a) son (b) father (c) uncle (d) Brother (e) None
- (63). P is brother of Q, R is sister of Q. How P is related to R.
- (a) uncle (b) Data inadequate (c) Brother (d) sister (e) none.

- (64) sheela is Ravi's sister-in-law. Ram is Ravi's brother. Ram's wife is sheela. Deepa is Ravi's sister. Deepa's mother is shanthi. How is sheela related to shanthi
 (a) Mother in Law (b) Daughter-in-law (c) Grand daughter
 (d) Daughter (e) None of these
- (65) What was the day of week on 1st March 2016?
 (a) Monday (b) Wednesday (c) Tuesday (d) Friday (e) None
- (66) Calander for the year 2007 will be same for
 year.
 (a) 2017 (b) 2018 (c) 2019 (d) 2003 (e) None.
67. If January 1, 2006 was Monday, then this year ends on which day of the week.
 (a) Sunday (b) Saturday (c) Monday (d) Tuesday
 (e) None.
68. Number of odd days on 1600 years
 (a) 3 (b) 1 (c) 5 (d) 0 (e) None of these
- (69). Express 150 mps in kmph?
 (a) 250 kmph (b) 590 kmph (c) 540 kmph (d) None
- (70). A can walk a certain distance in 20 days when he rests 8h per day. How long will he take to walk twice the distance, twice as fast and rests twice as long each day.

- (a) 40 days (b) 80 days (c) 60 days (d) 100 days (e) None

71. The ratio between the speed of truck, car and train is $3:8:9$. The car moved uniformly and covered a distance of 1040 km in 13h. What is the average speed of the truck and train together?

(a) 75 km/h (b) 60 km/h (c) 48 km/h (d) Can not be determined
(e) None of these.

72. A boat takes 35 min less to travel 28 km downstream than it takes to travel the same distance upstream. If the speed of the boat in still water is 14 km/h, what is the speed of the stream?

- (a) 2.5 (b) 6.5 (c) 2 (d) 9.5 (e) 10.5

73. What is the mirror image of 12:30 AM?

(a) 11:30 am (b) 11:30 PM (c) 12:30 PM (d) 10:30 PM
(e) None

74. How many times the hands of a clock are coincident ~~where the time is 20:20~~ in 24 hours?

(a) 12 (b) 11 (c) 13 (d) 22 (e) None of these

75. By what time (in minutes) between 3 o'clock and 4 o'clock, both the needles coincide each other?

(a) $12\frac{4}{11}$ min (b) $5\frac{1}{11}$ min (c) $13\frac{4}{11}$ min (d) $16\frac{4}{11}$ min
(e) None of these

(76). A clock rings at 1 o'clock, 2 o'clock, 3 o'clock and so on. The number of rings in a week would be

- (a) 256 (b) 176 (c) 156 (d) 168 (e) None of these

(77) Find the Simple interest on ₹200 for 4 yr at 6% per annum.

- (a) 28 (b) 48 (c) 38 (d) 18 (e) None of these

(78). What total amount would Mithillesh get at the end of 3 yr, if he invests an amount of ₹11200 in a scheme which offers simple interest at the rate of 8.5%.

- (a) ₹14056 (b) ₹14348 (c) 13852 (d) ₹15064
(e) None of these

(79). The Compound interest accrued on an amount at the end of 2 yr at the rate of 12% p.a is ₹2862. What is the amount

- (a) ₹11250 (b) 12200 (c) 13500 (d) ₹10000 (e) None of these

(80). What will be the difference between the simple interest and Compound interest earned on a sum of ₹985 @ 14% p.a. at the end of 2 yr.

- (a) ₹16408 (b) ₹14214 (c) ₹19218 (d) ₹17409
(e) None of these.

-X-

SEE AUG'23

LSCT12/31-08-2023

HEALTH AND HYGIENE

No. of Pages: 1

Time: 2Hrs

No. of Questions: 10

Roll No:	
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Max. Marks: 40M

Pass Min: 16M



SECTION – A

Answer any TWO of the following:

2 X 5 = 10M

1. What is balanced diet? Explain.
2. Explain protein functions and dietary sources.
3. Write about NIN.
4. Give an account of Village Health Nutrition Day.

SECTION – B

Answer any THREE of the following:

3 X 10 = 30M

5. Give an account of functioning of Vitamins, food sources and effects of deficiency.
6. Write an essay on functions and requirements of water. Add a note on effects of deficiency of water.
7. What are women and child health care schemes in India? Write about RMNCH⁺ (Reproductive, Maternal, Newborn, Child and Adolescent Health).
8. Explain the role of Government and Public in the prevention of pandemics.
9. Write an essay on personal hygiene.
10. List out different mobile apps introduced by Government of India to bring public awareness regarding health and hygiene and explain.

SEE AUG 2023

ECOT41B / 1-09-2023

Economic Development – India and Andhra Pradesh

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

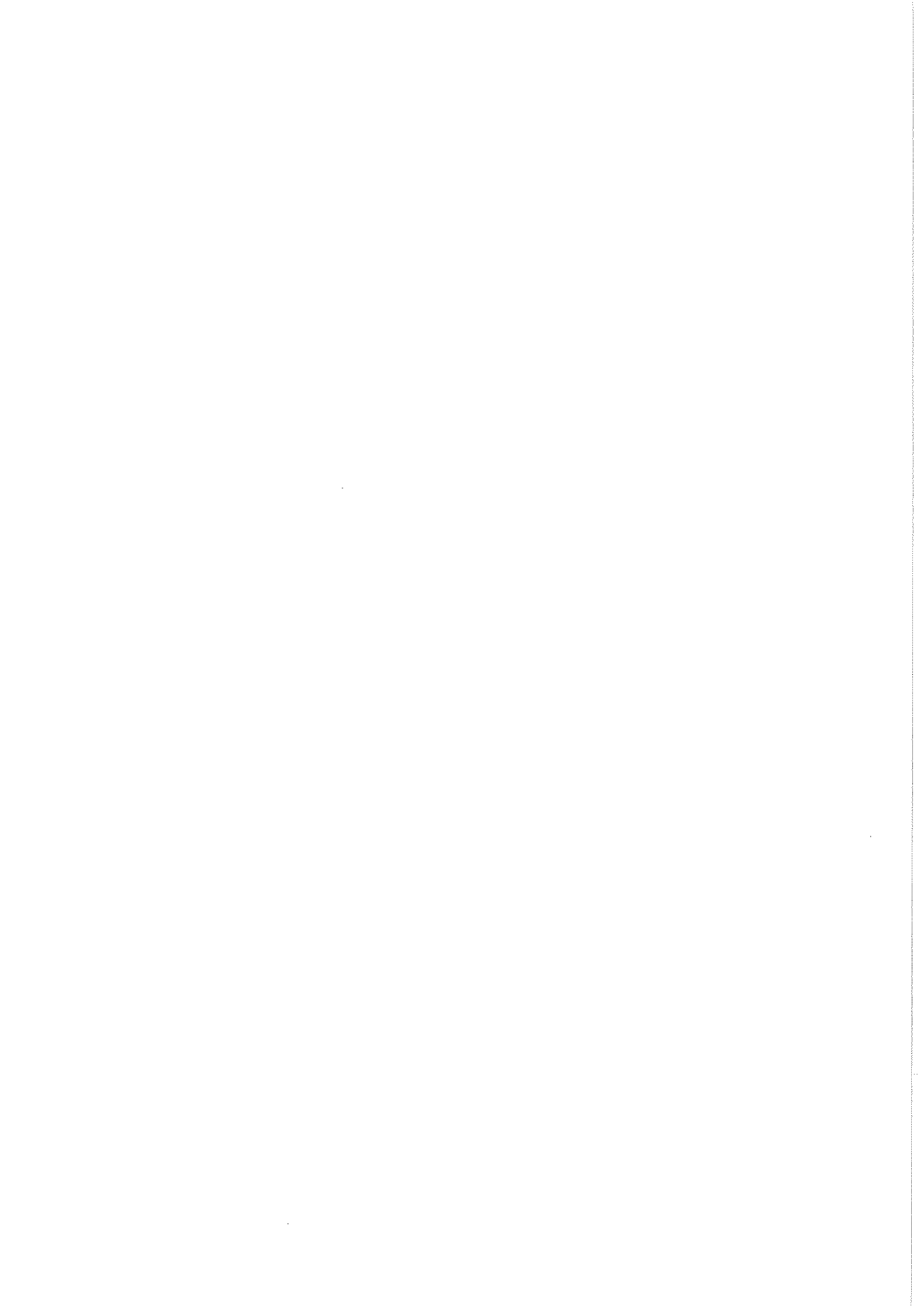
1. Write about human development index.
2. Types of unemployment.
3. Write about Atmanirbhar Bharat Package.
4. Explain recommendations of recent finance commission.
5. Write about information technology in Andhra Pradesh..
6. Causes for malnutrition.
7. Objectives of NITI Ayog
8. Write about industrial corridors.

Section B

Answer the following:

5 x 10 = 50M

9. a) Briefly explain basic characteristics of Indian Economy.
or
b) Explain achievements and failures of Indian five year plans.
10. a) What is meant by income inequality? Explain the causes of income inequalities in India.
or
b) What is meant by labour migration? Explain causes and remedial measures of labour migration.
11. a) What are the sources of agricultural credit in India?
or
b) Critically examine 1991 industrial policy.
12. a) What are the recent changes in Indian Tax system?
or
b) What is meant by Goods and Service Tax(GST)? Explain the impact of GST on commerce and industry.
13. a) Explain the basic characteristics of Andhra Pradesh Economy after bifurcation in 2014.
or
b) Explain various social welfare programmes in Andhra Pradesh.



Auditing

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. What is auditing? Explain its importance.
2. Explain the characteristics of auditing.
3. Explain about cost audit.
4. Explain about secretarial audit.
5. What is audit programme and its importance.
6. Write about internal check.
7. What are the objectives of vouching?
8. What are the rights of an auditor?

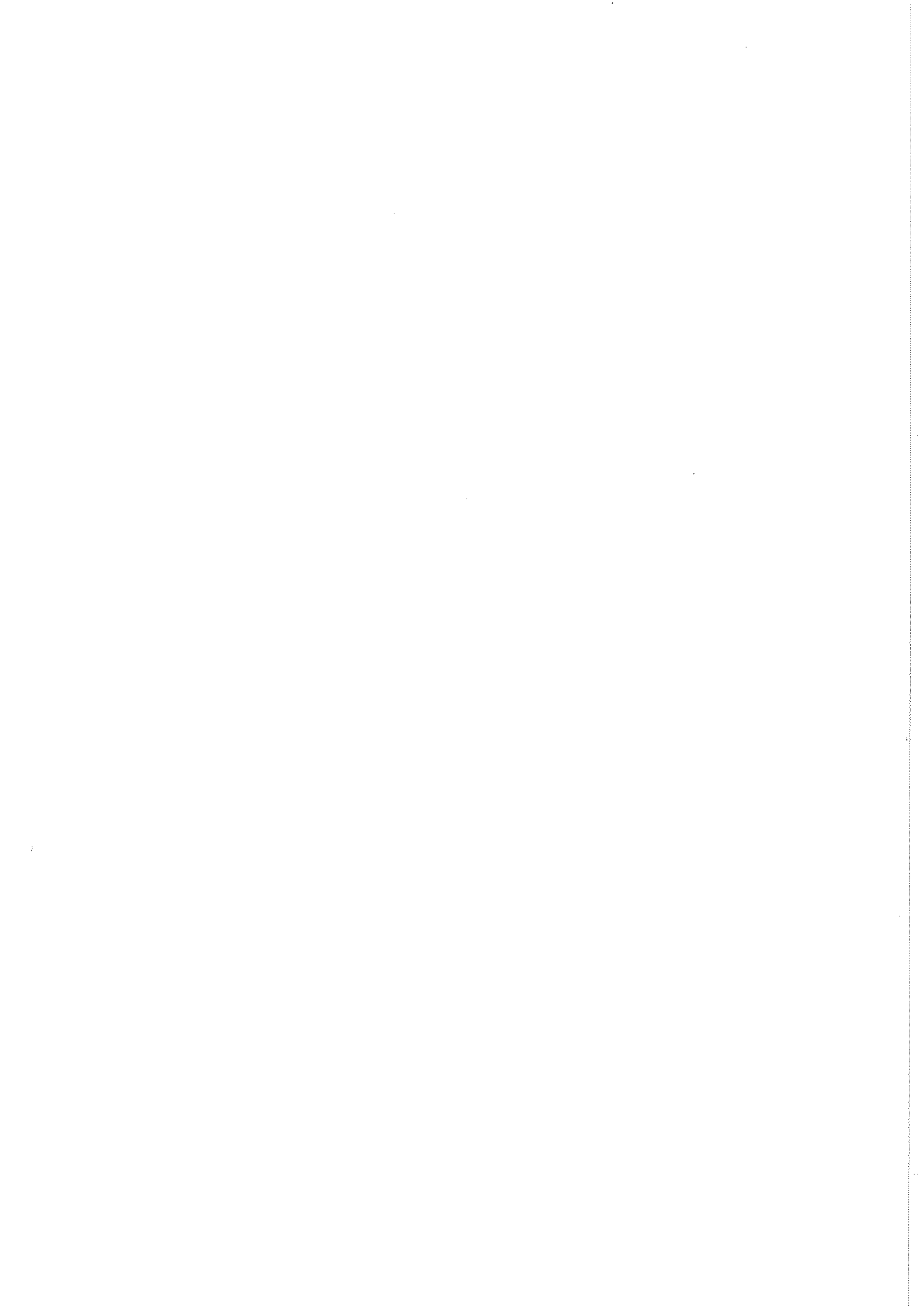
Section B

Answer the following:

5 x 10 = 50M

9. a) Define auditing. Explain the objectives of auditing.
or
b) What are the differences between accounting and auditing?
10. a) Explain the audit on the basis of organizational structure.
or
b) Explain the differences between continuous audit and annual audit.
11. a) What are the steps to be taken at the commencement of new audit?
or
b) Define internal control and explain its advantages and disadvantages.
12. a) Define vouching. Explain the vouching of cash transactions.
or
b) What is investigation? Explain its importance in auditing.
13. a) Explain auditor's qualifications and disqualifications.
or
b) What is meant by audit report? What are the contents of audit report?

* * *



SEE AUG 2023

CSCT41C / 1-09-2023

Operating Systems

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section - A

ANSWER ANY FIVE QUESTIONS

5 x 5M = 25 M

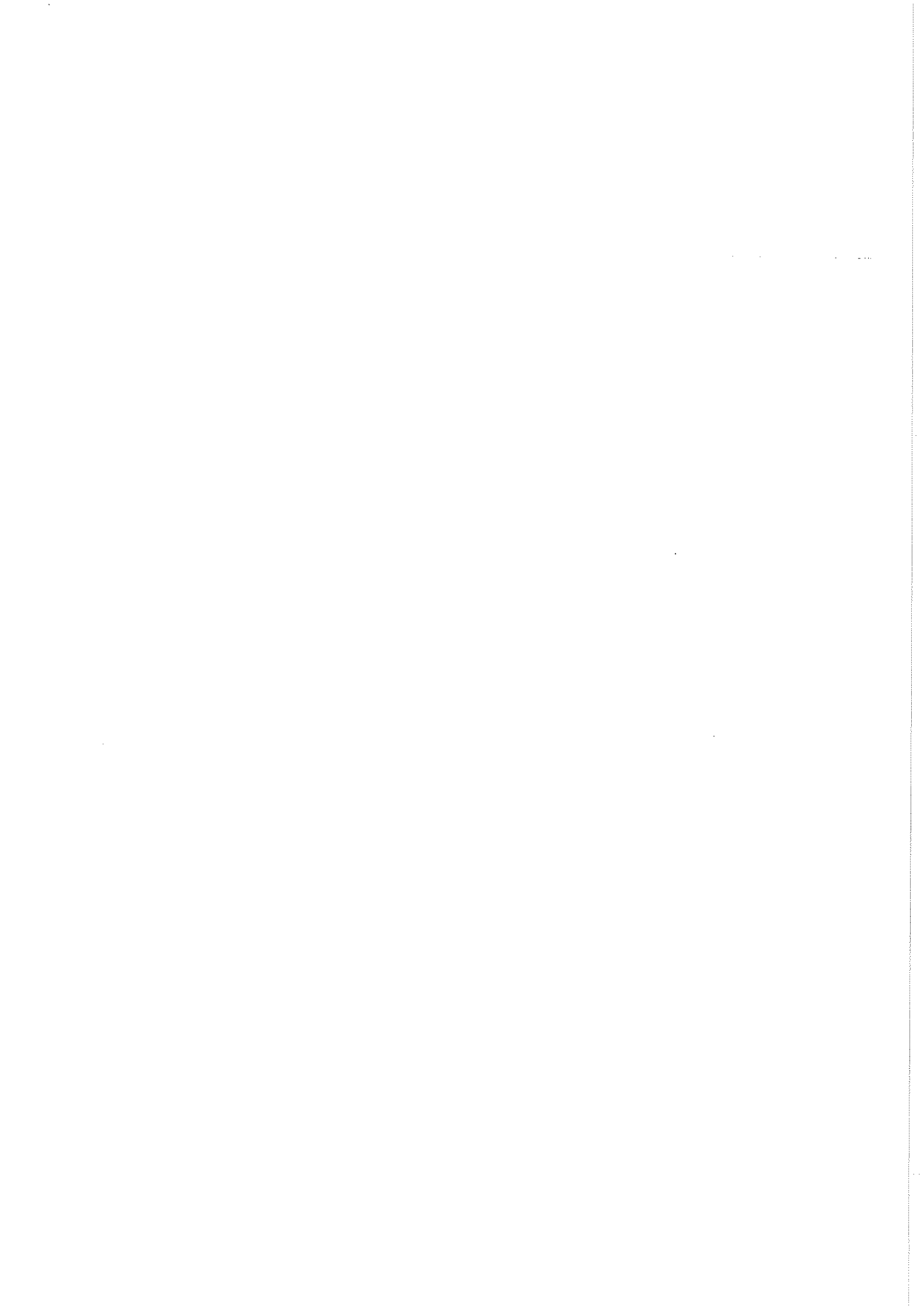
1. Explain about the components of Computer System Architecture
2. What is the use of a process control block (PCB)? Explain.
3. Differentiate between Process and a Thread
4. Explain about swapping with a neat diagram
5. What is Virtual Memory? Explain its importance
6. Discuss about File access Methods.
7. How can we recover from Deadlock?
8. What is the Resource allocation graph? Explain deadlock with resource allocation graph.

Section - B

ANSWER THE FOLLOWING QUESTIONS

5 x 10M = 50 M

9. a) What are the primary functions of an operating system, and how do they contribute to the overall operation of a computer system?
(OR)
b) What are the main types of operating systems? Explain.
10. a) Differentiate between pre-emptive and non preemptive CPU scheduling algorithms. Explain about 2 preemptive and 2 non preemptive scheduling algorithms.
(OR)
b) Explain about Process Synchronisation
11. a) Discuss about non - contiguous memory allocation
(OR)
b) Discuss about various page replacement algorithms with examples.
12. a) Discuss about Disk Scheduling
(OR)
b) Explain about File operations
13. a) What are the four necessary conditions that must hold simultaneously for dead lock to occur? Explain.
(OR)
b) Write about Bankers algorithm and explain it with a simple example.



SEE AUG'23

AQTT42/01-09-2023

FISH HEALTH MANAGEMENT, FISHERIES ECONOMICS, EXTENSION AND
MARKETING

No. of Pages: 1

Roll No:

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Max. Marks: 75M

Time: 3Hrs

Pass Min: 30M

No. of Questions: 13

~~~~~

Note: Draw neat labelled diagrams wherever necessary.

SECTION – A

Answer any FIVE of the following:

5 X 5 = 25M

1. Explain haemorrhagic septicemia in fishes.
2. Explain filamentous bacterial disease in shell fish.
3. Explain the role of probiotics in fish health.
4. Write about NABARD.
5. Analyse cost and earnings of freezing units.
6. Describe western blotting technique.
7. List out fish marketing methods.
8. Explain the methods of economic analysis of business organizations.

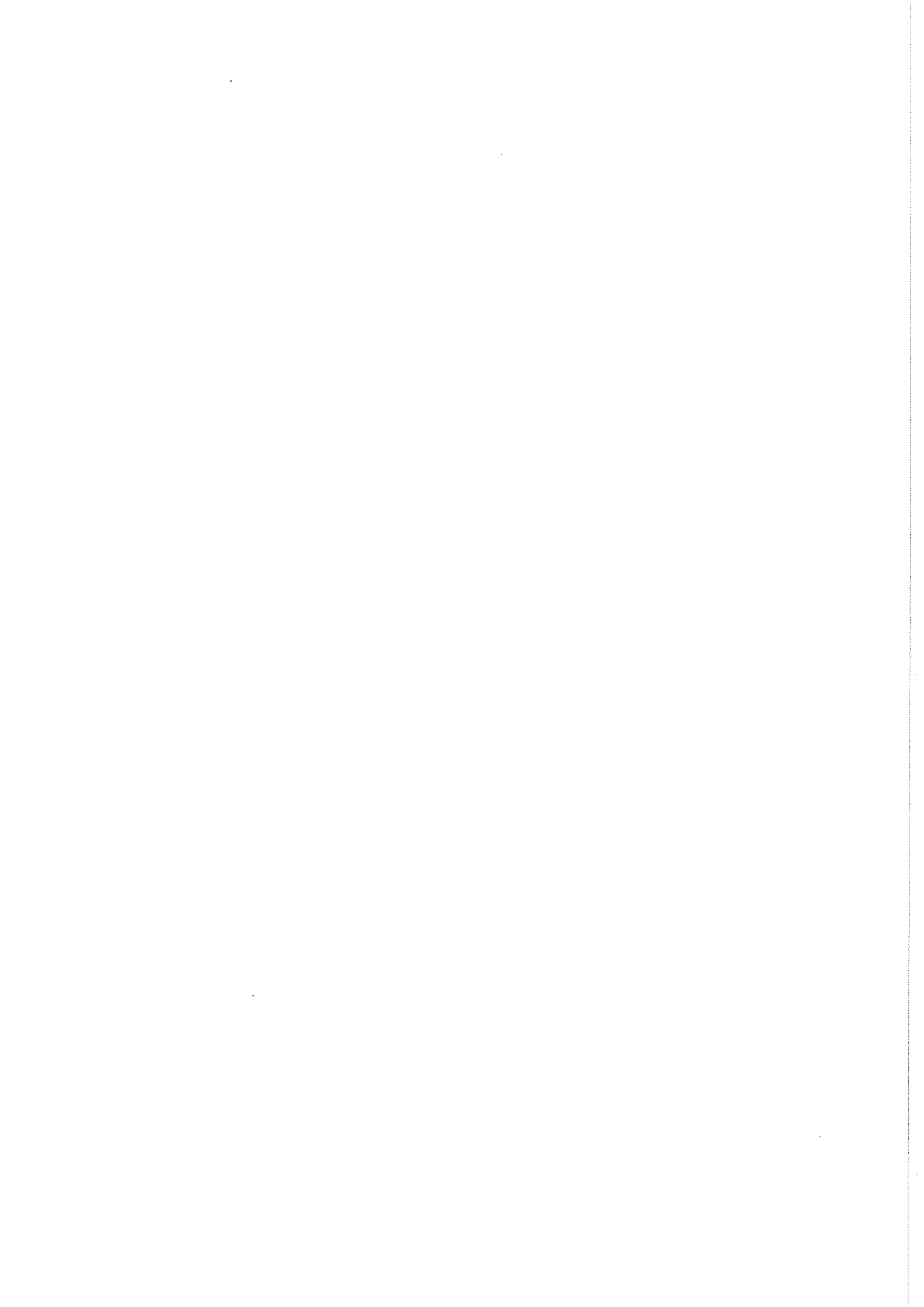
SECTION – B

Answer the following:

5 X 10 = 50M

9. (a) Explain any two fungal diseases of fish.  
OR  
(b) Explain the following bacterial diseases: (i) Epizootic ulcerative syndrome  
(ii) Furunculosis.
10. (a) Explain any two viral diseases of shell fish.  
OR  
(b) Explain the following protozoan diseases: (i) Costiasis (ii) Whirling disease
11. (a) Explain the significance and types of quarantine methods.  
OR  
(b) Describe the procedure and significance of ELISA.
12. (a) Explain the socio-economic conditions of fishermen in A.P.  
OR  
(b) Explain the principles of aquaculture economics.
13. (a) Explain fisheries training and education in India.  
OR  
(b) Explain fisheries extension methods.

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SEE AUG 2023

22LSCT06 / 01-09-2023

Human Values and Professional Ethics

No. of Pages: 01

Roll No:

Max. Marks: 35M

Time: 2 Hrs

No. of Questions: 09

Pass Min.: 14M

\*\*\*\*\*

Section A

Answer any THREE of the following:

3 x 5 = 15M

1. What are the basic guidelines of value education?
2. Write a short note on the following:  
a) Personal values                      b) social values.
3. Family is a natural laboratory to understand human relationships.
4. What is justice? What are its four elements?
5. What are professional values?

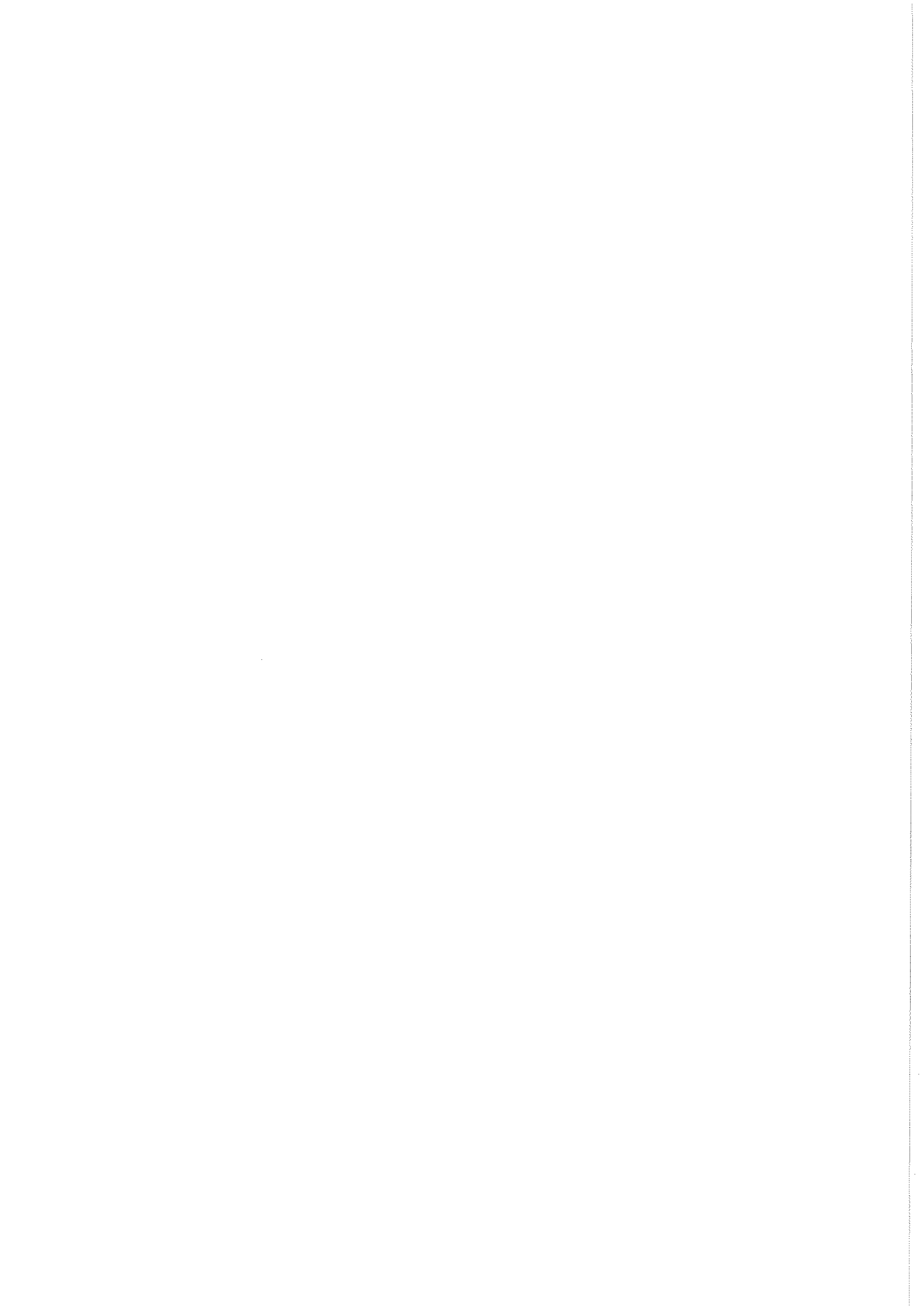
Section B

Answer any TWO of the following:

2 x 10 = 20M

6. What is the need for value education in modern technical and professional institutions?
7. Write a short note on the following:  
a) Trust    b) Respect    c) Affection    d) Care    e) Guidance
8. What is comprehensive human goal? How this is conducive to sustainable happiness and prosperity.
9. Describe about professional Integrity, Respect & Equality, Privacy, Building trusting relationships.

\* \* \*



## Macro Economic Analysis

No. of Pages: 01

Roll No:

Max. Marks: 70M

Time: 3 Hrs

No. of Questions: 10

Pass Min.: 28M

\*\*\*\*\*

Section A

Answer the following questions:

5 x 4 = 20M

1. a) What are macro economic paradoxes?  
or  
b) Concept of Green accounting.
2. a) Write about Say's Law of markets.  
or  
b) Write about acceleration principle.
3. a) Functions of commercial banks.  
or  
b) Explain the Gresham's law.
4. a) Write about Philip's curve hypothesis.  
or  
b) Write about demand pull and cost push inflation.
5. a) Explain the functions of money market.  
or  
b) Write about importance of insurance.

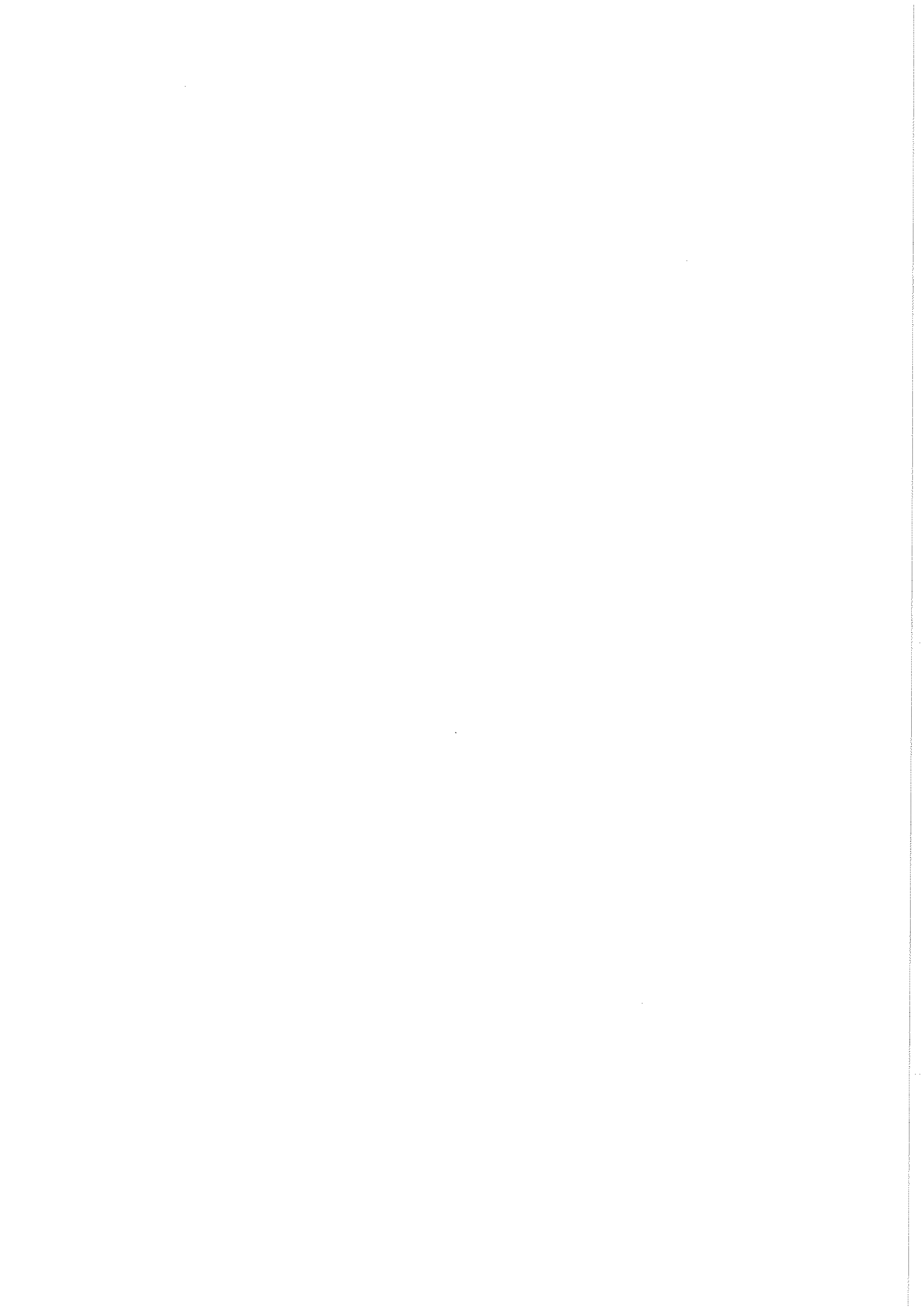
Section B

Answer the following:

5 x 10 = 50M

6. a) Explain the scope and importance of macro economics.  
or  
b) Explain the components of National income.
7. a) Critically examine Keynesian theory of employment.  
or  
b) What is meant by marginal efficiency of capital? Explain the functioning of marginal efficiency of capital.
8. a) Explain the functions of Central Bank.  
or  
b) Critically examine Fisher's quantity theory of money.
9. a) Explain the causes and effects of inflation.  
or  
b) What is meant by trade cycles? Explain the phases of trade cycles.
10. a) Briefly explain structure of financial system.  
or  
b) Explain different types of insurances.

\* \* \*



## BUSINESS ECONOMICS

No. of Pages: 01

Roll No:

Max. Marks: 70M

Time: 3 Hrs

No. of Questions: 10

Pass Min.: 28M

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Section A

Answer the following:

5 x 4 = 20M

1. a) Write wealth definition.  
or  
b) Write the importance of micro economics.
2. a) Write about demand function.  
or  
b) Exceptions of demand curve.
3. a) Relationship between AC & MC curves.  
or  
b) Write about AR and MR curves.
4. a) Features of monopoly market.  
or  
b) Write about selling costs.
5. a) What are the problems in measuring national income?  
or  
b) What are the causes of trade cycles?

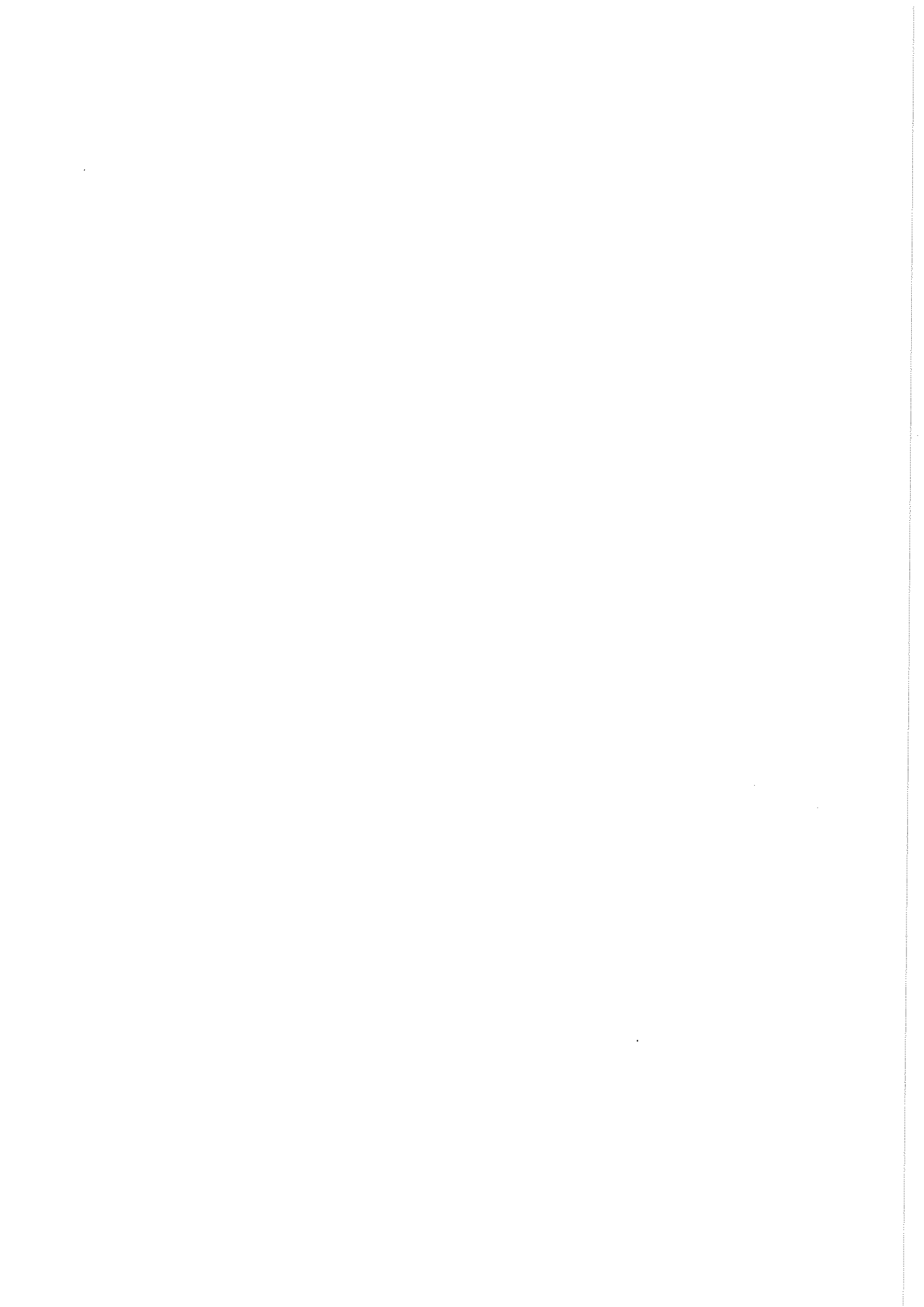
Section B

Answer the following:

5 x 10 = 50M

6. a) Explain nature and scope of business economics.  
or  
b) Critically examine scarcity definition.
7. a) What is meant by price elasticity of demand? Explain the types of price elasticity of demand.  
or  
b) Explain the law of supply and its exceptions.
8. a) Explain the law of variable proportions and its importance.  
or  
b) What is meant by break even point? Explain break even charts.
9. a) Explain the price determination under perfect competition.  
or  
b) What are the features of oligopoly market? Explain Kinky demand curve analysis.
10. a) What is meant by trade cycles? Explain the phases of trade cycles.  
or  
b) How do you measure National Income? Explain.

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## DATA STRUCTURES

No. of Pages: 01

Roll No:

Max. Marks: 70M

Time: 3 Hrs

No. of Questions: 10

Pass Min.: 28M

\*\*\*\*\*

## SECTION – A

Answer all Questions

5 x 4 = 20 M

1. a) Write the features of Abstract data types.  
OR  
b) What is data structure? Classify data structure.
2. a) Write about Doubly linked list and different operations performed on it.  
OR  
b) Differentiate between Linked Lists and Arrays.
3. a) What is a Stack? Explain the basic operations performed on Stack.  
OR  
b) Write any four applications of stacks.
4. a) What is a Binary Tree? Write the basic operations performed on Binary Tree.  
OR  
b) Explain the Depth-First Search (DFS) and Breadth-First Search (BFS) Algorithms.
5. a) Illustrate insertion sort algorithm for the values 12, 11, 13, 5, 6.  
OR  
b) What are the advantages of using Indexed sequential search over sequential search?

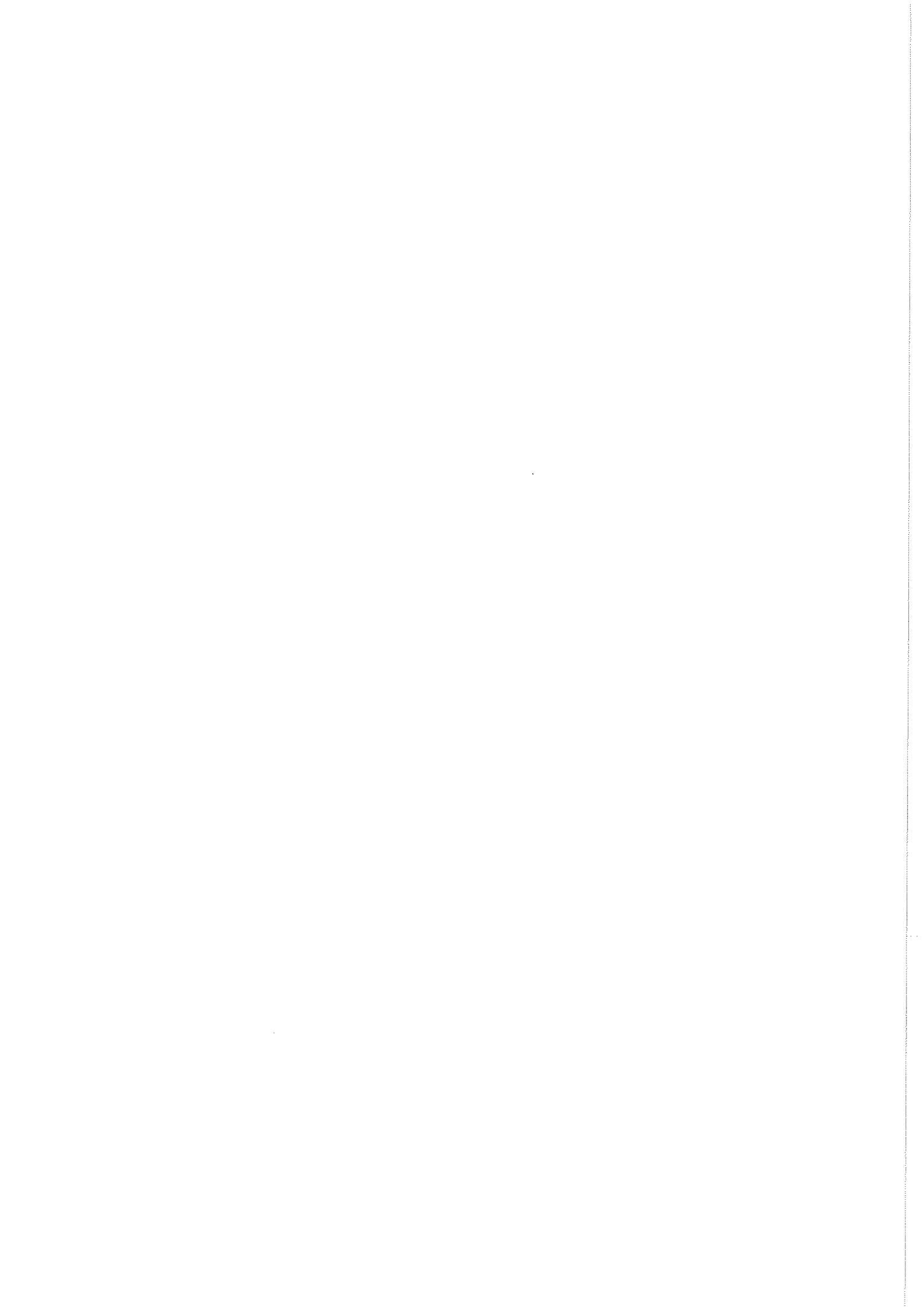
## SECTION – B

Answer all Questions

5 x 10 = 50 M

6. a) What is Algorithm Analysis? Explain the different types of Time Complexities which can be analyzed for an algorithm.  
OR  
b) What is Big-O Notation? How do you calculate Big-O Notation?
7. a) What is circular linked list? Write the benefits of a circular linked list. Where do we use the circular linked list?  
OR  
b) What is linked list and operations performed on linked list?
8. a) Define Queue. Explain various operations performed on the Queues.  
OR  
b) What is Double ended queue? Explain types of deque and operations performed on deque.
9. a) Explain about Binary Tree Traversal and its techniques. Write a C Program for Inorder traversal of the binary search tree?  
OR  
b) Construct a BST from the given post-order traversal: Post order - {1, 7, 5, 50, 40, 10}.
10. a) Write a C program to find a Minimum Spanning Tree using prim's algorithm.  
OR  
b) Explain about Sequential representation and Linked list representation of graphs.

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## Macro Economic Analysis

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Explain importance of macro economics.
2. Say's Law of market.
3. Circular flow of income and expenditure.
4. Permanent income hypothesis.
5. Write about types of banking.
6. Explain the causes for inflation.
7. Write about RBI classification of money.
8. What is the importance of insurance?

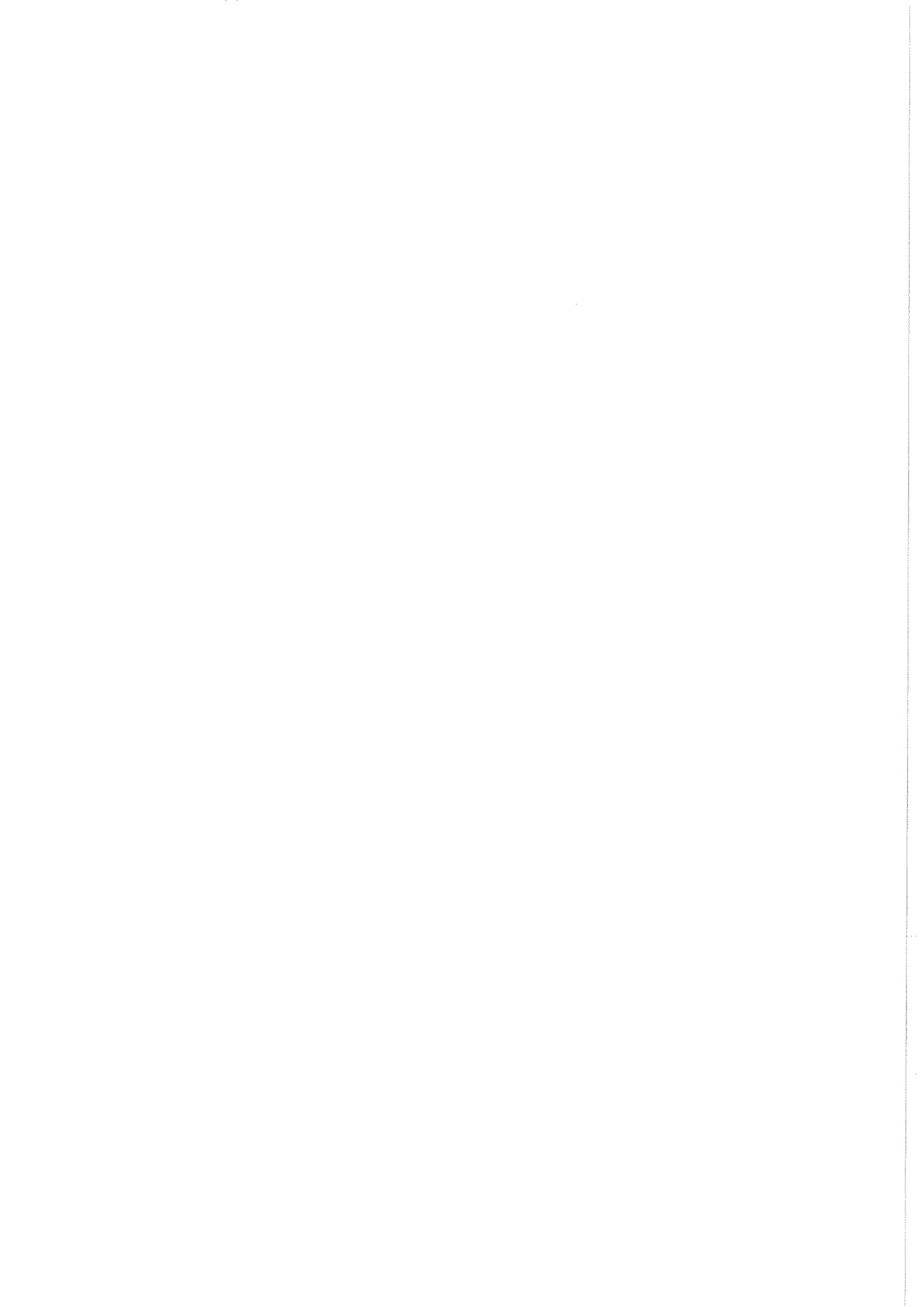
Section B

Answer the following:

5 x 10 = 50M

9. a) Define macro economics and explain its nature and scope.  
or  
b) What is meant by National Income? Discuss different concepts of National Income.
10. a) Critically examine the classical theory of employment.  
or  
b) Explain the working process of multiplier.
11. a) Discuss Fisher's quantity theory of money.  
or  
b) Explain the functions of commercial banks.
12. a) Write about demand pull and cost push inflation.  
or  
b) What is meant by trade cycle? Explain different phases of trade cycle.
13. a) Explain the structure of financial system in India.  
or  
b) Explain the functions of stock exchange.

\* \* \*



## BUSINESS ECONOMICS

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. What is micro economics?
2. What is the difference between wealth and welfare?
3. Write about point method.
4. What do you mean by production analysis?
5. Explain the relationship between AC and MC.
6. Write about monopolistic competition.
7. What are the features of oligopoly market?
8. Explain measuring methods of national income.

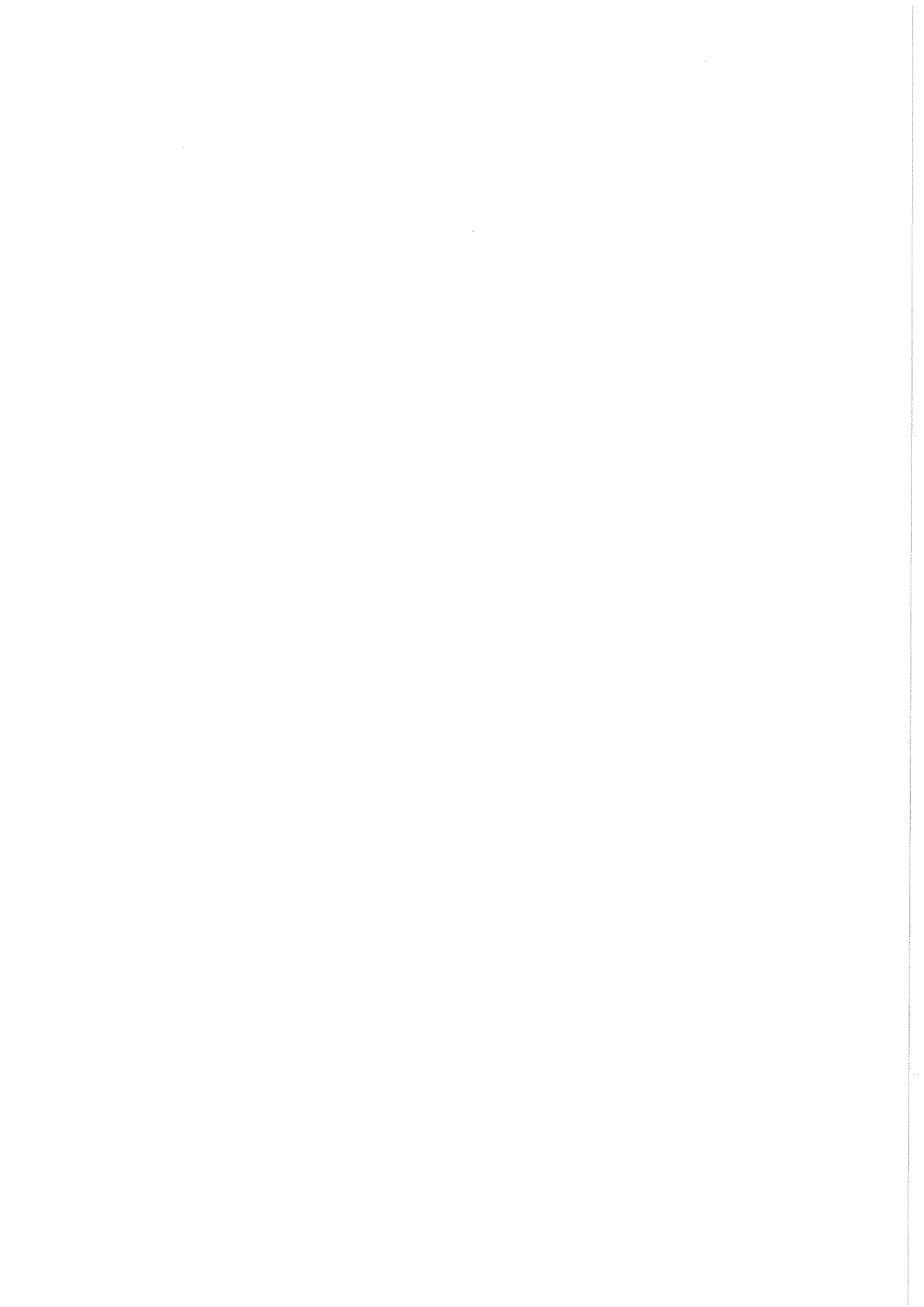
Section B

Answer the following:

5 x 10 = 50M

9. a) Define business economics and explain the nature and scope of business economics.  
or  
b) Distinguish between micro and macro economics.
10. a) State the law of demand with its exceptions.  
or  
b) Write about different types of price elasticity of demand.
11. a) Explain the law of variable proportions.  
or  
b) Discuss different short run cost curves.
12. a) What is perfect competition? Explain price determination under perfect competition.  
or  
b) Define oligopoly. Explain Kinky demand curve.
13. a) Explain the methods of calculating National Income.  
or  
b) What is meant by trade cycle? How many phases are there in it? Explain.

\* \* \*



## COMPUTER APPLICATIONS

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. How to print a document in MS-Word. Explain.
2. Explain about Headers and Footers.
3. How to add a clip art in power point?
4. How to change column width and row heights in MS-Excel?
5. Explain about data sorting & filter.
6. Explain the parts of access.
7. Explain chart wizard in access.
8. Explain crosstab queries.

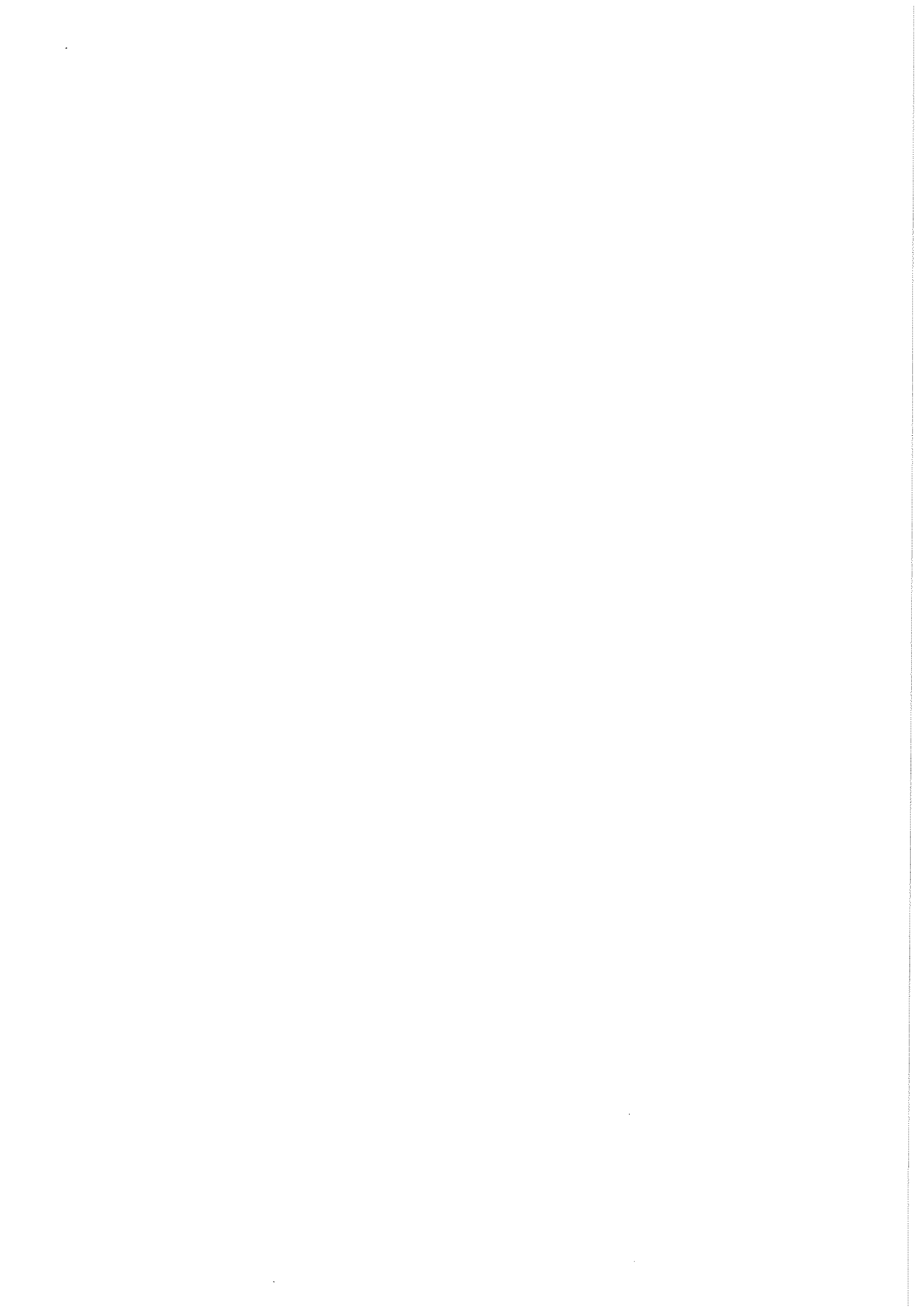
Section B

Answer the following:

5 x 10 = 50M

9. a) Explain the features of MS-Word.  
or  
b) What are the steps to create a mail merge?
10. a) How to create a presentation using a template?  
or  
b) What are the components of MS-Power point?
11. a) Define charts. What are different types of charts?  
or  
b) Explain how to work with formulas in MS-Excel?
12. a) How to create a simple data base table?  
or  
b) How to create form wizard using design view?
13. a) Define query. Explain different types of queries.  
or  
b) Define sorting. Explain about multi-level sorting.

\* \* \*





No. of Pages: 01  
Time: 3 Hrs

Roll No:  
No. of Questions: 13

Max. Marks: 75M  
Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. List and explain the abstract data types.
2. List out the different approaches to design an algorithm.
3. State and explain the differences between arrays and linked lists.
4. State the basic operations of linked list.
5. List and explain few applications of stack.
6. State the concept of double ended queue with an example.
7. Define binary tree and list the properties of binary tree.
8. List and explain the traversal of graphs.

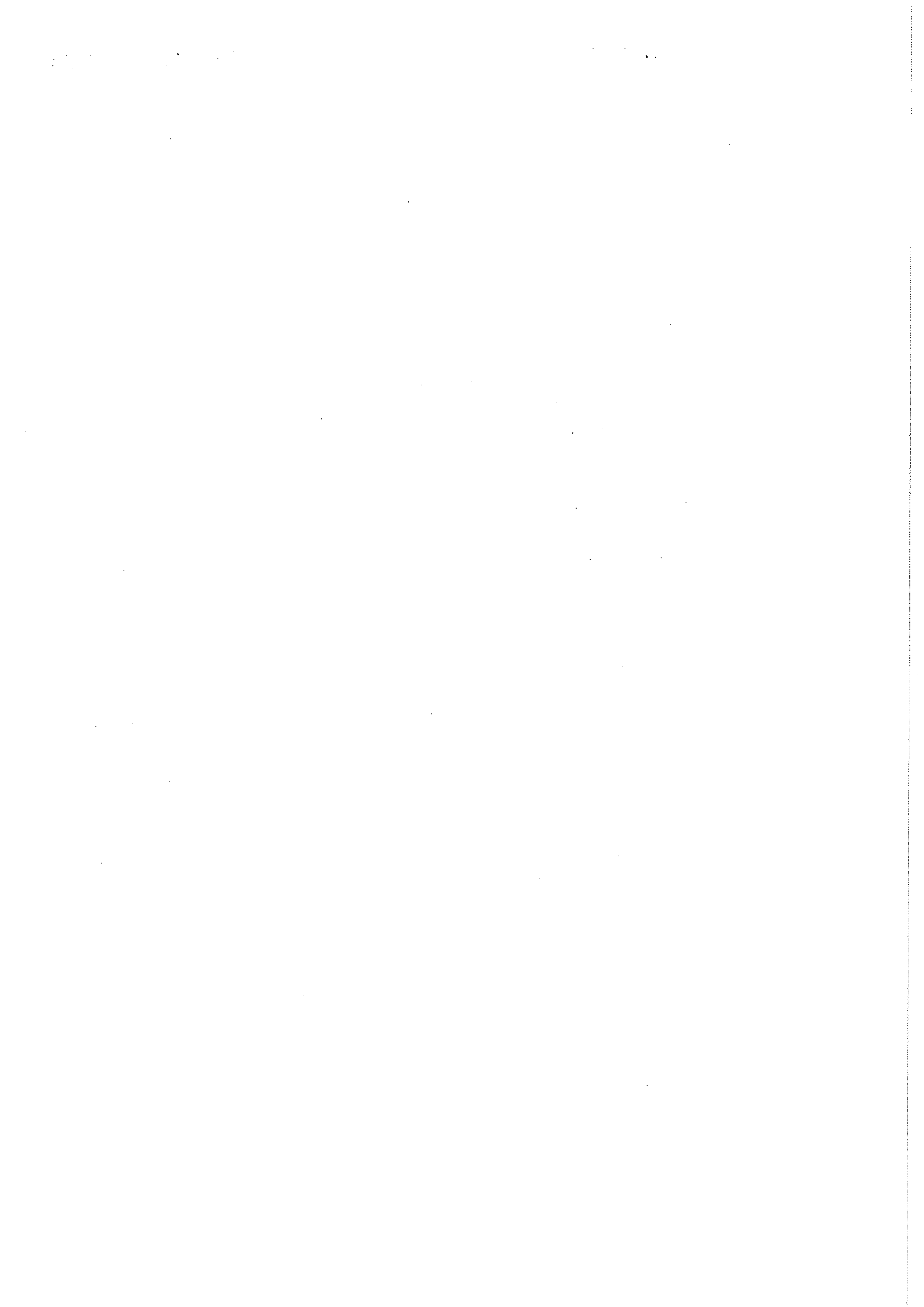
Section B

Answer the following:

5 x 10 = 50M

9. a) State and explain the differences between abstract data types, data types and data structures.  
or  
b) Elaborate on time complexity and space complexity.
10. a) Define linked list. How do you represent linked list using arrays?  
or  
b) Define doubly linked list with an example. Write a program to perform basic operations on a doubly linked list.
11. a) Define stack. Explain stack as an abstract data type. How do you represent stacks using linked list.  
or  
b) Define queue. Explain queue abstract data type. How do you represent queues using arrays.
12. a) Elaborate on representation of binary tree.  
or  
b) List various types of trees and briefly explain about each type of tree.
13. a) Define spanning tree. Explain various algorithms for finding the shortest path in a graph.  
or  
b) Which string mechanism is best among bubble sort and insertion sort? Give relevant justification.

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SEE AUG 2023

SDCECOT01 / 02-09-2023

Financial Markets

No. of Pages: 01

Roll No:

Max. Marks: 40M

Time: 2 Hrs

No. of Questions: 08

Pass Min.: 16M

\*\*\*\*\*

Section A

Answer any TWO of the following:

2 x 5 = 10M

1. Explain briefly about the role of financial system in economic development.
2. Write a short note on commercial paper.
3. Write a short note on NSE.

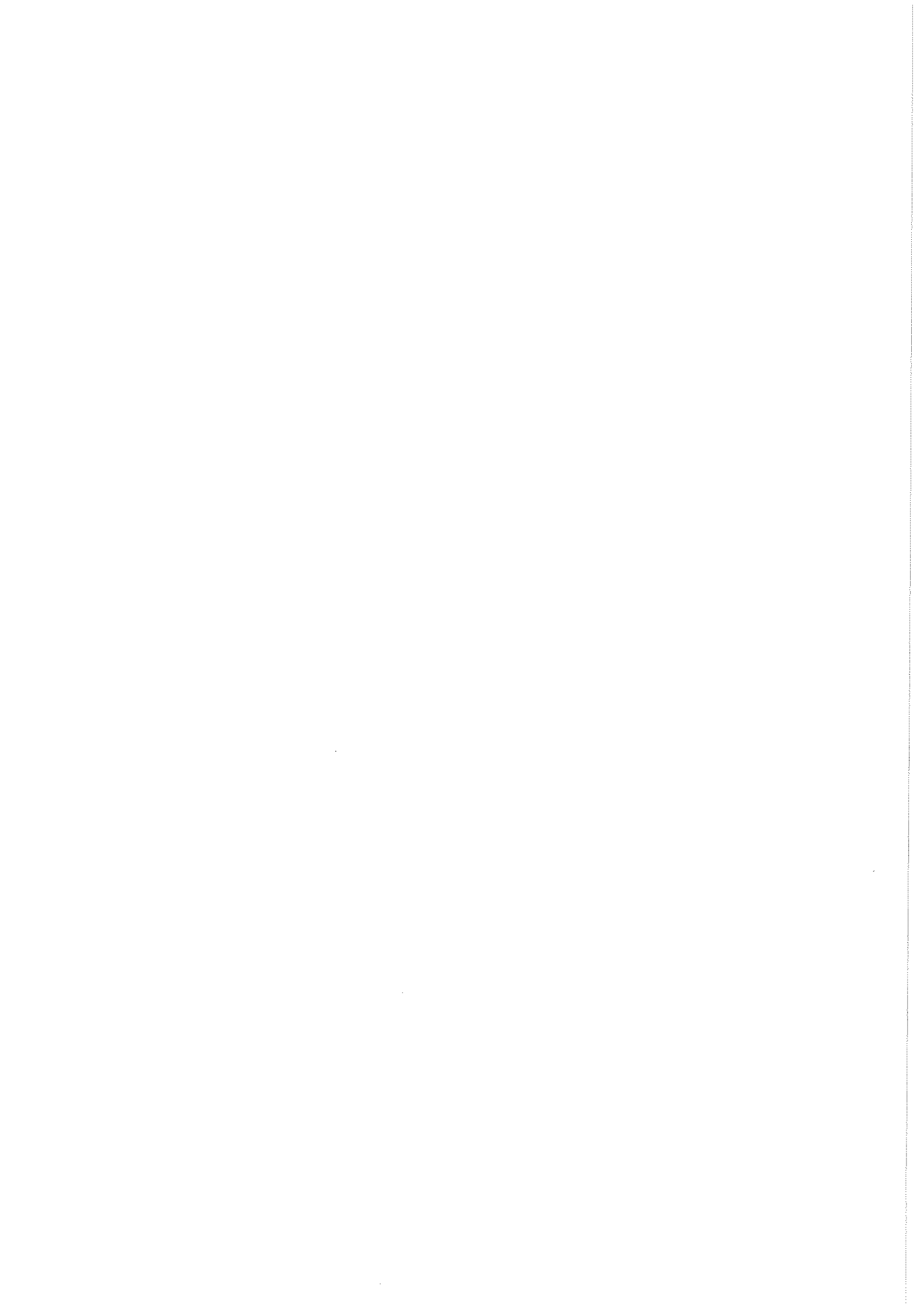
Section B

Answer any THREE of the following:

3 x 10 = 30M

4. Explain in detail about the structure of Indian Financial System.
5. Explain in detail about the characteristics of well structured money market.
6. Define money market. Explain briefly about various submarkets of money market.
7. Define capital market. Discuss in detail about the functions and importance of capital market.
8. Explain the functions of SEBI.

\* \* \*



SEE AUG'23

SDCCOMT01/02-09-2023

INSURANCE PROMOTION

No. of Pages: 1

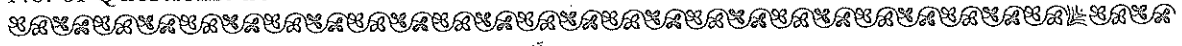
Time: 2Hrs

No. of Questions: 10

|          |  |
|----------|--|
| Roll No: |  |
|----------|--|

Max. Marks: 40M

Pass Min: 16M



Section – A

Answer any **Two** of the following:

2 x 5=10M

1. What is insurance?
2. List out the life insurance plans.
3. What is general insurance policy?
4. Write a note on maintenance of records by general insurance company.

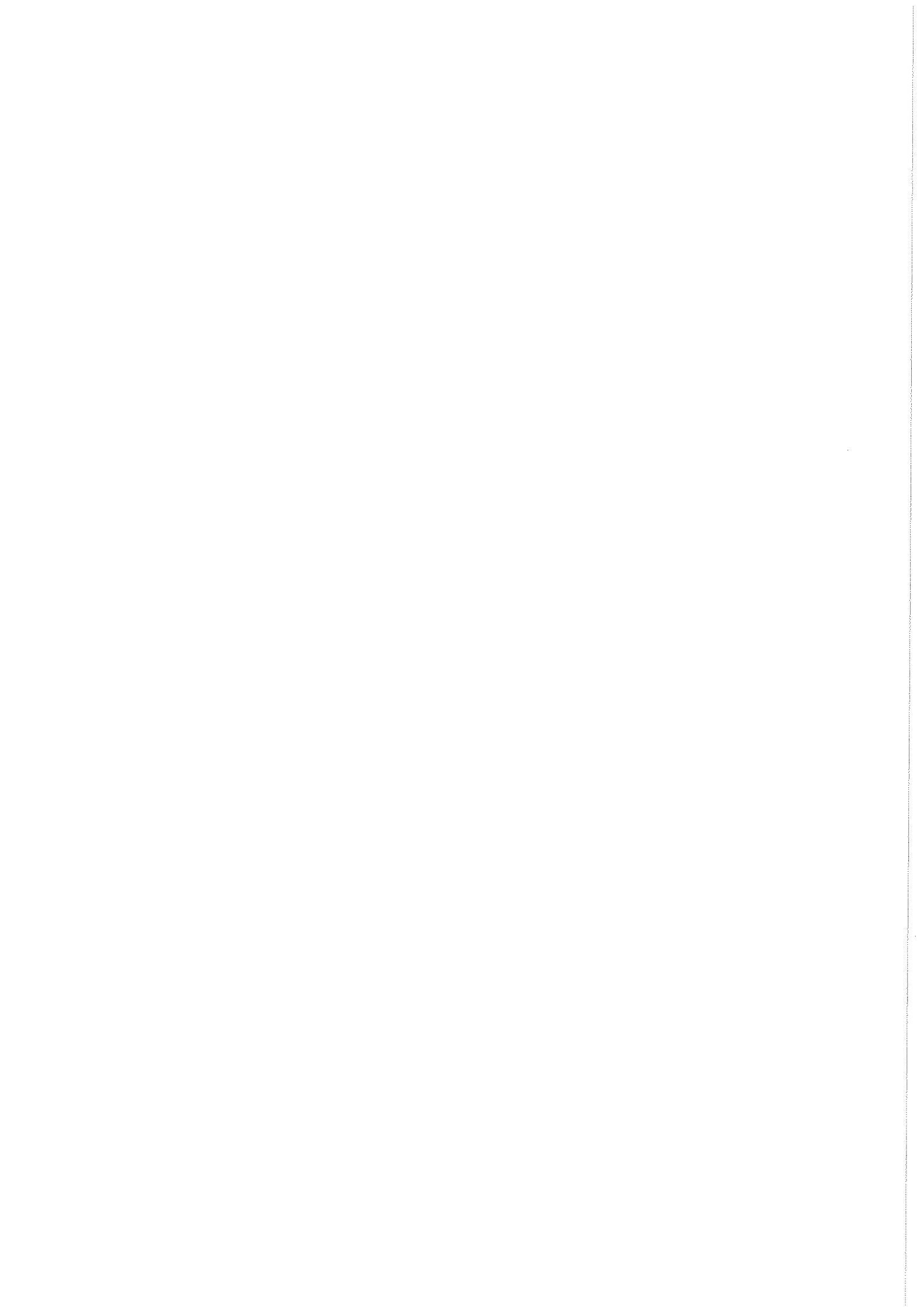
Section – B

Answer any **THREE** of the following:

3 x 10=30M

5. Explain the growth of insurance sector in India.
6. Explain the functions of IRDA.
7. Write the features of general insurance.
8. Explain the health insurance plans.
9. What are the various sales promotion methods in life insurance?
10. What are the different types of life insurance? Explain.

\* \* \*



## Food Adulteration

No. of Pages: 01

Roll No:

Max. Marks: 40M

Time: 2 Hrs

No. of Questions: 10

Pass Min.: 16M

\*\*\*\*\*

Section A

Answer any TWO of the following:

2 x 5 = 10M

1. Name few cheap substitutes used in food adulteration.
2. Write a note on types of food adulteration.
3. Write short notes on additives and sweetening agents.
4. How to detect adulterants in fruits and vegetables.

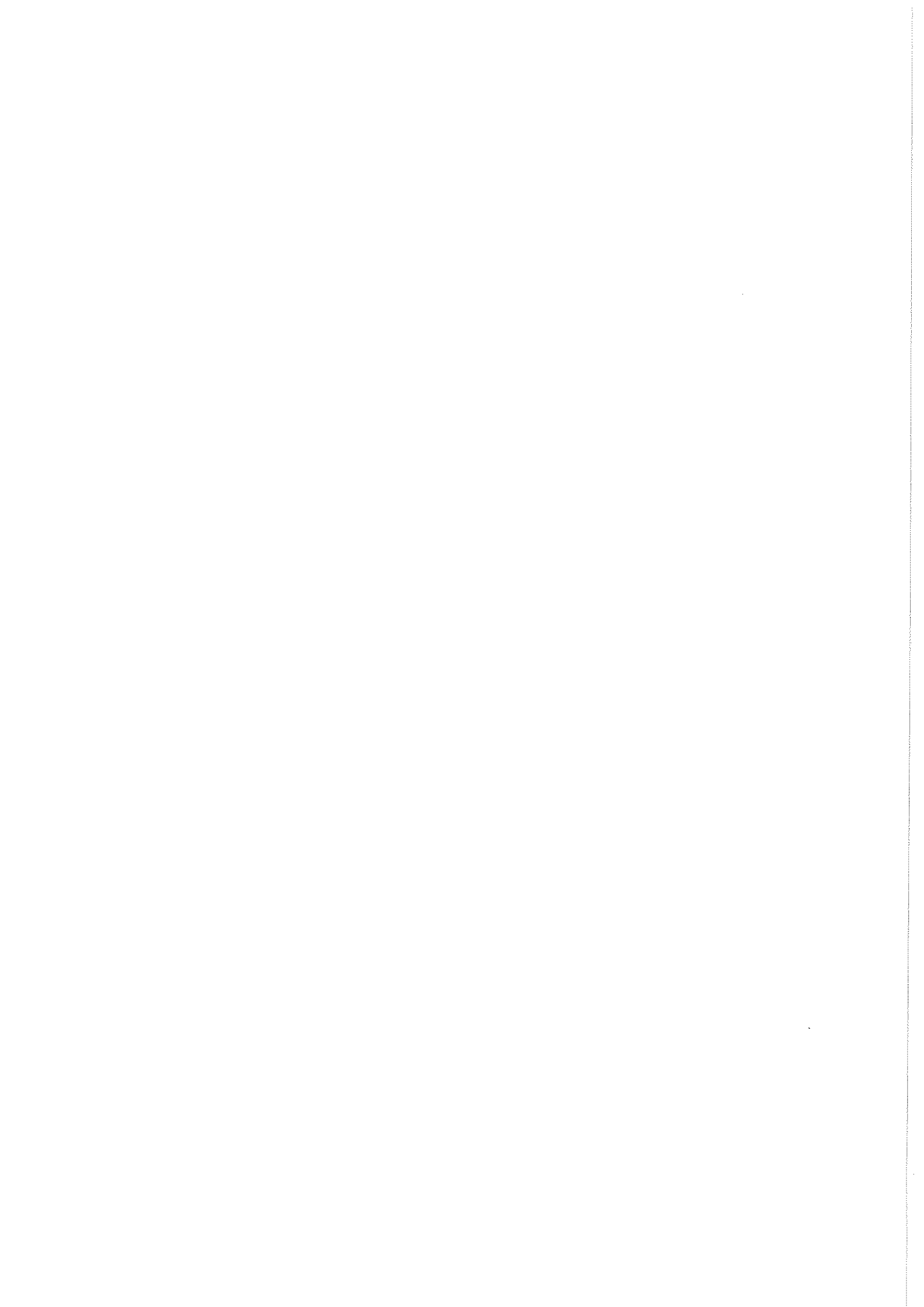
Section B

Answer any THREE of the following:

3 x 10 = 30M

5. Write about the adulteration through food additives and also explain international additives and incidental additives.
6. Define food adulteration. Write in detail about the general impacts of food adulteration on human health.
7. Write any three methods of detection of adulteration in milk and oil.
8. Write any three methods of detection of adulteration in grain, spices and condiments.
9. What are the highlights of Food Safety and Standards Act 2006 (FSSAI)?
10. What is the procedure to file a complaint under COPRA 2019?

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## Statistical Methods for Economics

No. of Pages: 02

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Briefly explain the limitations of statistics.
2. What are the merits and demerits of census method?
3. State the elements of a table.
4. What are the characteristics of good average?
5. Find the quartile deviation to the given data:  
Heights: 150 152 154 157 160 164 167 170 171 175 176
6. Find the rank correlation to the given ranks by a teacher:
 

|                  |   |   |   |    |   |    |   |   |   |   |
|------------------|---|---|---|----|---|----|---|---|---|---|
| R <sub>1</sub> : | 1 | 6 | 5 | 10 | 3 | 2  | 4 | 9 | 7 | 8 |
| R <sub>2</sub> : | 3 | 5 | 8 | 4  | 7 | 10 | 2 | 1 | 6 | 9 |
7. Write about least square method.
8. What are the uses of index numbers?

Section B

Answer the following:

5 x 10 = 50M

9. a) Define statistics and explain the importance of statistics.  
or  
b) Explain the various sources of secondary data.
10. a) Explain the significance of diagrammatic presentation of data.  
or  
b) Draw less than and more than ogive curves from the following data and locate the median:
 

|                 |       |       |       |       |       |       |       |
|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Wages:          | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 |
| No. of workers: | 10    | 23    | 26    | 19    | 10    | 8     | 4     |
11. a) What do you understand by the term average? What are the objectives of an average?  
or  
b) Wages of 40 workers are given find the average wage:
 

|                  |         |         |         |         |         |         |
|------------------|---------|---------|---------|---------|---------|---------|
| Wages in rupees: | 130-140 | 140-150 | 150-160 | 160-170 | 170-180 | 180-190 |
| No. of workers:  | 3       | 15      | 10      | 8       | 3       | 1       |

Contd....(2)

## Statistical Methods for Economics

12. a) Distinguish between correlation and regression.

or

b) Calculate the Karal Pearson Coefficient of correlation to the given data:

|    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|
| X: | 78 | 36 | 98 | 25 | 75 | 82 | 90 | 62 | 65 | 39 |
| Y: | 84 | 51 | 91 | 60 | 68 | 62 | 86 | 58 | 53 | 47 |

13. a) Define index numbers and explain the problems in the construction of index numbers.

or

b) The following data relates to the profits of a company, fit a straight line trend with the method of least square and also estimate the profit for the year 2025:

|         |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|
| Year:   | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Profit: | 160  | 180  | 184  | 166  | 188  | 198  | 184  |

(Trend line should be drawn on graphsheet).

\*\*\*

## INCOME TAX

No. of Pages: 02

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Explain the concept of income and give its features.
2. Write in brief about gratuity.
3. Deemed owner.
4. Valuation of closing stock.
5. What are the different types of capital assets?
6. House Rent Allowance.
7. Deduction u/s 80G.
8. What is meant by agricultural income?

Section B

Answer the following:

5 x 10 = 50M

9. a) Explain ten examples of incomes which are totally exempt from income tax.

or

- b) Mr. X earns the following incomes during the financial year 2019-20.

- i) Profit earned from business in Paris which is controlled from India, half of the profits being received in India Rs.1,60,000
- ii) Income from pension from former employer in India received in USA (computed) Rs.32,000
- iii) Income from agriculture in Pakistan and brought to India Rs.40,000
- iv) Income from house property in UK and received there Rs.32,000
- v) Past untaxed foreign income brought into India during the previous year Rs.40,000.

- vi) Gift in foreign currency from a relative received in India Rs.80,000

Determine the gross total income of Mr. X for the assessment year

- 2020-21, if he is
- i) Resident
  - ii) Not ordinarily resident
  - iii) non-resident

10. a) What are the different types of perquisites?

or

- b) Mr. Venu working in a nationalized bank submits you the following particulars compute taxable salary.

- i) Basic pay Rs.25,000 p.m. ii) D.A. Rs.10,000 p.m. (part of salary)

- iii) Bonus 10% salary iv) Arrears of salary Rs.60,000

- v) Overtime remuneration Rs.40,000 vi) Leave encashed Rs.24,000

- vii) Rent free staff quarter with furniture costing Rs.60,000 p.a.

- viii) Leave travel concession Rs.10,000 ix) Children Education allowance

- Rs.1,600 p.m. for 2 children x) Employee and employer's contribution to

- SPF Rs.42,000 (each) xi) Employment tax paid by employee Rs.4,800

Contd.....(2)

## INCOME TAX

11. a) Explain how the income from house property is computed under the provisions of the Income Tax Act 1961.

or

- b) From the Receipts and payments given below for the year ended 31-3-2017 of Dr. Venkat a medical practitioner compute professional income.

## Receipts and payments a/c

| Receipts                    | Rs.             | Payments               | Rs.             |
|-----------------------------|-----------------|------------------------|-----------------|
| To opening balance          | 40,000          | By dispensary expenses | 1,00,000        |
| To consultation fee         | 1,00,000        | By books of journals   | 10,000          |
| To interest                 | 10,000          | By income tax          | 22,000          |
| To rent                     | 40,000          | By surgical equipment  | 18,000          |
| To gifts from patients      | 20,000          | By medicines purchased | 28,000          |
| To operation fee            | 70,000          | By travelling expenses | 24,000          |
| To royalty on medical books | 40,000          | By shares purchased    | 32,000          |
| To visiting fee             | 40,000          | By telephone charges   | 6,000           |
| To lecture fee              | 20,000          | By surplus             | 1,48,000        |
| To sale of medicines        | 8,000           |                        |                 |
|                             | <b>3,88,000</b> |                        | <b>3,88,000</b> |

Other information:

- i) Depreciation on all assets Rs.16,000
  - ii) Closing stock of medicines Rs.10,000
  - iii) Travelling expenses incurred are related to Kasi trip.
12. a) What are the general incomes under the head income from other sources?

or

- b) Mr. X acquired land and buildings for Rs.2,50,000 on 1-8-2021. These lands were acquired compulsorily by the Govt. of AP and paid a compensation of Rs.8,00,000. What is the capital gain if half the proceeds are re-invested in similar asset?

CII for the year 2001-02 = 426; 2016-17 = 1125

13. a) Explain the deductions allowed to an individual under the IT Act.

or

- b) Compute tax liability of Mr. Kumar an Indian Resident of 30 years age for the current assessment year 2017-18.

i) Gross salary Rs.1,86,000 ii) Income from house property (computed) Rs.25,000 iii) Short term capital loss Rs.10,000 iv) Long term capital gain (buildings) Rs.12,000 v) Income from profession Rs.58,000 vi) Interest on securities Rs.6,000 vii) Income from Govt. securities (gross) Rs.23,000

He donated Rs.25,000 to the PM National Relief fund and Rs.10,000 to the Prime Minister's drought relief fund. During the previous year 2016-17 he paid profession tax Rs.6,000 and issued a cheque Rs.12,000 for health insurance.

\*\*\*\*\*

## Taxation

No. of Pages: 02

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Write any five objectives of tax.
2. What is assessment year and previous year?
3. Deduction U/S 16.
4. Deduction U/S 24.
5. What do you understand the terms business and profession?
6. Models of GST.
7. What is meant by customs?
8. Define adjudicating authority.

Section B

Answer the following:

5 x 10 = 50M

9. a) How to determine residential status of an individual?  
or  
b) Mr. Chandra an American came to India for the first time on 1<sup>st</sup> January 2018. He stayed here continuously for 2 years. He went back to New York on 1.1.2021. Again he came to India on 1.2.2022 on a two years job assignment with a MNC in India. Determine his residential status for the previous year 2021-2022.
10. a) How to determine annual value of self occupied house and let out house property having unrealized and vacancy rent.  
or  
b) Mr. Hari gives the details of house property for the assessment year 2022-2023:  
Municipal rental value Rs.1,00,000; Fair rental value Rs.1,02,000; Standard rent Rs.75,000; Actual rent Rs.6,000 p.m.  
One month rent was unrealized and the house was vacant for 3 months.  
The municipal taxes were outstanding to the extent of Rs.18,000.  
Compute the income from house property.
11. a) Write about house rent allowance and rent free accommodation.  
or  
b) Mr. M a production manager of an Industrial unit of a company in Chennai. The particulars of his salary income are as under:  
Basic salary Rs.15,000 p.m.  
Dearness allowance (given under terms of employment) Rs.5,000 p.m.  
Entertainment allowance Rs.1,000 p.m.  
Medical allowance Rs.500 p.m.

Contd.....(2)

## Taxation

House rent allowance Rs.4,000 p.m.

Rent paid for the house Rs.5,000 p.m.

He and his employer (each) contribute 15% of salary to recognized provident fund.

Compute income under the head salary.

12. a) How to compute business income?

or

b) Mr.Krishna chartered accountant compute his professional income for the assessment year 2022-2023:

## Income and expenditure account

|                              | Rs.             |                                    | Rs.             |
|------------------------------|-----------------|------------------------------------|-----------------|
| To Office rent               | 36,000          | By Audit fees                      | 3,00,000        |
| To Salary to staff           | 75,000          | By Financial consultancy service   | 60,000          |
| To Creditors                 | 5,000           | By Interest and deposits in a bank | 22,000          |
| To Gifts to relatives        | 6,000           | By Dividends on units of U.T.I     | 6,000           |
| To Subscriptions to journals | 2,400           | By Accountancy works               | 32,000          |
| To Drawings                  | 16,000          |                                    |                 |
| To Car expenses              | 24,000          |                                    |                 |
| To House hold expenses       | 8,600           |                                    |                 |
| To NSC purchased             | 20,000          |                                    |                 |
| To Net income                | 2,27,000        |                                    |                 |
|                              | <b>4,20,000</b> |                                    | <b>4,20,000</b> |

**Additional information:**

i) Depreciation on car Rs.6,000

ii) 30% of car expenses related to personal purpose

13. a) What are the merits and demerits of GST?

or

b) Explain the features of Customs Act 1962.

\*\*\*

## MODERN PHYSICS

No. of Pages: 02

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 14

Pass Min.: 30M

Section A

Answer the following:

5 x 10 = 50M

1. a) Describe stern and Gerlach experiment and discuss the importance of the results obtained.  
Or  
b) Explain Raman effect. Describe an experimental set up to study Raman effect.
2. a) Describe Davison and Germer experiment on electron diffraction. Discuss the result of the experiment.  
Or  
b) State and explain Heisenberg's uncertainty principle. Explain how it can be verified by gamma ray microscope.
3. a) Derive Schrodinger time independent wave equation.  
Or  
b) Derive an expression for energy of free particle in one dimensional box of infinite height.
4. a) Write about shell model of the nucleus.  
Or  
b) Write a detailed note on elementary particles.
5. a) Describe the powder method for the analysis of crystal structure. What are the advantages of this method.  
Or  
b) Explain type-I and type-II super conductors.

Section B

Answer any THREE of the following:

3 x 5 = 15M

6. Explain briefly L-S and J-J coupling schemes.
7. Explain de-Broglie's concept of matter waves.
8. State the basic postulates of quantum mechanics.
9. Write the important characteristics of nuclear forces.
10. Explain Meissner effect in super conductivity.

Contd.....(2)

## MODERN PHYSICS

Section C

Answer any TWO of the following:

2 x 5 = 10M

11. If the uncertainty in the momentum of an electron is  $1.65 \times 10^{-24}$  kg. m/s, calculate the uncertainty in position.
12. Calculate the de-Broglie wavelength associated with a particle of mass  $1.67 \times 10^{-27}$  kg, moving with a velocity equal to  $\frac{1}{20}$ th of the velocity of light  
( $h = 6.62 \times 10^{-34}$  JS)
13. A nucleus of mass number 165 has radius 7.731 fermi. Calculate the radius of nucleus of mass number 4.
14. In a crystal, a lattice plane cuts intercepts of 2a, 3b and 6c along the three axes, where a, b and c are primitive vectors of the unit cell. Determine the Miller indices of the given plane.

\* \* \*



## APPLIED STATISTICS

No. of Pages: 1

Time: 3Hrs

No. of Questions: 13

|          |  |
|----------|--|
| Roll No: |  |
|----------|--|

Max. Marks: 75M

Pass Min: 30M

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SECTION – A*Answer any FIVE of the following:**5 X 5 = 25M*

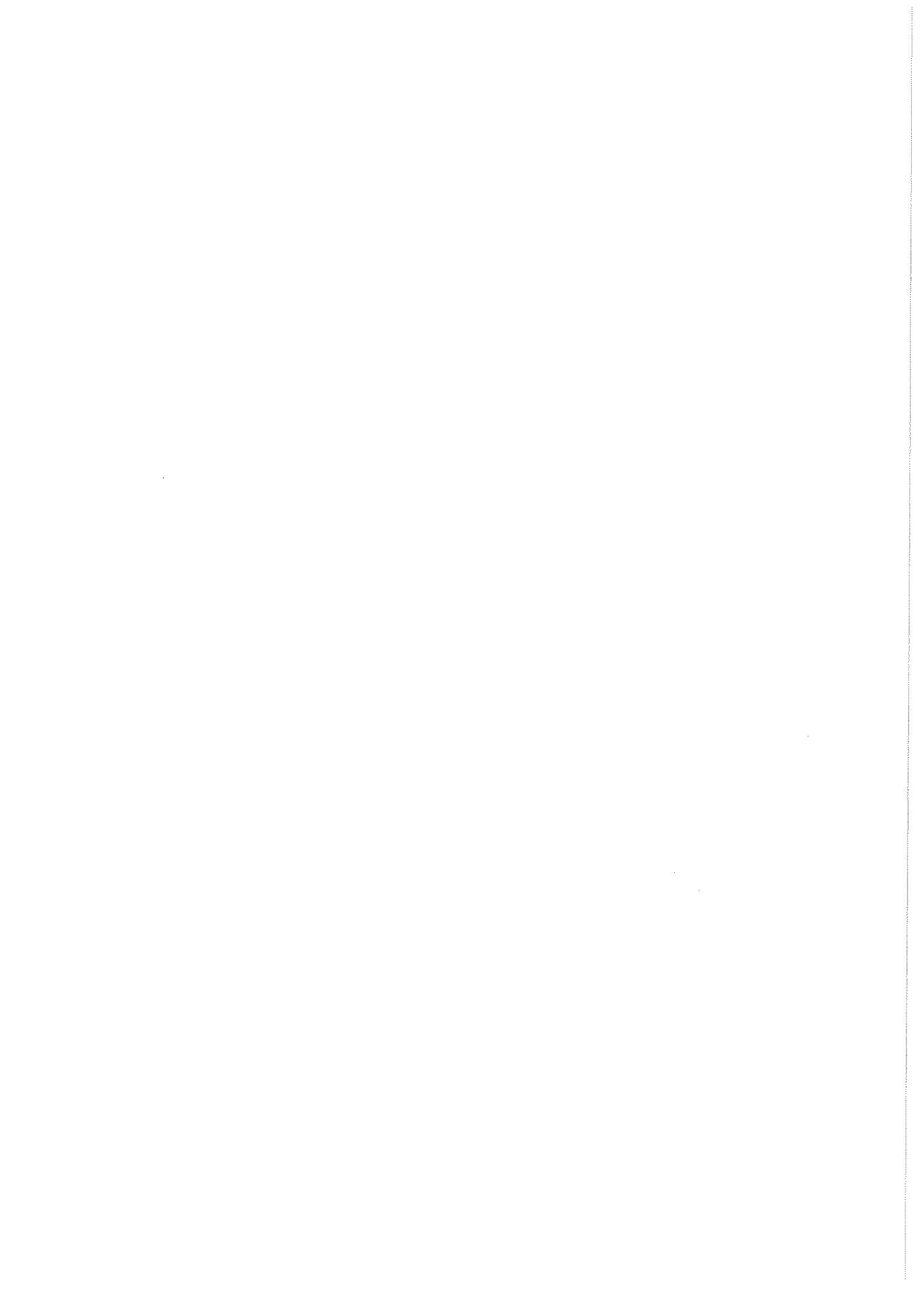
1. Write uses and limitations of index numbers.
2. Write uses of SQC.
3. Describe R Chart.
4. Explain C Chart.
5. Write the uses of vital statistics.
6. Give an account of OC curves.
7. Explain normalized scores.
8. Elucidate scaling methods.

SECTION – B*Answer the following:**5 X 10 = 50M*

9. (a) Discuss the problems involved in construction of index numbers.
OR
(b) Explain criteria for a good index numbers.
10. (a) Elaborate different mortality rates.
OR
(b) Compute GFR, SFR, TFR for the following data. Also find GRR if the proportion of female births is 42 percent.

Age group	Female production (in thousands)	No. of births
15-19	15	600
20-24	14	1,610
25-29	13	1,716
30-34	10	1,000
35-39	8	520
40-44	7	210
45-49	5	30

11. (a) Explain types of controls and 3σ limits.
OR
(b) Discuss the interpretation of \bar{X} and R-Chart.
12. (a) Write about natural and specification limits.
OR
(b) Explain AQL & LPTPD.
13. (a) Give an account of reliability and validity tests.
OR
(b) Explain scaling procedures.



SEE AUG'23

ZOOT02/04-09-2023

IMMUNOLOGY AND ANIMAL BIOTECHNOLOGY

No. of Pages: 1

Roll No:

Max. Marks: 75M

Time: 3Hrs

Pass Min: 30M

No. of Questions: 13

Note: Draw neat labelled diagrams wherever necessary.

SECTION – A

Answer any FIVE of the following:

5 X 5 = 25M

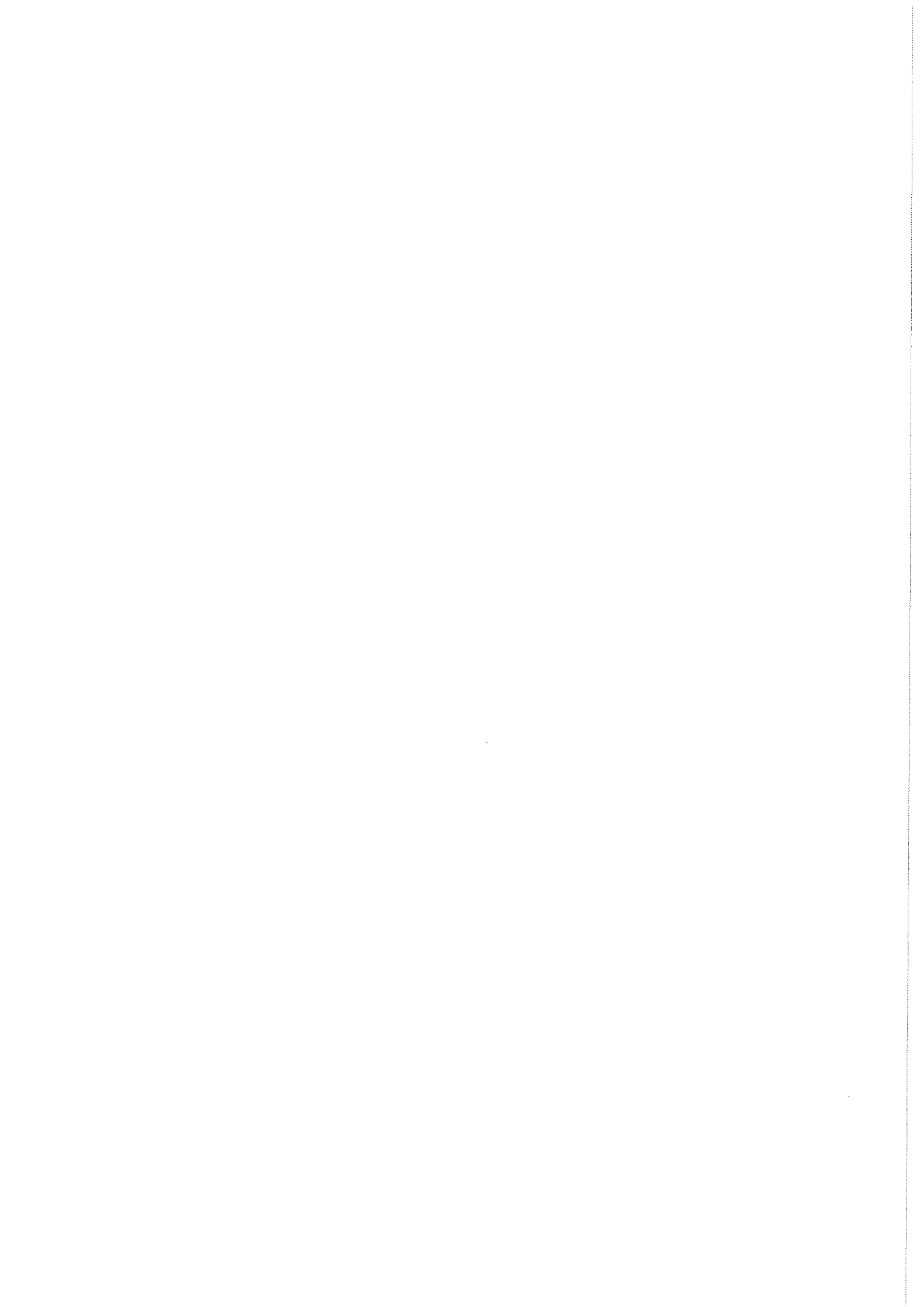
1. Discuss basic properties of antigens.
2. Illustrate the properties and functions of Cytokines.
3. Explain exogenous pathway of antigen presentation and processing.
4. Write about vectors.
5. What is Western blotting technique? Explain.
6. What can you infer from Hybridoma Technology?
7. Discuss on embryo cloning.
8. Explain natural culture media.

SECTION – B

Answer the following:

5 X 10 = 50M

9. (a) Recall different organs of immune system.
OR
(b) Compare innate and adaptive immunity.
10. (a) Describe the factors influencing immunogenicity.
OR
(b) Explain the structure of antibody.
11. (a) Review the principle, procedure of PCR.
OR
(b) Illustrate the following:
(i) Viral-mediated gene delivery
(ii) Biolistic method of gene delivery
12. (a) Compare the protocols for primary and secondary cell cultures.
OR
(b) Describe different types of stem cells and applications of stem cells.
13. (a) Explain the production of transgenic sheep.
OR
(b) Explain different types of fermentation and downstream processing.



ORGANIC & GENERAL CHEMISTRY

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

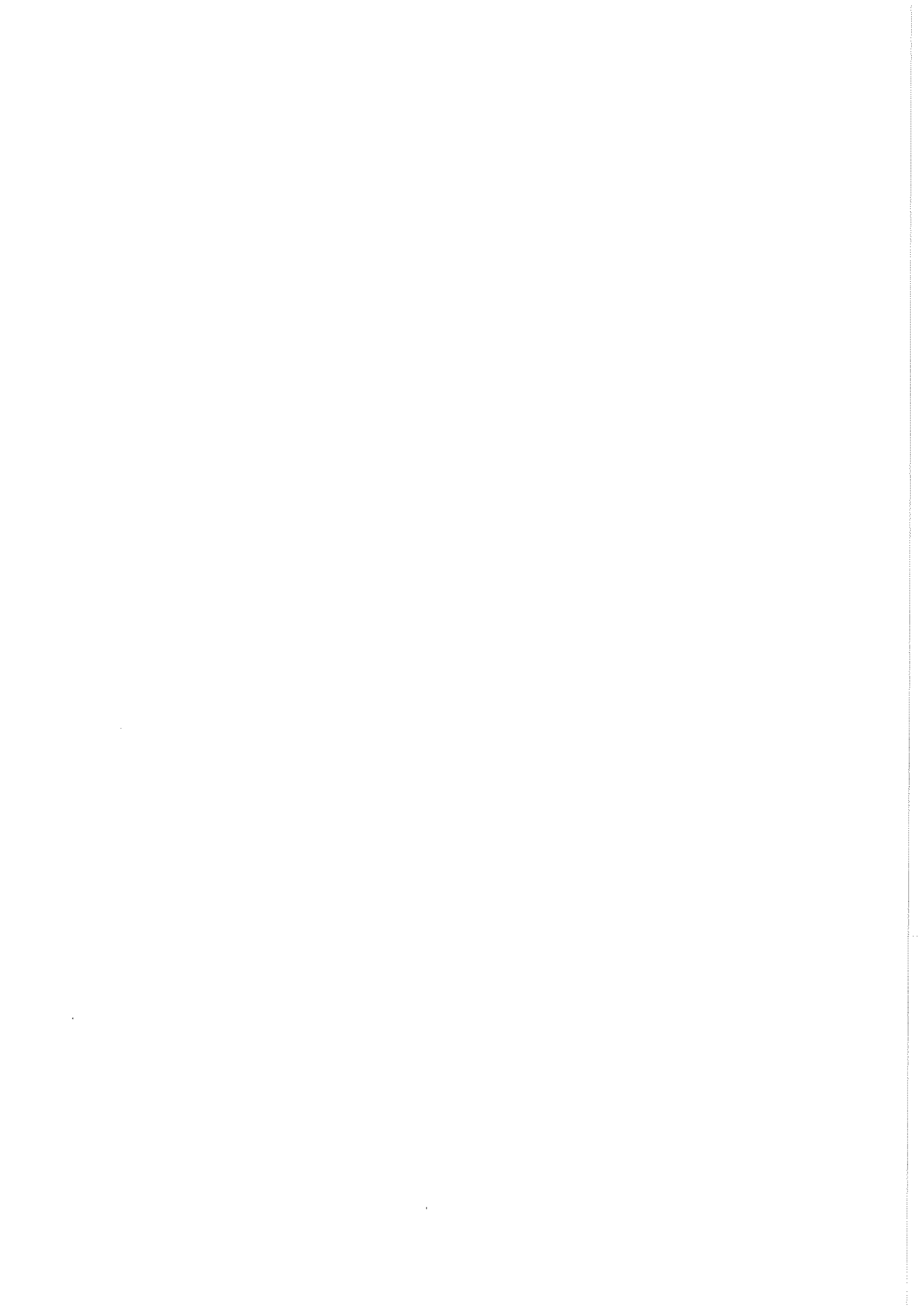
1. Write a note on conformational analysis of n-butane.
2. What is isomerism? Explain the effect of isomerism on the properties of alkanes.
3. What is ozonolysis? Explain with an example.
4. What is Huckel's rule? Explain with any 2 examples.
5. Explain the mechanism of Friedel Crafts acylation in benzene.
6. Give any five differences between physical and chemical adsorption.
7. What are hard acids and bases and soft acids and bases? Give examples.
8. Define enantiomers and diastereomers with examples.

Section B

Answer the following:

5 x 10 = 50M

9. a) i) Explain the preparation of alkanes by Wurtz fitting and Corey House reactions.
ii) Give an account of physical and chemical properties of alkanes.
Or
b) i) Explain the stability of cyclo alkanes according to Baeyer strain theory.
ii) Write about the conformations of cyclo hexane.
10. a) Explain Markownikoff's and Anti-Markownikoff's rule with mechanisms.
Or
b) i) Write a note on 1, 2 – and 1, 4 – addition reactions in conjugated dienes.
ii) What is Diels Alder reaction? Explain with example.
11. a) Explain nitration and Freidel Craft's alkylation reactions with mechanism.
Or
b) What are ortho, para and meta directing groups? Explain the effect of these directing groups in electrophilic substitution reactions of benzene.
12. a) What is adsorption? Explain Langmuir adsorption isotherm. Write any four applications of adsorption.
Or
b) Draw the molecular orbital energy level diagram for O₂ and CO molecules. Give their bond order and magnetic nature.
13. a) Give an account of R, S and E, Z configuration with suitable examples.
or
b) What is racemic mixture? Explain the methods for the resolution of racemic mixture.



ORGANIC AND GENERAL CHEMISTRY

No. of Pages: 02

Roll No:

Max. Marks: 70M

Time: 3 Hrs

No. of Questions: 10

Pass Min.: 28M

Section A

Answer the following:

5 x 4 = 20M

1. a) Explain Bayer's Strain theory.
or
b) Discuss the conformations and explain the relative stability of propane.
2. a) Explain Diels Alder reaction with mechanism.
or
b) Explain the mechanism of Markovinkoffs addition with suitable example.
3. a) Explain the notation of benzene with mechanism.
or
b) Explain with one example, ring activating and deactivating groups.
4. a) What are colloids? Explain the stability of colloids.
or
b) Give a brief description of Pearsons concept.
5. a) Explain enantiomers and diastereomers with suitable example.
or
b) Draw the Wedge, Fischer, Newmann and saw horse representations for 2, 3 – dibromobutane.

Section B

Answer the following:

5 x 10 = 50M

6. a) i) Give any two general preparation methods of alkanes.
ii) Explain the concept of relative reactivity versus selectivity.
or
b) i) Give the general molecular formulae of cyclohexanes and explain their relative stability.
ii) Draw the conformations of mono substituted cyclohexane with energy diagram.
7. a) i) Write any two methods of preparation of alkanes.
ii) Discuss the mechanism of E₁ & E₂ reactions.
or
b) i) Explain the mechanism of Diels Alder reaction.
ii) Discuss 1, 2 – and 1, 4 – addition reactions in conjugated dienes.

Contd.....(2)

ORGANIC AND GENERAL CHEMISTRY

8. a) State Huckles rule. How can you prove benzene and naphthalene are aromatic in nature.
- or
- b) i) Discuss in brief the orientation of aromatic substitution in ortho, para and meta directing groups.
ii) Explain Friedal crafts alkylation and acylation.
9. a) Define adsorption. Derive Langmuirs adsorption isotherm and give the applications of adsorption.
- or
- b) i) List the principles of LCAO method.
ii) Construct the M.O. diagram for hetero nuclear diatomic molecules with bond order and magnetic nature.
10. a) Define racemic mixture. Explain any two techniques for resolution of racemic mixtures.
- or
- b) Anticipate D, L and R, S configurations with suitable examples.

SEE AUG 2023

POLT41 / 07-09-2023

Indian Political Process

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Write a short note on Sarkaria Commission recommendations.
2. Discuss the issues involved in electoral reforms.
3. Explain the basic structure of Panchayat Raj System.
4. Write about 74th Amendment.
5. Analyse the role of regionalism in Indian politics.
6. Discuss the functions of Finance Commission of India.
7. What are the major powers of Central Vigilance Commission of India?
8. Write a short note on criminalization of politics.

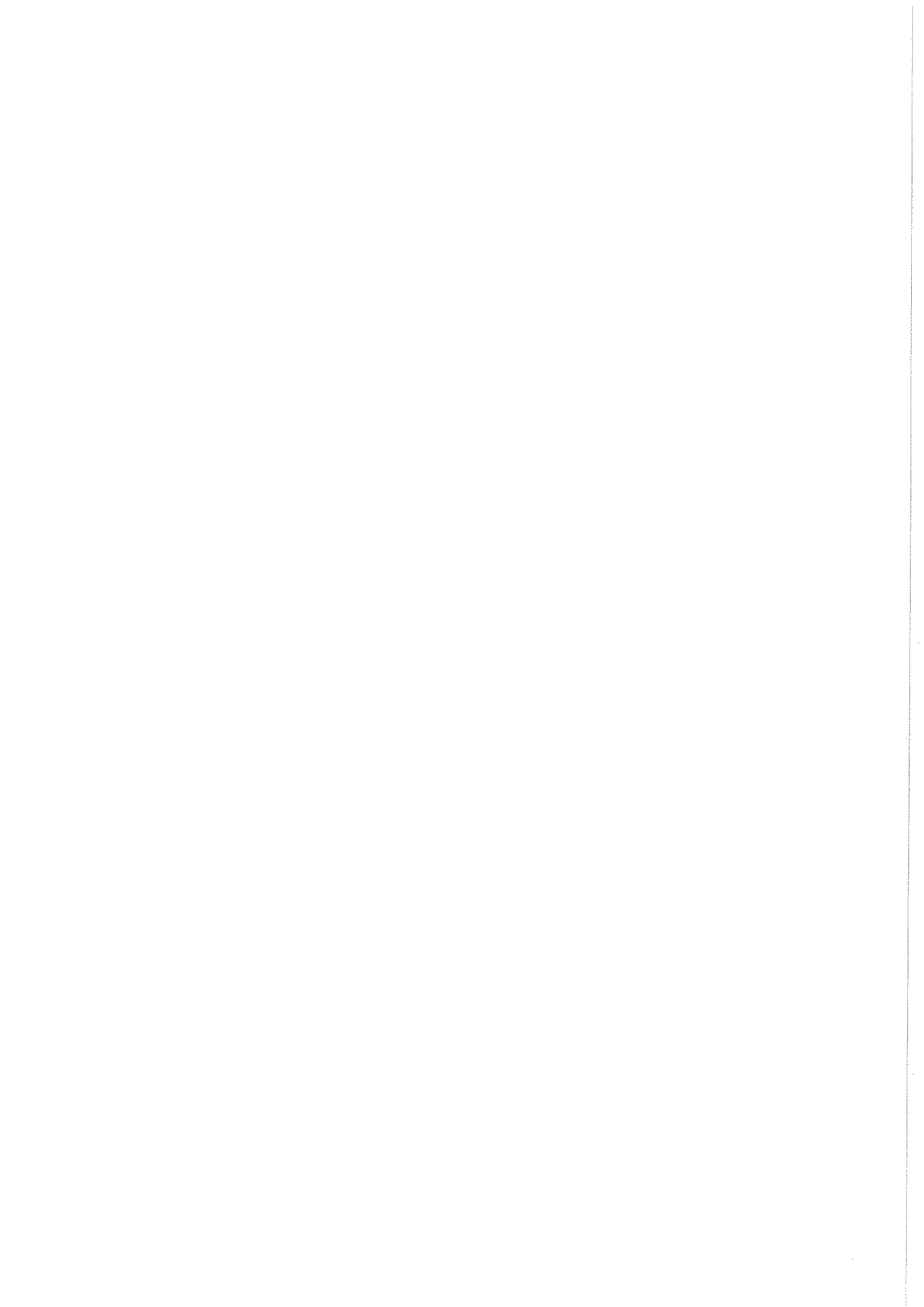
Section B

Answer the following:

5 x 10 = 50M

9. a) Critically analyse the Legislature, administrative and Financial relations between Central and State Government.
or
b) Explain the features of Indian Federal system.
10. a) Explain the powers and functions of Election Commission of India.
or
b) Discuss various determinants of voting behaviour in India.
11. a) Write an essay on 73rd constitutional amendment.
or
b) Critically analyse how the democratic decentralization helped in Rural Development and Poverty alleviation.
12. a) Analyse the role of caste, religion and language in Indian politics.
or
b) How the politics of reservation and internal threats are challenges to Indian political system.
13. a) Explain the powers and functions of NITI AYOJ.
or
b) Critically analyse the functions of LOKPAL and LOKAYUKTA.

* * *



DATA BASE MANAGEMENT SYSTEMS

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Elaborate on data abstraction.
2. List the advantages of traditional file system.
3. Elaborate on categories of data models.
4. Define relationship and explain types of relationship.
5. Explain attributes and keys.
6. Differentiate specialization and generalization.
7. Explain tuples and relations.
8. List all aggregate functions.

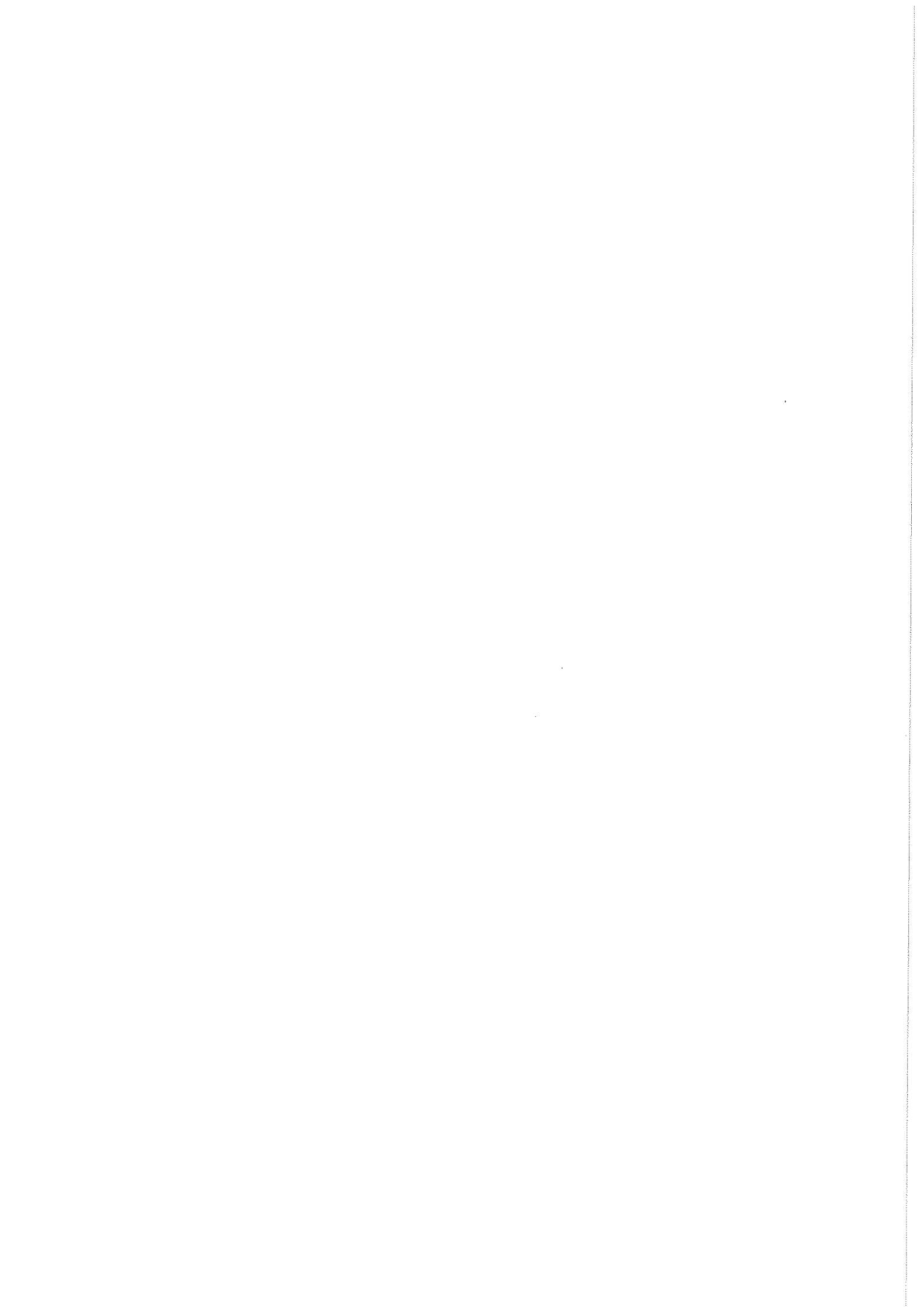
Section B

Answer the following:

5 x 10 = 50M

9. a) Explain the evolution of data base system.
or
b) Outline the characteristics of the database approach.
10. a) Illustrate the concept of three schema architecture and data independence.
or
b) Compare and contrast traditional file processing and data base approach.
11. a) Briefly explain about entity relationship model.
or
b) Draw ER diagram for Railway Reservation system and identify weak and strong attributes.
12. a) Explain the concept of inheritance and super classes.
or
b) Elaborate on relational constraints.
13. a) Explain any few basic queries in SQL.
or
b) Illustrate on arithmetic operations and addressing.

* * *



SOLID GEOMETRY

No. of Pages: 2

Roll No:	
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Max. Marks: 75M

Time: 3Hrs

Pass Min: 30M

No. of Questions: 13

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SECTION - A

Answer any FIVE of the following:

5 X 5 = 25M

- Find the equation to the plane through the points (2,2,1), (9,3,6) and perpendicular to the plane  $2x + 6y + 6z = 9$ .
- Find the angle between the planes  $x + 2y + 3z = 5$ ,  $3x + 3y + z = 9$ .
- Find the foot of the perpendicular from (1,2,3) to the plane  $x + 2y + 3z + 4 = 0$ .
- Find the equation to the sphere through  $O = (0,0,0)$ , and making intercepts a,b,c on the axes.
- Find the limiting points of the coaxial system defined by spheres  $x^2 + y^2 + z^2 + 4x - 2y + 2z + 6 = 0$  and  $x^2 + y^2 + z^2 + 2x - 4y - 2z + 6 = 0$ .
- Find the equation of the cone which passes through three coordinate axes and the lines  $\frac{x}{1} = \frac{y}{-2} = \frac{z}{3}$  and  $\frac{x}{2} = \frac{y}{1} = \frac{z}{1}$ .
- Show that the two lines of intersection of the plane  $ax + by + cz = 0$  with the cone  $yz + zx + xy = 0$  will be perpendicular if  $\frac{1}{a} + \frac{1}{b} + \frac{1}{c} = 0$ .
- Find the equation of the cylinder whose generators have the direction ratio's (1,-2,3) and whose guiding curve is  $x^2 + 2y^2 = 1$ ,  $z = 0$ .

SECTION - B

Answer the following:

5 X 10 = 50M

- (a) Find the equation of the plane bisecting the angle between the planes  $3x - 6y + 2z + 5 = 0$ ,  $4x - 12y + 3z - 3 = 0$ .  
OR  
(b) Prove that equation  $6x^2 + 4y^2 - 10z^2 - 11xy + 3yz + 4zx = 0$  represents a pair of planes and also find the angles between them.
- (a) Find the image of the line  $\frac{x-1}{9} = \frac{y-2}{1} = \frac{z+3}{-3}$  in the plane  $3x - 3y + 10z - 26 = 0$ .  
OR  
(b) Find the S.D. between the lines  $\frac{x-3}{3} = \frac{y-8}{-1} = \frac{z-3}{1}$ ,  $\frac{x+3}{-3} = \frac{y+7}{2} = \frac{z-6}{4}$ . Find also the equations.

Contd...(2)

11. (a) Show that the plane  $2x - 2y + z + 12 = 0$  touches the sphere  $x^2 + y^2 + z^2 - 2x - 4y + 2z - 3 = 0$  and find the point of contact.

OR

- (b) Find the equation of the sphere which touches the plane  $3x + 2y - z + 2 = 0$  at  $(1, -2, 1)$  and cuts orthogonally the sphere  $x^2 + y^2 + z^2 - 4x + 6y + 4 = 0$ .

12. (a) Find the equation to the right circular cone whose vertex is  $(1, -2, 1)$ , axes the line

$$\frac{x-1}{3} = \frac{y+2}{4} = \frac{z+1}{5} \text{ and the semi vertical angle } 60^\circ.$$

OR

- (b) Find the equation of the lines of intersection of the plane  $2x + y - z = 0$  and the cone  $4x^2 - y^2 + 3z^2 = 0$ .

13. (a) Find the equation of the right circular cylinder whose guiding circle is  $x^2 + y^2 + z^2 = 9$ ,  $x - y + z = 3$ .

OR

- (b) Find the equation of the enveloping cylinder of the sphere  $x^2 + y^2 + z^2 = 25$  whose generators are parallel to  $\frac{x}{1} = \frac{y}{2} = \frac{z}{3}$ .

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## PLANT PHYSIOLOGY AND METABOLISM

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Osmosis.
2. Physical properties of water.
3. Micronutrients.
4. Anaerobic respiration.
5. Emerson-Enhancement effect.
6. Anabolism of triglycerides.
7. Role of phytochrome in flowering.
8. Brassinosteroids.

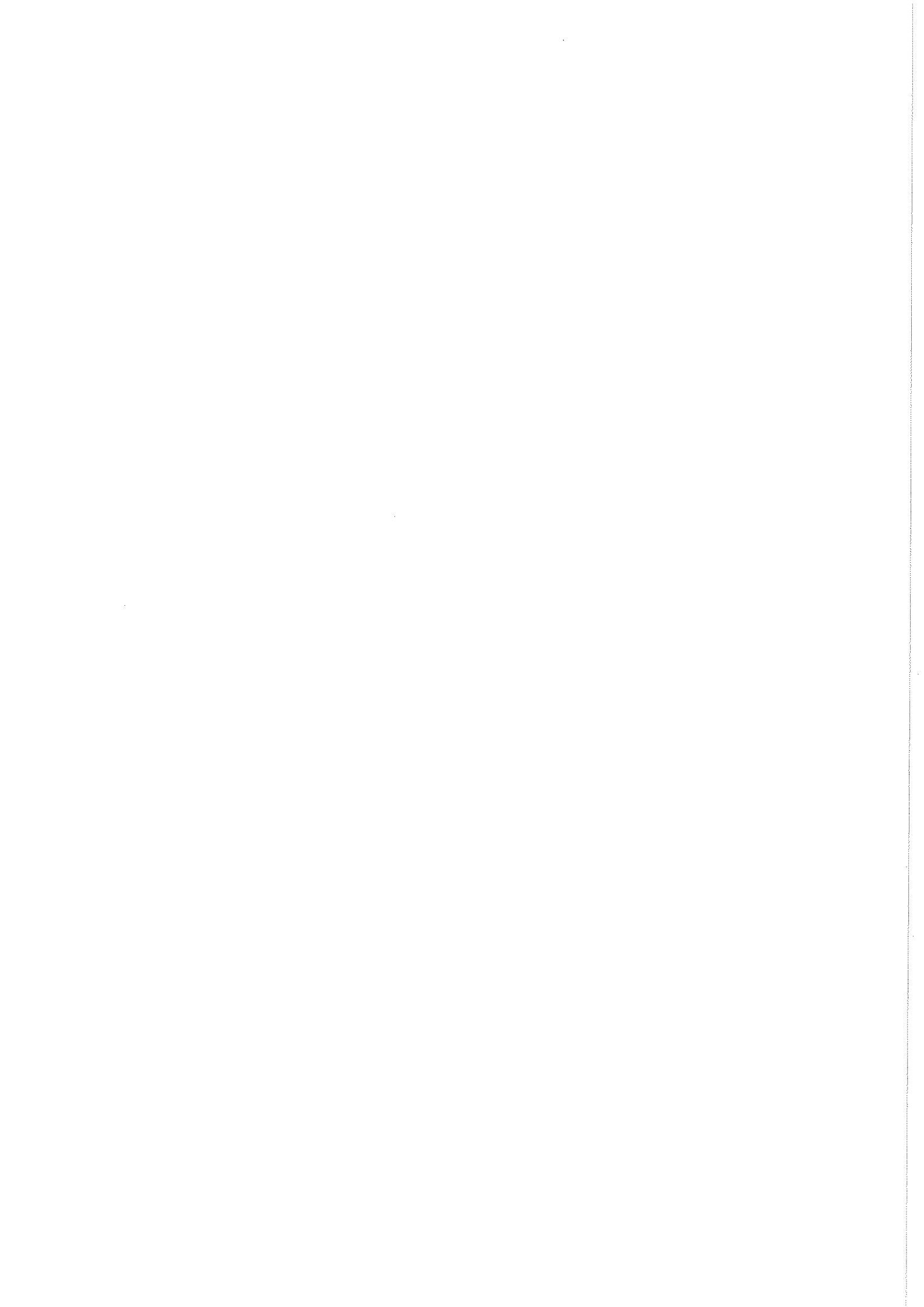
Section B

Answer the following:

5 x 10 = 50M

9. a) Define transpiration. Explain the mechanism of stomatal opening and closing.  
Or  
b) Discuss the process of Ascent sap, with neat diagram.
10. a) Give a sequential reactions of Krebs cycle.  
Or  
b) Define enzyme. Detail account on enzyme action.
11. a) Describe the process of Calvin cycle.  
Or  
b) Explain photorespiration.
12. a) Write an essay on  $\beta$  oxidation.  
Or  
b) Explain different steps of biological nitrogen fixation.
13. a) Define growth and development. Discuss about their phases with graphical diagram.  
or  
b) What are physiological effects shown by Gibberellins?

\* \* \*





SEE AUG'23

SDCENGT01/07-09-2023

ENRICHING COMMUNICATION SKILLS

No. of Pages: 1

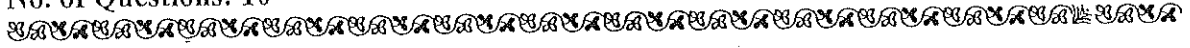
Time: 2Hrs

No. of Questions: 10

Roll No:

Max. Marks: 40M

Pass Min: 16M



SECTION - A

I. Answer any TWO of the following questions. 2X5=10M

1. You are new to Vijayawada, you go to PWD grounds to visit book exhibition; you have met with a native of the place who's very familiar to the place and to the book exhibition. Write a conversation between you two about the new place and about the book exhibition.
2. You got a call letter from ICICI bank, Vijayawada Branch. But you are suffering with high fever. Ask them to permit you to attend your interview on a later date. Draft the conversation between you and the H.R.
3. You have applied for a bank loan to study in abroad and have been asked to attend an interview. Think of five questions that you could be asked and write them with possible responses.
4. Write the suitable greetings for the following occasions.

| Occasion                                                          | Gréeting |
|-------------------------------------------------------------------|----------|
| a. When your dear grand father came from hospital after a surgery | _____    |
| b. When your classmate selected for district level sports.        | _____    |
| c. When your sister get a chance to perform dance on stage.       | _____    |
| d. When your favorite teacher is sick                             | _____    |
| e. When your friend is going to give his seminar                  | _____    |

Section - B

II. Answer any THREE of the following questions. 3X10=30M

5. How group discussion is helpful to a student to get success?
6. Give any Ten (five for each) debate points for the topic 'Mobile is a Boon or Bane for a student's life'?
7. Write down the meaning of report writing and the importance of report writing?
8. Write any seven differences between technical and non technical writing.
9. Write down the meaning of an Interview and list any five of Do's and Don'ts of an Interview.
10. Many parents ask their children to help in domestic chores. What do you think about this? Write an argumentative essay.

30

SEE AUG 2023

POLT~~42~~/ 08-09-2023

Western Political Thought

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

SECTION - A

Answer any Five of the following Questions

5X5=25 M

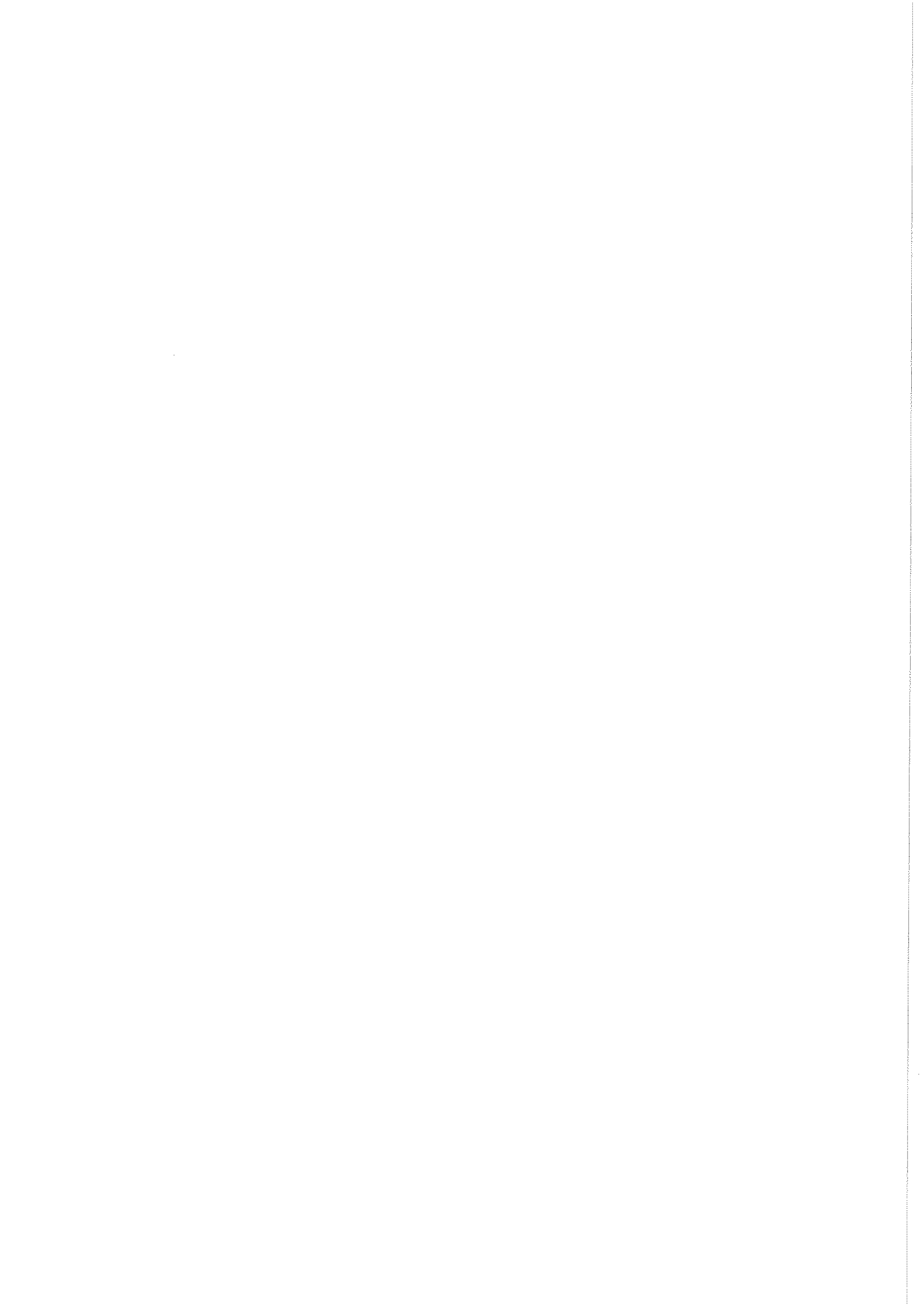
1. Plato's Education
2. Aristotle's works.
3. Limited government
4. Hobbes works
5. Locke's State of Nature.
6. Popular Sovereignty.
7. Machiavelli's "The Prince"
8. John Lock's Natural Rights

SECTION - B

Answer all the following questions.

5X10=50 M

9. A) Discuss Plato's IDEAL State?  
OR  
B) Examine the classification of governments by Aristotle?
10. A) Write Medieval Political Thinker St. Augustine views on Political thought?  
OR  
B) Explain Machiavelli's Contribution to political thought?
11. A) Discuss Thomas Hobbe's Social Contract theory?  
OR  
B) Write an essay on Rousseau's "General Will"?
12. A) Discuss Jeremy Bentham's Utilitarian theory?  
OR  
B) Examine the work of J.S.Mill "On Liberty"?
13. A) Write an essay on Karl Marx contribution to political thought?  
OR  
B) Discuss Gramsci's Hegemony?



## GOODS AND SERVICE TAXES

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. What are the features of GST?
2. What are the documents required for GST Registration?
3. Dual GST.
4. Exempted supply.
5. E\_Way bill.
6. What is input tax credit?
7. GST Returns.
8. Write short note on GSTR-6.

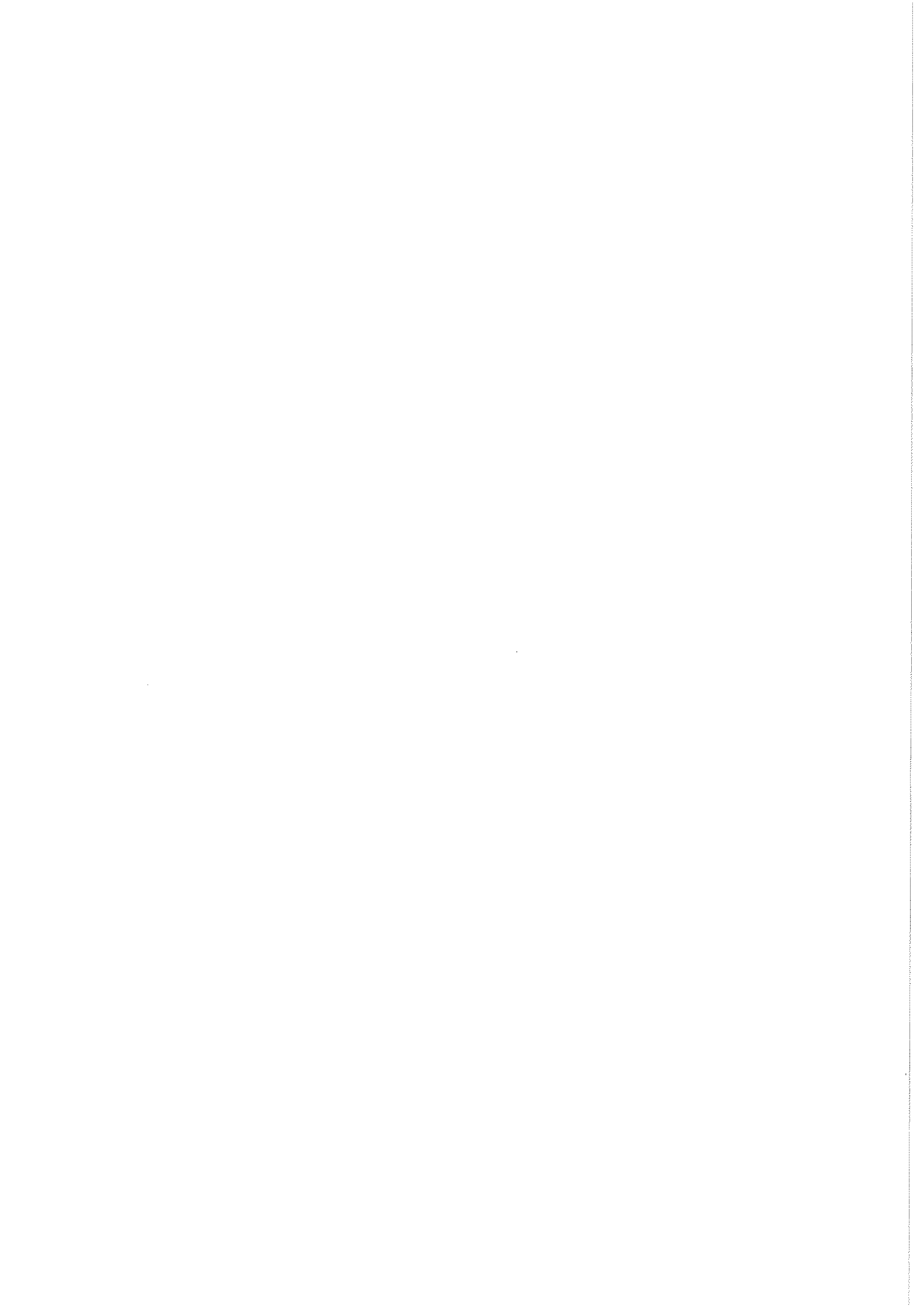
Section B

Answer the following:

5 x 10 = 50M

9. a) What is the process of introduction of GST in India?  
or  
b) What is the construction of GST council?
10. a) Explain the comprehensive structure of GST model in India.  
or  
b) Write about Dr. Vijay Kelkar committee recommendations on GST.
11. a) What are the various types of tax invoices issues under GST?  
or  
b) What are the advantages and disadvantages of E-Invoice?
12. a) Explain the rules for determination of time of supply of goods under GST.  
or  
b) Explain the documentary requirements for claiming Input Tax Credit.
13. a) What are the various types of GST returns and due dates?  
or  
b) Discuss GSTR-9C.

\* \* \*



No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. What are the basic concepts of OOP?
2. Write a structure of Java program.
3. What is command line arguments?
4. Write syntax of switch statement and give an example program.
5. Differentiate between while loop and do while loop statements.
6. Write steps to create a class. Give an example.
7. What is method? Write steps of creating an object.
8. Differentiate between abstract methods and interface methods.

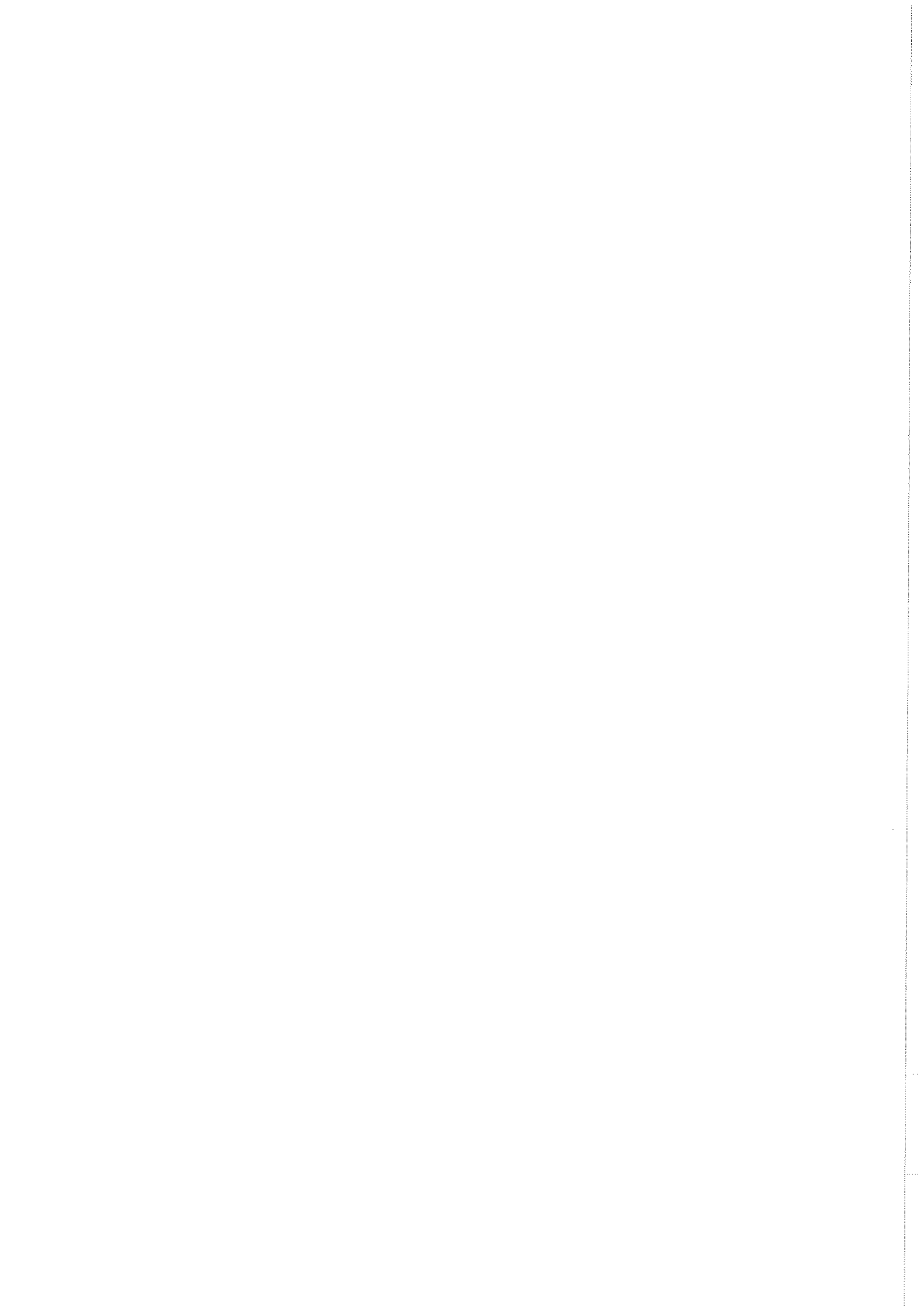
Section B

Answer the following:

5 x 10 = 50M

9. a) Write a structure of JVM.  
or  
b) Explain about basic concepts of Java.
10. a) Explain various types of operators.  
or  
b) Define variable. How to declare a variable and scope of variable with an example.
11. a) Explain various types of control statements.  
or  
b) Explain briefly about looping statements with an example.
12. a) Define constructor. Write an example program on constructor.  
or  
b) Define method over loading and give an example program.
13. a) Define inheritance. Explain various types of inheritance.  
or  
b) Define string. Explain various string methods available in Java.

\* \* \*





## OBJECT ORIENTED PROGRAMMING USING JAVA

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Explain structure of Java program.
2. Define a class and add methods, variables to it and create objects for it.
3. Explain constructors in Java with example.
4. Explain any five string handling methods in Java.
5. Illustrate implementing interfaces in Java with example.
6. Illustrate creating threads in Java with example.
7. Illustrate arithmetic exception in Java with example.
8. Explain byte stream classes in Java.

Section B

Answer the following:

5 x 10 = 50M

9. a) Explain Object Oriented Programming Principles.  
Or  
b) Explain Java Buzz words.
10. a) Explain the following with programs  
i) Method overloading                      ii) Abstract classes.  
Or  
b) Explain the concept of static members in Java with an example.
11. a) Explain the concept of final keyword with an example.  
Or  
b) List of different types of inheritance in Java give examples.
12. a) Explain life cycle of a thread with neat diagram.  
Or  
b) Define exception. Explain exception handling mechanism with java give examples.
13. a) Explain creating and accessing package in Java with example.  
or  
b) Explain different stages in JDBC program with an example.

\* \* \*



## SOCIAL WORK

No. of Pages: 01

Roll No:

Max. Marks: 40M

Time: 2 Hrs

No. of Questions: 10

Pass Min.: 16M

\*\*\*\*\*

Section A

Answer any TWO of the following:

2 x 5 = 10M

1. Write about objectives of social work.
2. Discuss values of social work.
3. Community organization.
4. Write the qualities of a leader.

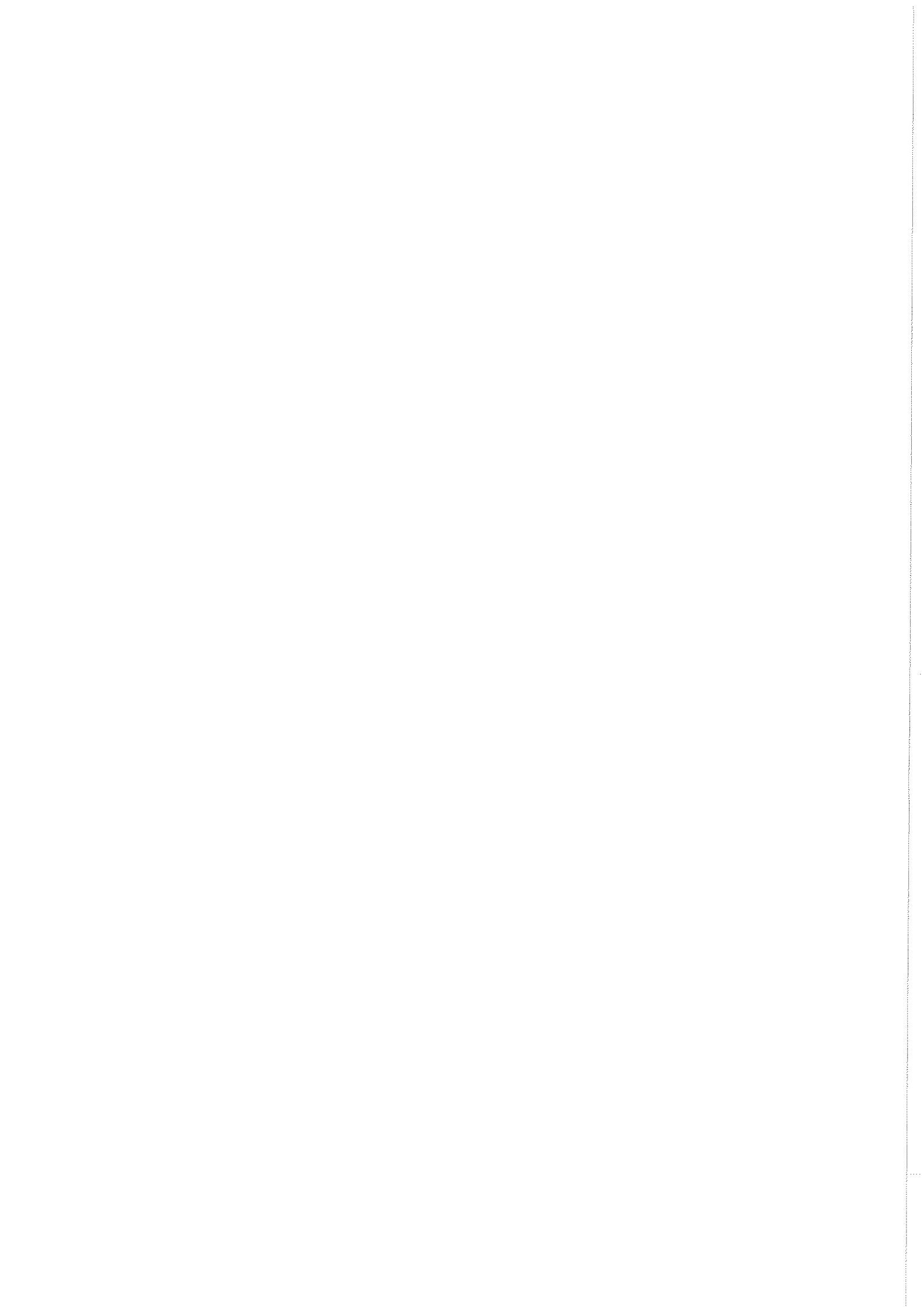
Section B

Answer any THREE of the following:

3 x 10 = 30M

5. Explain the nature and scope of social work.
6. Discuss any two major social problems in India.
7. Write an essay on social group work.
8. Define social case work and discuss the process of social case work.
9. Define community organization. Write the phases of community organization.
10. What are the objectives and types of field work?

\* \* \*



Advertising

No. of Pages: 01

Roll No:

Max. Marks: 40M

Time: 2 Hrs

No. of Questions: 10

Pass Min.: 16M

\*\*\*\*\*

Section A

Answer any TWO of the following:

2 x 5 = 10M

1. What is media planning?
2. What is ASCI code?
3. What is local marketing?
4. Write about business promotion.

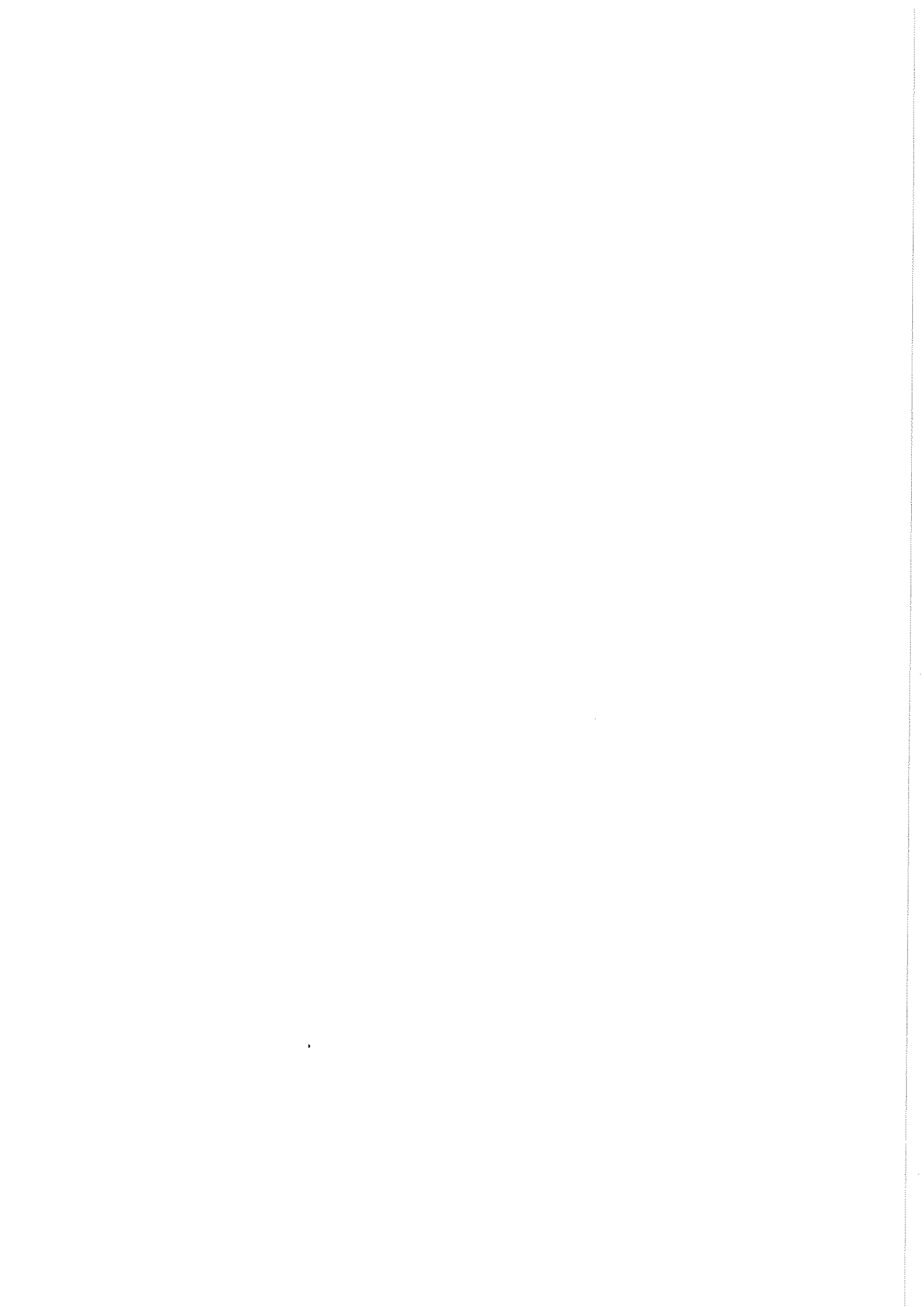
Section B

Answer any THREE of the following:

3 x 10 = 30M

5. Explain the importance of advertising and its objectives.
6. Explain different types of advertisement.
7. Explain various laws related to advertising in India.
8. What is advertising agency and its role?
9. Write the effective advertising and explain its characteristics.
10. How to reach the target groups through advertisements?

\* \* \*



## PLANT NURSERY MANAGEMENT

No. of Pages: 01

Roll No:

Max. Marks: 40M

Time: 2 Hrs

No. of Questions: 10

Pass Min.: 16M

\*\*\*\*\*

Section A

Answer any TWO of the following:

2 x 5 = 10M

1. Write a short note on nursery.
2. Define Green house in plant nursery.
3. Nursery tools and implementation.
4. Common possible errors in nursery activities.

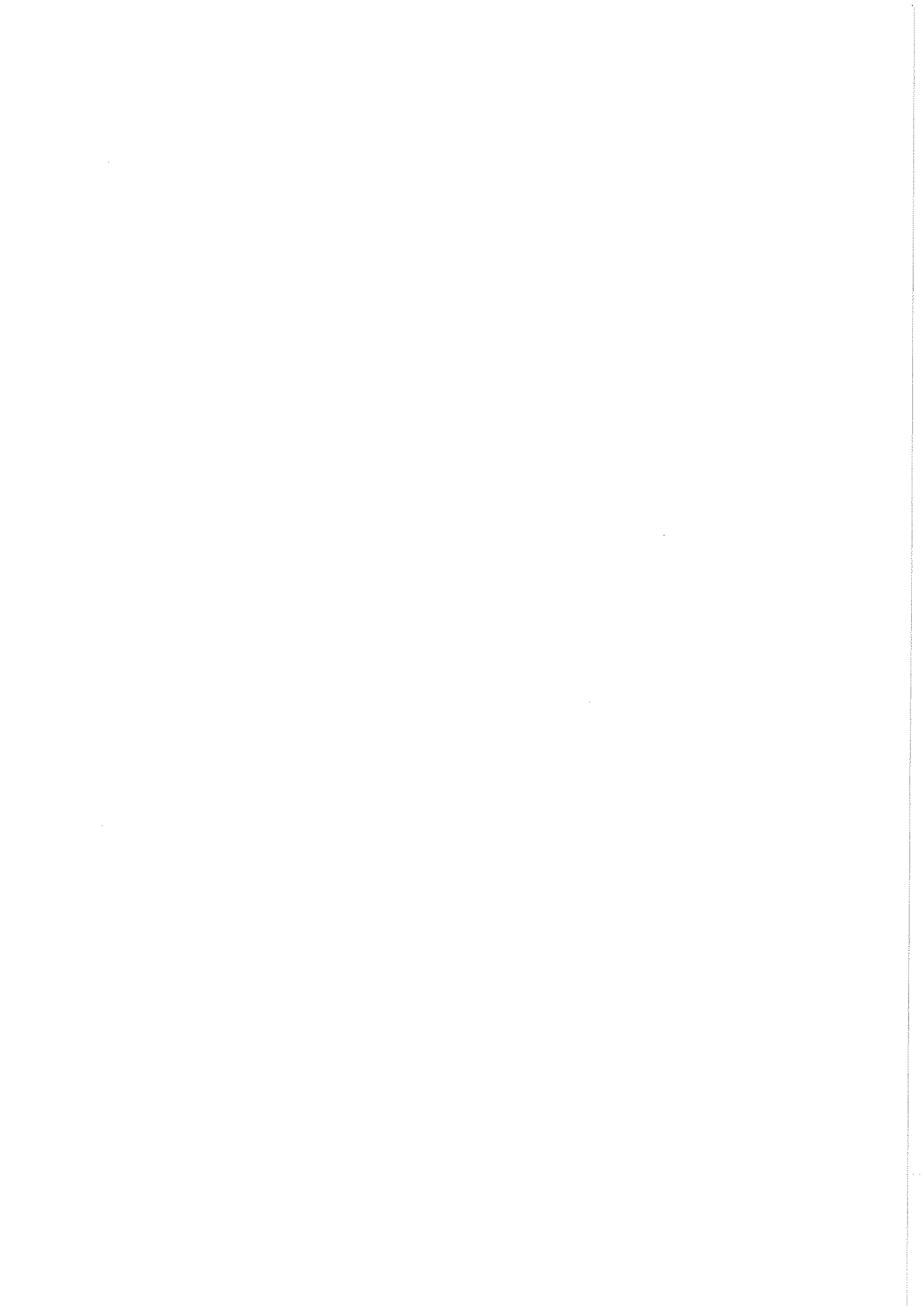
Section B

Answer any THREE of the following:

3 x 10 = 30M

5. Explain the basic facilities required for nursery.
6. Write an essay on bureau of Indian Standards related to nursery.
7. Sowing methods of seeds and planting material.
8. Write an essay on growing media.
9. Write an essay on record management.
10. What are the common possible errors in nursery activities?

\* \* \*





## BUSINESS LAWS

No. of Pages: 01

Roll No:

Max. Marks: 75M

Time: 3 Hrs

No. of Questions: 13

Pass Min.: 30M

\*\*\*\*\*

Section A

Answer any FIVE of the following:

5 x 5 = 25M

1. Define contract.
2. Features of valid acceptance.
3. Write about consideration.
4. Explain minor contracts.
5. Discuss contingent contracts.
6. Distinguish sale and agreement to sell.
7. Define consumer.
8. What is meant by cyber law?

Section B

Answer the following:

5 x 10 = 50M

9. a) "All agreements are not contracts but all contracts are agreements" - Explain.  
or  
b) Write various kinds of contracts.
10. a) Write about the essentials of valid offer.  
or  
b) What is meant by acceptance? Write the essential elements of acceptance.
11. a) Write the different modes of discharge of contracts.  
or  
b) Explain the remedies for breach of contract.
12. a) Write about sale of Goods Act 1930.  
or  
b) Explain redressal agencies under Consumer Protection Act 2019.
13. a) Write about IT Act.  
or  
b) Explain the need for cyber law.

\* \* \*

