

21.08.19 Comprehensive Revision Programme-1 Marks: 40  
 STD: XII (F-J) AN Computer Application Time: 1.15 hrs

I. Choose the correct answer: 10x1=10

1. How many parameter are required for MySQLi connect function in PHP?  
 a) 2            b) 3            c) 4            d) 5
2. Which version of PHP supports MySQLi functions?  
 a) Version 2.0    b) Version 3.0    c) Version 4.0  
 d) Version 5.0
3. Which is the correct function closing connection in PHP?  
 a) mysqli\_close("Connection object");  
 b) close ("Connection object");  
 c) mysql-close ("Connection object");  
 d) mysqli-close("Database object");
4. How many parameters are required for MySQLi close function in PHP?  
 a) 1            b) 2            c) 3            d) 5
5. \_\_\_\_\_ is a server-side scripting language designed for web development.  
 a) PHP        b) HTML        c) C++        d) CSS
6. The short name for Wi-Fi is \_\_\_\_\_.  
 a) Wireless Fidelity        b) Wired Fidelity  
 c) Wired fiber optic        d) Wireless fiber optic
7. Facebook was created at \_\_\_\_\_.  
 a) 2002        b) 2004        c) 2013        d) 2010
8. Which one is harmful to computer?  
 a) Bloggers    b) Browser    c) Hackers    d) Twitter
9. Which innovation made the people to use Internet?  
 a) Social Web    b) Mobile technology    c) Mobile App  
 d) Both a & b
10. \_\_\_\_\_ use less power comparing with single transmitter or satellite often cell towers nears.  
 a) Mobile devices    b) Transistors    c) WIFI  
 d) Communication

II. Answer any 4 of the following: 4x2=8

[Q.No.15 is compulsory]

11. Difference between wired and wireless networks.
12. Define Computer Network.
13. What is Web Database?
14. Give few examples of MySQLi Queries.
15. Define Internet.

III. Answer any 4 of the following: 4x3=12

[Q.No.19 is compulsory]

16. Define ARPANET.
17. What is the usage of cloud storage and cloud computing?
18. What is meant by artificial intelligence?
19. List out some usefulness of social networks.
20. Write MySQL Connection Syntax with example.

IV. Answer any 2 in detail: 2x5=10

21. Mention some uses of network at business, home, mobile, social application.
22. Define Computer networking and Internet. Explain different developments on computer network and Internet.
23. Explain in detail the types of MySQL connection method in PHP.

I. Choose the correct answer: 5x1=5

1. If  $A = \begin{pmatrix} 1 & -2 \\ 1 & 4 \end{pmatrix} = \begin{pmatrix} 6 & 0 \\ 0 & 6 \end{pmatrix}$ , then  $A =$  \_\_\_\_\_

- 1)  $\begin{pmatrix} 1 & -2 \\ 1 & 4 \end{pmatrix}$  2)  $\begin{pmatrix} 1 & 2 \\ -1 & 4 \end{pmatrix}$  3)  $\begin{pmatrix} 4 & 2 \\ -1 & 1 \end{pmatrix}$  4)  $\begin{pmatrix} 4 & -1 \\ 2 & 1 \end{pmatrix}$

2. If A, B and C are invertible matrices of same order then which one of the following is not true?

- 1)  $\text{adj } A = |A|A^{-1}$  2)  $\text{adj } (AB) = (\text{adj } A) (\text{adj } B)$   
 3)  $\det A^{-1} = (\det A)^{-1}$  4)  $(ABC)^{-1} = C^{-1}B^{-1}A^{-1}$

3. If  $A^T A^{-1}$  is symmetric, then  $A^2 =$  \_\_\_\_\_

- 1)  $A^{-1}$  2)  $(A^T)^2$  3)  $A^T$  4)  $(A^{-1})^2$

4. If  $P(A) = P(A/B) <$  number of unknowns, then the system of linear equations is \_\_\_\_\_.

- 1) consistent and has a unique solution 2) consistent  
 3) inconsistent  
 4) consistent and has infinitely many solution

5. If  $P(A) =$  number of unknowns in homogeneous system of linear equations, then system has

- a) only trivial solution b) only non-trivial solution  
 c) Trivial solution and infinitely many non-trivial solutions  
 d) No solution

II. Answer any 4 of the following: 4x2=8

(Q.No.10 is compulsory)

6. If  $A = \begin{pmatrix} a & b \\ c & d \end{pmatrix}$  is non-singular, find  $A^{-1}$ .

7. Prove that  $\begin{pmatrix} \cos\theta & -\sin\theta \\ \sin\theta & \cos\theta \end{pmatrix}$  is orthogonal.

8. Reduce the matrix  $\begin{pmatrix} 0 & 3 & 1 & 6 \\ -1 & 0 & 2 & 5 \\ 4 & 2 & 0 & 0 \end{pmatrix}$  to a row-echelon form.

9. Find the inverse of  $\begin{pmatrix} 2 & -1 \\ 5 & -2 \end{pmatrix}$  by Gauss-Jordan method.

10. Show that the system of equation is inconsistent  $2x+5y=7$ ;  
 $6x+15y=13$ .

III. Answer any 4 of the following: 4x3=12

(Q.No.15 is compulsory)

11. Solve by matrix inversion method:  $2x-y=8$ ;  $3x+2y=-2$

12. Solve by Cramer's rule:  $5x-2y+16=0$ ,  $x+3y-7=0$

13. Test for consistency and if possible, solve the following systems by rank method:  $2x+2y+z=5$ ;  $x-y+z=1$ ,  $3x+y+2z=4$ .

14. If  $\text{adj}(A) = \begin{bmatrix} 0 & -2 & 0 \\ 6 & 2 & -6 \\ -3 & 0 & 6 \end{bmatrix}$  find  $A^{-1}$

15. If the rank of the matrix  $\begin{pmatrix} \lambda & -1 & 0 \\ 0 & \lambda & -1 \\ -1 & 0 & \lambda \end{pmatrix}$  is 2, then find  $\lambda$ .

IV. Answer any 3 of the following questions: 3x5=15

16. By using Gaussian elimination method, balance the chemical reaction equation  $C_2H_6 + O_2 \rightarrow H_2O + CO_2$

17. Determine the values of  $\lambda$  for the system of equations,  $x+y+3z=0$ ,  $4x+3y+\lambda z=0$ ,  $2x+y+2z=0$  has i) a unique solution ii) a non-trivial solution.

18. Investigate for what values of  $\lambda$  and  $\mu$  the system of linear equations  $x+2y+z=7$ ,  $x+y+\lambda z=\mu$ ,  $x+3y-5z=5$

19. A chemist has one solution which is 50% acid and another solution which is 25% acid. How much each should be mixed to make 10 litres of a 40% acid solution? (Use Cramer's rule to solve the problem)

20. Find the inverse of the matrix by Gauss-Jordan method

$$\begin{pmatrix} 1 & -1 & 0 \\ 1 & 0 & -1 \\ 6 & -2 & -3 \end{pmatrix}$$

Bio-Botany

I. Choose the correct answer: 3x1=3

1. Virus free plants are developed from
  - a) Organ culture
  - b) Meristem culture
  - c) Protoplast culture
  - d) Cell suspension culture
2. Choose the incorrect pair:
  - a) Totipotency – Gottlieb Haberlandt
  - b) Differentiation – Structural changes of cells
  - c) Redifferentiation – Explant
  - d) Dedifferentiation – Formation of callus
3. Fusion product of protoplast without nucleus \_\_\_\_\_.

II. Answer any 3 of the following: 3x2=6

4. Why is a sterile environment important in tissue culture?
5. Write the application of somatic embryogenesis.
6. Draw the flow chart of general steps in patenting.
7. What is IPR?

III. Answer any 2 of the following: 2x3=6

8. List out the applications of Somatic embryogenesis.
9. What is cryopreservation?
10. What are the advantages of artificial seeds?

IV. Answer any 1 in detail: 1x5=5

11. Give the protocol for micropropagation in Banana.
12. Write the application of plant tissue culture.

Bio-Zoology

I. Choose the correct answer: 3x1=3

1. There are \_\_\_\_\_ autosomal alleles located on chromosome number \_\_\_\_\_ are concerned with the determinations of blood group in any person.
  - a) 2, 10
  - b) 3, 9
  - c) 1, 15
  - d) 2, 12
2. Statement I: RNA being a catalyst was reactive and hence unstable.  
Statement II: Walter Gilbert hypothesized that RNA as the first genetic material on earth.

- a) Both I and II are correct
- b) I is correct II is incorrect
- c) Both I and II are incorrect
- d) I is incorrect II is correct

3. I<sup>A</sup> AND I<sup>B</sup> genes of ABO are dominant over I<sup>O</sup> and \_\_\_\_\_.

- a) Dominant and recessive
- b) co-dominant
- c) Pleiotropic
- d) Epistatic

II. Answer any 3 of the following: 3x2=6

4. Give any two features of Genetic code.
5. What is meant by Co-dominance? Explain.
6. What is Holandric gene?
7. Write a note on two enzymes and their role in replication.
8. What is meant by HnRNA?

III. Answer any 2 of the following: 2x3=6

9. Write a note on Erythroblastosis foetalis.
10. Write a note on Sutton's classical gene concept.
11. Write a note on Patan's syndrome.

IV. Answer any 1 of the following: 1x5=5

12. Write and explain the chemistry of nucleic acid.
13. Write a note on sickle cell anaemia due to mutation.
14. Explain on Meselson and Stahl experiment and its importance.

21.08.19 Comprehensive Revision Programme -1 Marks: 40

STD: XII (C,D,E) AN Chemistry Time: 1.15 Hrs

I. Choose the correct answer: 10x1=10

- The geometry at which carbon atom in diamond are bonded to each other is
  - Tetrahedral
  - Hexagonal
  - Octahedral
  - None of these
- $\text{AlF}_3$  is soluble in HF only in presence of KF. It is due to the formation of
  - $\text{K}_3[\text{AlF}_3\text{H}_3]$
  - $\text{K}_3[\text{AlF}_6]$
  - $\text{AlH}_3$
  - $\text{K}[\text{AlF}_3\text{H}]$
- The stability of +1 oxidation state increases in the sequence
  - $\text{Al} < \text{Ga} < \text{In} < \text{Ti}$
  - $\text{Ti} < \text{In} < \text{Ga} < \text{Al}$
  - $\text{In} < \text{Ti} < \text{Ga} < \text{Al}$
  - $\text{Ga} < \text{In} < \text{Al} < \text{Ti}$
- The anomalous behavior of p-block is due to
  - smaller atomic size
  - high electronegativity
  - both a & b
  - None of these
- Which is used in removal of permanent hardness of water?
  - Pyroxenes
  - Zeolites
  - Sorosilicates
  - Mica
- Fraction of effective collisions is expressed as
  - $f = e^{\frac{-1}{RT}}$
  - $f = e^{\frac{-E_a}{RT}}$
  - $f = e^{\frac{-E_a}{T}}$
  - None of these
- Half life for an nth order reaction involving reactant A and  $n \neq 1$ 
  - $t_{\frac{1}{2}} = \frac{2^{n-1}}{(n-1)K[\Delta_0]^{n-1}}$
  - $t_{\frac{1}{2}} = \frac{2^{n-1}}{(n-1)[\Delta_0]^{n-1}}$
  - $t_{\frac{1}{2}} = \frac{2^n}{K[\Delta_0]^{n-1}}$
  - None of these
- Rate is independent of the concentration of reactant is
  - First order
  - zero order
  - second order
  - All of the above
- The rate constant of a reaction is  $5.8 \times 10^{-2} \text{s}^{-1}$ . The order of the reaction is
  - first order
  - second order
  - zero order
  - third order
- The addition of catalyst during a chemical reaction alters which of the following quantity?
  - Enthalpy
  - Entropy
  - Internal energy
  - Activation Energy

II. Answer any 5 of the following: 5x3=15

- Write the structure of diborane.
  - Give the preparation of a)  $\text{BF}_3$  b) Borax
  - Differentiate Fullerene and Carbon nanotube
  - Define a) unit of reaction b) Instantaneous rate
  - Compare and contrast order and molecularity.
  - Explain the rate of catalyst in rate of reaction.
  - The rate of the reaction  $x + 2y \rightarrow \text{product}$  is  $4.3 \times 10^{-3} \text{ mol L}^{-1} \text{s}^{-1}$  if  $[x] = [y] = 0.2 \text{ M}$  and rate constant at 400K is  $2 \times 10^{-2} \text{ s}^{-1}$ . What is the overall order of the reaction?
  - Write a) McA fee process b) Fischer Tropsch synthesis
- III. Answer any 3 of the following: 3x5=15
- Explain the types of silicates in detail.
  - Write a note on Alum and its types.
  - Give the Integrated Equation for first order reaction.
  - a) The time for half changes in a first order decomposition of a substance (A) is 60 seconds. Calculate the rate constant. How much of (A) will be left after 180 seconds?  
b) A hydride of 2<sup>nd</sup> period alkali metal (A) on reaction with compound of Boron (B) to give a reducing agent (C). Identify (A), (B) and (C).
  - Explain i) Pseudo first order reaction  
ii) Inert pair effect  
iii) Ionisation Enthalpy of p-block element

21.08.19 Comprehensive Revision Programme-1 Marks: 40  
 STD: XII (E) FN Physics Time: 1.15 hrs

I. Choose the correct answer:

5x1=5

1. Three wires of equal lengths are bent in the form of loops. One of the loops circle, another is semi-circle and the third one is square. They are placed in a uniform magnetic field and same electric current is passed through them. Which of the following loop configuration will experience greater torque?

a) circle b) semi-circle c) square d) all of them

2. The vertical component of Earth's magnetic field at a place is equal to the horizontal component. What is the value of angle of dip at this place?

a)  $30^\circ$  b)  $45^\circ$  c)  $60^\circ$  d)  $90^\circ$

3. The value of Bohr magneton is \_\_\_\_\_.

a)  $9.27 \times 10^{34} \text{ Am}^2$  b)  $9.72 \times 10^{34} \text{ Am}^2$  c)  $9.27 \times 10^{24} \text{ Am}^2$   
 d)  $9.72 \times 10^{-24} \text{ Am}^{-2}$

4. Which of the following is an example for Diamagnetic materials?

a) Bi b) Fe c) Steel d) Mn

5. Which of the following pair of particles move with same velocity along the same circular path in a uniform magnetic field?

a) electron, proton b) proton, deuteron  
 c) proton alpha particle d) deuteron, alpha particle

II. Answer any 4 of the following:

4x2=8

6. Define magnetic flux.

7. State Ampere's circuital law.

8. What is meant by magnetic induction?

9. Distinguish between Coulomb's law and Biot-Savart's law.

10. Using the relation  $\vec{B} = \mu_0(\vec{H} + \vec{M})$ , show that  $X_m = \mu_r - 1$

III. Answer any 4 of the following:

4x3=12

11. Show that the time period of oscillation when a bar magnet is

kept in a uniform magnetic field is  $T = 2\pi \sqrt{\frac{I}{P_m B}}$  in second, where I

represents moment of Inertia of the bar magnet,  $P_m$  is the magnetic moment.

12. Explain any 3 basic properties of magnets.

13. Compare dia, para and ferro magnetism.

14. Define Tangent law and what are the precautions to be maintained while using Tangent Galvanometer?

15. Explain Hysteresis loss.

IV. Answer any 3 of the following:

3x5=15

16. Derive an expression for Bohr magneton of revolving electron.

17. Derive an expression for the magnetic field due to a long current carrying conductor.

18. Obtain a relation for the magnetic induction at a point along the axis of a circular coil carrying current.

19. Explain the principle, construction and theory of Tangent Galvanometer.

STD: XII Comprehensive Revision Programme -1 Marks: 40  
 (F-J) AN Business Maths Time: 1.15 Hrs

I. Choose the correct answer: 5x1=5

1.  $\int \sqrt{e^x} dx$  is \_\_\_\_\_  
 a)  $2\sqrt{e^x}+c$     b)  $\frac{1}{2}\sqrt{e^x}+c$     c)  $\frac{1}{2\sqrt{e^x}}+c$     d)  $\sqrt{e^x+c}$
2.  $\Gamma(1)$  is \_\_\_\_\_  
 a) 1    b) 0    c) n!    d) n
3. The value of  $\int_2^3 f(5-x)dx - \int_2^3 f(x)dx$  is  
 a) 5    b) -1    c) 0    d) 1
4.  $\int_0^\infty x^4 e^{-x} dx$  is \_\_\_\_\_  
 a) 4    b) 4!    c) 12    d) 64
5.  $\int \frac{dx}{x^2-a^2} =$  \_\_\_\_\_  
 a)  $\log|x + \sqrt{x^2 - a^2}|+c$     b)  $\frac{1}{2a}\log\left|\frac{a+x}{a-x}\right|+c$   
 c)  $\frac{1}{2a}\log\left|\frac{x-a}{x+a}\right|+c$     d)  $\log\left|\frac{x-a}{x+a}\right|+c$

II. Answer any 4 of the following: 4x2=8

6. Evaluate  $\int \frac{1}{\sqrt{x+2}-\sqrt{x-2}} dx$
7. Evaluate  $\int -\frac{dx}{\sqrt{x^2+25}}$
8. Evaluate  $\int_{\frac{\pi}{2}}^{\frac{\pi}{2}} \sin x dx$
9. If  $\int_1^a 3x^2 dx = -1$  then find the value of a (a ∈ R).
10. Evaluate  $\int \sqrt{1 + \sin 2x} dx$

III. Answer any 4 of the following: 4x3=12

11. Evaluate  $\int_1^4 f(x)dx$ ; where  $f(x) = \begin{cases} 2x^2+1, & \text{if } 1 \leq x \leq 3 \\ 7x, & \text{if } 3 \leq x \leq 4 \end{cases}$

12. Integrate:  $2\cos x - 3 \sin x + 4\sec^2 x - 5\operatorname{cosec}^2 x$

13. Evaluate  $\int x^3 \log x dx$

14. Integrate  $x^8(1+x^9)^5$  with respect to x.

15. Evaluate  $\int_{-1}^1 x\sqrt{x+1} dx$

IV. Answer any 3 of the following: 3x5=15

16. Evaluate the following using properties of definite integrals,

$$\int_0^{\frac{\pi}{2}} \frac{f(\sin x)}{f(\sin x)+f(\cos x)} dx$$

17. Evaluate the integral as the limit of the sums  $\int_1^3 (2x+3)dx$

18. Evaluate  $\int_0^1 [e^{a \log x} + e^{x \log a}] dx$

19. Evaluate  $\int_2^3 \frac{\sqrt{x}}{\sqrt{x}+\sqrt{5-x}} dx$

20. Evaluate the integral as the limit of a sum:  $\int_1^2 x^2 dx$

I. Choose the correct synonym of the underlined word from the options given below:

- I had eleven broken ribs and a perforated lung.  
 a) supported b) perfect c) damaged d) plastic
- My thoughts have turned to the consideration.  
 a) federation b) apprehension c) association  
 d) appreciation

Choose the correct antonym of the underlined word from the options given below:

- Suffering seems so cruelly prevalent in the world today.  
 a) normal b) frequent c) popular d) rare
- He suffered severe third-degree burns on the upper part of his body.  
 a) easy b) harsh c) serious d) cruel
- Form a phrase with each of the following pairs of nouns given below:  
 i) fibre + tissue = \_\_\_\_\_  
 ii) fancy + idea = \_\_\_\_\_

Spot the errors in the following sentence:

- The Boss had full confidence on his Manager for successful completion of the project.
- I had my evening meals in a restaurant near my office.

Add suitable question tags to the following sentences and punctuate properly:

- You have not returned my books yet, \_\_\_\_\_
- There is a pharmacy near that bus stand \_\_\_\_\_

Correct the error found in the question tag in the following:

- We needn't apply for a bank loan do we?

II. Read the following sets of poetic lines and answer the questions below: 7x1=7

“Then a soldier,  
 Full of strange oaths and bearded like the pard,  
 Jealous in honour, sudden and quick in quarrel  
 Seeking the bubble reputation  
 Even in the cannon's mouth.

- What is the soldier ready to do?
- Explain 'bubble reputation'.
- Mention the figure of speech in the fourth line.

“And then the justice,  
 In fair round belly with good capon lin'd,  
 With eyes severe and beard of formal cut  
 Full of wise saws and modern instances.

- Whom does justice refer to?
- Describe his appearance.
- How does he behave with the people around him?
- What does he do to show his wisdom?

III. Explain with reference to the context (Any one): 1x3=3

- “They have their exits and their entrances”.
- “Jealous in honour, sudden and quick in quarrel,  
 Seeking the bubble reputation.”

IV. Do as directed: 2x1=2

Change the following sentence into passive voice:

- Please open the door.

Change the following sentence into active voice.

- Prizes were being given by the chief guest.

V. Answer any one of the following: 1x3=3

- What thoughts troubled Dr.Christiaan Barnard as he neared the end of his career as a heart surgeon?
- How was Dr.Barnard's attitude to suffering different from that of his father?

VI. Answer any one of the following in a paragraph of 100-150 words: 1x5=5

- Describe the various stages of a man's life picturised in the poem “All the world's a stage”.
- Trace the bond of friendship between Baldwin and Gresham. Explain why Baldwin wished to attribute some credit to his friend.

I. Choose the correct answer: 10x1=10

1. How many datatypes are in Python?  
a) 2            b) 4            c) 6            d) 8
2. List is an ordered collection of values enclosed within  
a) [ ]            b) ( )            c) < >            d) { }
3. Choose the odd one out:  
a) List            b) Tuples            c) Statement            d) Set
4. The elements of list can be  
a) replaced    b) added            c) removed            d) all
5. Choose the incorrect pair:  
a) List – Sequence datatype    b) List – Similar to arrays  
c) List – Within square – Brackets  
d) List – indexed with numbers beginning with one
6. Using append( ) function a single element is added as \_\_\_\_\_ element with the existing list.  
a) first            b) middle            c) at any position            d) last
7. Which is used to delete entire list?  
a) remove ( )    b) del statement            c) erase( )            d) clear( )
8. Values in a tuples are \_\_\_\_\_.  
a) mutable    b) immutable    c) zero            d) one
9. A set is a \_\_\_\_\_.  
a) mixed datatype            b) none datatype  
c) collection datatype            d) fixed datatype
10. Which operator is used to difference set operator?  
a) ^            b) -            c) &            d) 1

II. Answer any 4 of the following: 4x2=8

Q.No.12 is compulsory

11. Differentiate del with remove( ) function of list.
12. What is negative index in list? Give an example.
13. Differentiate between clear( ) and del statement.
14. Differentiate between List and Dictionary.
15. How will you delete tuple?

III. Answer any 4 of the following: 4x3=12

Q.No.20 is compulsory

16. Write short note about sort ( ).
  17. How will you access elements using for loop? Write eg.
  18. With an example explain extend( ) function.
  19. How will you create a set?
  20. Write a note on dictionary comprehension.
- IV. Answer any 2 in detail: 2x5=10
21. Explain the different set operation supported by python with an example.
  22. Write a note for the following:  
i) remove( )    ii) pop            iii) clear( )    iv) index( )  
v) count( )
  23. What are the different ways to insert an element in a list? Explain with an example.

21.08.19 Comprehensive Revision Programme-2 Marks:40  
Std:XII-I,J (FN) Commerce Time:1.15 Hrs

I. Choose the correct answer: 5x1=5

1. Scientific management is developed by \_\_\_\_\_.  
a) Fayol b) Taylor c) Mayo d) Jacob
2. Which of the following is not a main function?  
a) Decision making b) Planning c) Organising  
d) Staffing
3. Delegation of Authority is easily done with the help of \_\_\_\_\_.  
a) MBM b) MBE c) MBO d) MBA
4. Selection is usually considered as a \_\_\_\_\_ process.  
a) positive b) negative c) natural d) none of these
5. State the order in which steps in employee selection process?  
i) Interview ii) Physical examination  
iii) Applications selection test  
iv) Approval of Higher Authority  
a) (ii) (iii) (iv) (i) b) (iii) (iv) (i) (ii) c) (iii) (i) (ii) (iv)  
d) (i) (ii) (iii) (iv)

II. Answer any 4 of the following: 4x2=8

6. What is meant by controlling?
7. What is Government securities market?
8. Define money market.
9. Explain the two oldest money markets.
10. What do you mean by placement?
11. What is intelligence test?

III. Answer any 4 of the following: 4x3=12

12. How is panel interview conducted?
13. Name the types of Selection test.
14. What are the features of treasury bills?
15. What are the types of commercial bills?
16. State the importance of motivation.
17. State the importance of staffing.

IV. Answer any 3 of the following: 3x5=15

18. Explain the characteristics of money market.
19. Explain the principles of placement.
20. Explain main functions of management.
21. Difference between money and capital market.

21.08.19 Comprehensive Revision Programme-1 Marks:40  
Std:XII-H [FN] Economics Time: 1.15 Hrs

I. Choose the correct answer: 5x1=5

1. Who coined the word Macro?  
a. Adamsmith b. J.M Keynes  
c. Ragnar Frinch d. Karlmarx
2. An economy consists of \_\_\_\_\_ sector.  
a. Consumption b. Production  
c. Government d, All the above
3. The average income of the country is \_\_\_\_\_.  
a. Personal income b. Percapita income  
c. Inflation rate d. Disposal income
4. PQLI is the indicator of \_\_\_\_\_.  
a. Economic growth b. Economic welfare  
c. Economic progress d. Economic development
5. During Inflation, Value of money is \_\_\_\_\_ price is increases.  
a. Increases b. decreases c. constant d. None

II. Answer the following: (any 4) 4x2=8

6. What do you mean by the term personal income?
7. Explain briefly NNP at Factor cost.
8. Define Macro economics.
9. Write the formula for personal Income, Disposable Income, Percapita Income.
10. Describe the different types of economic systems.
11. What is difference between NNP and NDP?

III. Answer the following: (any 4) 4x3=12

12. Draw the circular flow of income in a four sector economy.
13. What is mean by Transfer payments?
14. List out the uses of national income.
15. Why is self consumption difficult in Measuring National Income?

IV. Answer the following: (any 3) 3x5=15

16. Write a short note on Percapita income.
17. Define the solution to Economic problems.
18. What are the difficulties involved in the measurement of national income?
19. Compare the features among capitalism, socialism, and Mixedism.
20. Explain the Basic concepts of national income (any 5)
21. Explain the Features of Mixed Economy.

I. Answer the following:

5x2=10

1. Calculate opening capital.

	₹
Debtors	60,000
Bills receivable	5,000
Creditors	25,000
Bills payable	2,000

2. Calculate the missing figure.

	₹
Capital as on 31.03.2018	40,000
Additional capital	15,000
Drawings	7,500
Capital as on 1.04.2017	?
Loss for the year	12,500

3. Write the format for Total debtors account.

4. Find out the profit or loss:

Particulars	₹
Opening capital	2,50,000
Closing capital	3,00,000
Additional capital	50,000
Drawings	2,500 per month

5. From the following, calculate the missing figure.

Particulars	₹
Closing capital as on 31/3/08	80,000
Additional capital	30,000
Drawings	15,000
Opening capital	?
Loss for the year	25,000

II. Answer the following:

4x5=20

6. Bindu does not keep proper books of accounts. Following details are given from his records. Find out his Opening and closing capital.

Particulars	1.4.2017	31.3.2018
Cash	40,000	20,000
Stock of goods	1,10,000	1,20,000
Debtors	80,000	80,000
Creditors	90,000	75,000
Loan	10,000	15,000

7. Mr.Suresh started business with ₹ 2,00,000 on 1<sup>st</sup> April 2016. His books are kept under Single entry. On 31<sup>st</sup> March 2017 his position was as under:

Liabilities	₹	Assets	₹
Sundry Creditors	40,000	Cash in hand	6,000
Bills payable	5,000	Cash at bank	10,000
Outstanding creditors	7,500	Furniture	30,000
		Plant & Machinery	1,00,000
		Sundry debtors	50,000
		Stock	90,000
		Bills receivable	15,000

Ascertain the profit or loss made by Mr.Suresh for the year ended 31<sup>st</sup> March 2017.

8. Ram is a partner in a business in which the books are kept by single entry. On 1.4.2017 his position was as under:

Liabilities	₹	Assets	₹
Ram capital	5,00,000	Cash in hand	5,000
Bills payable	20,000	Cash at bank	15,000
Sundry creditors	30,000	Bills receivable	30,000
		Stock	1,00,000
		Sundry debtors	25,000
		Furniture	1,25,000
		Plant & Machinery	2,50,000
	5,50,000		5,50,000

On 31.3.2018 his position was as under:

Cash in hand ₹2,000, Sundry creditors ₹35,000, Sundry debtors ₹30,000, Bills receivable ₹26,000, Cash at bank ₹10,000, Stock ₹1,10,000, Bills payable ₹10,000, Plant and machinery ₹2,50,000. Plant and machinery are to be depreciated by 10% Drawings Ram ₹55,000. Ascertain the profit for the year ended 31.3.2018.

9. From the following particulars find out total sales:

Particulars	₹	Particulars	₹
Debtors on 1/4/18	2,50,000	Bills receivable	
Bills receivable on 1/4/18	60,000	Dishonoured	15,000
Cash received from debtors	7,25,000	Returns inward	50,000
Cash received for Bills receivable	1,60,000	Bills receivable 31/3/19	90,000
Bad debts	30,000	Sundry debtors 31/3/19	2,40,000
		Cash sales	3,15,000

III. Answer any 1 of the following: 1x10=10

10. Prepare Trading & Profit & loss a/c & balance sheet as on 31/12/18.

Particulars	1/1/18	31/12/18
Furniture	30,000	30,000
Cash	10,000	17,000
Debtors	40,000	60,000
Stock	28,000	11,000
Bills receivable	12,000	35,100
Bank loan	25,000	25,000
Creditors	15,000	16,000

Other information:

Cash sales	11,200	Credit sales	88,800
Cash purchases	4,250	Credit purchases	35,750
Carriage on purchases	3,000	Carriage on sales	700
Commission received	600	Interest on loan	2,500
Drawings	8,000	Additional capital	14,000
Salaries	8,900	Office Rent	2,400

Adjustments:

Depreciation of 5% on furniture. Provision 1% on debtors for doubtful debts.

11. From the following information prepare trading, profit & loss a/c & Balance sheet as 31/12/18.

Particulars	1/1/18	31/12/18
Machinery	60,000	60,000
Cash	25,000	33,000
Debtors	70,000	1,00,000
Stock	45,000	22,000
Bills receivable	20,000	38,000
Loan	45,000	45,000
Creditors	25,000	21,000

Cash sales	20,000	Credit sales	1,80,000
Cash purchases	8,000	Credit purchases	52,000
Wages	6,000	Salaries	23,500
Advertisement	7,000	Interest on bank	
		Loan	4,500
Drawings	60,000	Additional capital	21,000

Adjustments:

Write off depreciation 10% on machinery. Create a reserve of 1% on debtors for doubtful debts.