தமிழ்த்துறை
இளங்கலை முதலாமாண்டு – முதல் பருவம்
சுழற்சித் தேர்வு (செப்டம்பர்-2017)
தாள் : 1 இக்கால இலக்கியங்களும் உரைநடையும்
காலம் : 2 மணி   **17UFTA01**   மதிப்பெண்-50

பகுதி - அ

I. ஐந்து வினாக்களுக்கு மட்டும் விடையளி:

(5X2=10)

1. ''துறைதோறும் துறைதோறும்
   துடித்தெ ழுந்தே'' - இடஞ்சுட்டிப் பொருள் தருக.
2. ''தடையில் லாமலே –சேஷம்
   தலைத்து வருமையா'' -இடஞ்சுட்டிப் பொருள் தருக.
3. ''சட்டம் ஒழுங்குப் பிரச்சனை- எதுவும்
   இல்லாமல் நாடு அமைதியாக இருந்தது''-
   இடஞ்சுட்டிப் பொருள் தருக.
4. ''உண்மையின் ஆடைகளை உடுத்து வந்த
   பொய்யோ''- இடஞ்சுட்டிப் பொருள் தருக.
5. மையத்து நாடுகளில் பயிர் செய்வது எப்போது?
6. அரங்களின் இருவகைகள் யாவை?
7. மனிதன் கடைபிடிக்க வேண்டிய உறுதிப்
   பொருள்கள் யாவை?
8. வேட்டுவன் கண்ட வீரக் காட்சி யாது?
9. தலைவன் தேர் மணியின் நாவைக் கட்டினான் -
   ஏன்?
10. நட்பு உருவாகும் முறைகள் யாவை?

பகுதி -ஆ

II. எவையேனும் நான்கு வினாவிற்கு விடையளி.

(4X5=20)

11. அ) காந்தியைப் போல் எவ்வாறு இருக்க வேண்டும்
    என்று நாமக்கல் கவிஞர் அறிவுறுத்துகிறார்?

ஆ) இயேசு பிரான் தம் சீடருக்குக் கூறிய
   அறிவுரைகளை விளக்குக.

12. அ) உலகில் முன்னேற்றத்தைத் தடுக்கும்
    முடிச்சுகளை விளக்குக.
    (அல்லது)
    ஆ) 'சுதந்திரம் என்ன தந்ததாக' கவிஞர்
    வைரமுத்து கூறும் கருத்துக்களை எழுதுக.

13. அ) 'திருக்குறள் எழுதப்பட்டது
    இல்லறத்திற்காகத்தான்' என்பதை நாமக்கல்
    கவிஞர் வழி விளக்குக.
    (அல்லது)
    ஆ) சங்க நெறியில் 'அன்பு நெறிகள்' குறித்து
    எழுதுக.

14. அ) நட்பு குறித்து வேதாத்திரி மகரிஷி கூறும்
    கருத்துகளை இயம்புக.
    (அல்லது)
    ஆ) சிறையில் இருப்பவர் செய்த குற்றங்களாக
    கவிஞர் கூறுவனவற்றை விளக்குக.

பகுதி-இ

III. எவையேனும் இரண்டு வினாவிற்கு கட்டரை
வடிவில் விடையளி.   (2X10=20)

15. கவிமணி கூறும் 'ஒத்துழைப்பு' குறித்துக்
    கட்டுரைக்க.
16. உறக்கம் கலைவதெப்போ? மயக்கம்
    தெளிவதெப்போ? கவிதையில் கவிஞர் கூறும்
    கருத்துக்களைத் தொகுத்துரைக்க.
17. சமயங்கள் வளர்த்த தமிழ்' குறித்து அறிஞர்
    மயிலை.சீனி. வேங்கடசாமி கூறும் கருத்துக்களை
    எடுத்துரைக்க.

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CYCLE TEST- 2017
Classical and Statistical mechanics

Class : I M.Sc. Phy	Marks: 50
Paper Code : 17PPH01	Time : 2 hrs

PART –A

I. Choose the bestanswers   6x1=6

1. Spherical polar coordinates are represented by
   a) r, θ, Φ b) r, θ, z c) x, y, z d) x, y
2. If the constrains are independent of time, they are termed as
   a) Scleronomicb)Holonomic
   c) Non-holonomicd) Rheonomic.
3. Poisson brackets are under a canonical transformation.
   a) Variant   b) Invariant
   c) Equivalent d)Constant.
4. Volume in phase space is under
   a) Canonical transformation   b) Hamiltonian
   c)Jacobi identity d) Lagrangian.
5. The total energy for Lagrangian (L) is
   a) T+V   b) T-V   c) V-T   d) 2T-1
6. The total energy of the Hamiltonian (H) represents
   a) T+Vb) T-Vc) T*V d) 2T

PART –B

II. Answer the questions 4x5=20

7. a) Discuss the lagrangian equation of motion for a simple pendulum.

(or)

b) Derive an expression for principle of least action.

8. a) Explain the D'Alembert's principle.

(or)

b) Discuss the frequency of periodic motion by applying action-angle variable.

9. a) Derive the angular momentum equation using Poisson's bracket.

(or)

b) Discuss the torque free motion of a rigid body.

10.a) Obtain the expression for rotational kinetic energy of a rigid body.

(or)

b) Discuss the relation between $E=mc^2$.

PART –C

III. Answer the questions   3x8=24

11.a) Discuss the Hamilton-Jacobi theory to solve a linear harmonic oscillator.

(or)

b) Elaborate the Lagrangian equation from D'Alembert's principle.

12.a) Explain the canonical transformation with all possible generating functions.

(or)

b) How the ellipse, parabola, hyperbola are formed from Kepler's law.

13.a) Give an account on symmetric top moving under gravity.

(or)

b) Discuss about the vibration of a tri-atomic molecules.

CYCLE TEST – September 2017
Mechanics

Class	: I B.Sc. PHYSICS	Marks : 50
Paper Code : 17UPH01		Time : 2Hrs

Section – A

I Answer ALL the Questions   (5X2=10)

1. Define angle of friction.
2. Draw the hollow hemisphere and show its CG.
3. Define frictional force.
4. Explain centre of gravity.
5. Write about limiting friction.
6. Explain the centre of pressure.
7. Write the continuity equation and explain.
8. Mention the uses of Venturimeter.
9. State Bernoulli's theorem.
10. Give any two applications of Bernoulli's theorem.

Section – B

II Answer ALL the Questions   (4X5=20)

6. |a) State the laws of friction

(or)

b) Explain the cone of friction with neat diagram.

7. a) Distinguish centre of mass and centre of gravity with examples.

(or)

b) Derive the centre of gravity of a solid hemisphere.

8. a) Explain the centre of pressure of a triangular lamina.

(or)

b) Explain the centre of pressure of a rectangular lamina.

9. a) Give short notes on Venturimeter.

(or)

b) Obtain the equation of continuity of fluid flow.

Section – C

III Answer ALL the Questions   (2X10=20)

10. a) Derive the expression for the CG of a hollow hemisphere and a solid cone.

(or)

b) Discuss the equilibrium of a body on an inclined plane under the action of a force.

11. a) Explain in detail about the Venturimeter and Pitot's tube.

(or)

b) State and prove Bernoulli's theorem.

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CYCLE TEST - SEPTEMBER - 2017
PROPERTIES OF MATTER AND SOUND

Class : II B.Sc. Physics	Time : 2 Hrs.
Paper Code: 12UPH03	Marks : 50

PART – A

I. Answer any five questions: (5X2=10)

1. Define elasticity.
2. Define bending moment.
3. What is meant by Rigidity modulus?
4. Define Poisson's ratio.
5. What is a cantilever?
6. What are ultrasonic waves?
7. What is piezo electric effect?
8. Define Acoustics.
9. Write the properties of ultrasonic waves.
10. Define absorption coefficient.

PART – B

II. Answer the following questions: (4X5=20)

11. a) Obtain an expression for bending moment.

(or)

b) Give an expression for couple per unit twist.

12. a) Discuss the theory to determine the young's modulus by uniform bending.

(or)

b) What are the three types of elastic moduli? Explain it.

13. a) Explain about Piezo electric method for producing ultrasonic waves.

(or)

b) List out important applications of ultrasonic waves.

14. a) Explain the measurement of absorption coefficient of a material.

(or)

b) Write a short note on reverberation and reverberation time.

PART – C

III. Answer the following questions: (2X10=20)

15. a) Describe the determination of rigidity modulus by torsion pendulum with mass.

(or)

b) Derive an expression for the depression of the loaded end of a cantilever.

16. a) Explain in detail Magnetostriction method of producing ultrasonic waves.

(or)

b) Obtain an expression for Sabine's formula.

CYCLE TEST SEPTEMBER – 2017
INDIAN SOCIAL STRUCTURE AND SOCIAL PROBLEMS

Class	: I M.S.W	Marks : 50	
Paper Code	: 17PSW04	Time : 2 Hrs	

SECTION – A

I. Answer the questions: (4X5=20)

1. a) Define society and concept of society.
   Or
   b) Explain association and different between association and society.

2. a) Explain culture and the concept of culture.
   Or
   b) Write characteristics of culture.

3. a) Describe structure and function of institution.
   Or
   b) Brife concept and meaning of economic and educational institution.

4. a) Describe culture as a system of norms, folkways, mores, institution and laws.
   Or
   b) Describe pattern of interaction and interdependence among institution.

SECTION – B

II. Answer the questions: (3X10=30)

1. a) Detail on social processes.
   Or
   b) Explain major elements of society.

2. a) Discuss on culture lag theory and its application to the society.
   Or
   b) Elaborate the functions and major elements of culture.

3. a) Enumerate social institution (caste, kinship, marriage and family).
   Or
   b) Detail on social stratification.

HOSPITAL ADMINISTRATION
CYCLE TEST – 2017

Class : **II MSW**	**Marks: 50**
Paper Code: 12PSW12B	**Time** : **2 hrs**

Section – A
Answer the following questions: 4 x 5 = 20

1. a) Explain any five uses of computer in hospitals.
   (Or)
   b) Mention the rights of patients.

2. a) Write short note on control of hospital.
   (Or)
   b) Explain the process of staff recruitment in the hospital settings.

3. a) Briefly explain medical records section.
   (Or)
   b) Explain department functions in oncology and urology.

4. a) Explain any two special clinics.
   (Or)
   b) What is health insurance Policy?

Section – B
Answer the following questions: 3 x 10 = 30

5. a) Explain the department functions in dietary dialectology and psychiatric ward.
   (Or)
   b) Describe the main functions in causality and emergency ward.

6. a) Discuss in detail the toke of Human resource department in hospital.
   (Or)
   b) Enumerate the Services offered in the outpatient and inpatient department.

7. a) How does the governing board and the committee function in the hospital.
   (Or)
   b) Evaluate how effective our health care system functions in rural area.

CYCLE TEST – SEP 2017
CHAUCER AND ELIZABETHAN AGE

Class   : IM.A. English   Marks: 50
Paper Code: 17PEN01   Time: 2 Hrs

SECTION – A

I. Annotate ALLof the following: (3 x 6= 18)

1. "Full riche he was a stored pryvely;
   His lord wel koude he plesen sublilly
   To yeve and lene hym of his owene good
   And have a thank, and yet a gowne and hood".

2. "A trewe swynkere and good was he,
   Lyvnge in pees and parfit charitee.
   God loved he best, with al his hole herte,
   At alle tymes, thogh him gamed or smerte
   And thane his neighbore right as hymselve.

3. "Embrouded was he, as it were as meede
   Al ful of fresshe floured whyte and reede
   Syngynge he was, or floytynge, al the day
   He was as fresh as is the monthe of May".

SECTION – B

II. Answer any two of the following questions:

(2 x 6 =12)

4. Discuss the character of the Monk.

5. What is Epithalamion in regards with Spenser's poem?

6. Analyse the character of Captain Face in The Alchemist.

SECTION – C

III. Answer any two questions: (2 x 10 = 20)

7. How does Andrew Marvell vindicate love and sexuality in the poem "To His Coy Mistress"?.

8. George Herbert is a religious poet. Discuss.

9. Write a critical appreciation of Epithalamion.

CYCLE TEST – SEP 2017
GRAMMAR AND SEMANTICS

Class : III B.A. English	Marks : 50
Paper Code: 12UEN09	Time : 2 Hrs

SECTION – A

I. Answer any five of the following: (5 x 2 = 10)

1. What is Structuralism?
2. Write a note on Prepositional Phrase with an example.
3. Define Adverbial Phrase with an example.
4. What is TG Grammar?
5. What is Competence and Performance?
6. What is a Kernel sentence? Give an example.
7. Write down the PS rule for Auxiliaries.
8. Derive the Passive sentence 'My pen was stolen by him' from its Kernel.
9. Analyse the constituents of the Verbal Group: 'has been playing'
10. Write down the formula for Interrogative Rule.

SECTION – B

II. Answer all the questions: (4 x 5 = 20)

11. a) What is a Noun Phrase? What are its Constituents?

(or)

b) Draw a tree diagram of the Verbal Group and its Constituents.

12. a) Explain the main tenents of Structuralism.

(or)

b) Give an IC analysis of the following sentences:
   i) The ball is under the table.
   ii) The author writes his last play.

13. a) Explain Passivation and Negation with examples.

(or)

b) Describe Affix-switch rule with an example.

14. a) Supply the Do-support rule for the Kernel sentence: 'Sita accepted your proposal'.

(or)

b) Apply Wh-type rule for the surface structure: 'Why did you punish him?'

SECTION – C

III. Answer any TWO of the following questions:

(2 x 10 = 20)

15. Write a note on IC analysis and its limitations.

16. Make an IC analysis for the following sentences:
   i) Boys and girls may join the group in the evening.
   ii) These girls have been singing nicely.

17. Elaborate Phrase Structure Rules and its constituents.

18. Derive the following sentences from their Kernels:
   i) Was she playing the match?
   ii) Could you solve the puzzle?

CYCLE EXAM – SEPTEMBER 2017
OFFSET PRINTING TECHNOLOGY

Class : III B.Sc. D.P.M	Marks : 50
Paper code : 12UDP10	Time : 2 hrs.

SECTION – A

I. Answer any FIVE questions. (5x2=10)

1. What is sheet control?
2. How many types of feeding are there?
3. Define 3 point registration.
4. What is web offset?
5. Write the types of reel stands.
6. State the importance of web break detectors.
7. What is dancer roller?
8. How many types of side lays are there?
9. Write feeder head components.
10. Write automatic sheet feeder is set in the offset?

SECTION – B

II. Answer ALL the questions. (4x5=20)

11. a) Write short note on automatic sheet control.

(or)

b) State the sequence of operation of stream feeding.

12. a) Write the safety precautions while running the machine.

(or)

b) Explain splicing sequence of flying speed splices.

13. a) Elaborate bustle wheels.

(or)

b) Write shortly on historical development of web offset press.

14. a) Describe the various operations in delivery section.

(or)

b) Explain about sheet registering devices.

SECTION – C

III. Answer any TWO questions. (2x10=20)

15. Explain in detail on feeder head components.

16. Write briefly on early and late sheet detectors.

17. Explain about the types of reel stands with diagram

18. Write short note on web break detectors.

CYCLE EXAM – SEPTEMBER 2017
PRINTING PROCESS & MATERIALS

Class : II B.Sc. D.P.M	**Mark** : 50
Paper code : 12UDP05	**Time** : 2 hrs.

SECTION – A

I. Answer any FIVE questions. (5x2=10)

1. What is paper?
2. State the raw materials used for paper manufacturing?
3. What are cellulose fibers?
4. State various pulping process.
5. Explain about TMP, CTMP and BCTMP.
6. What is board?
7. Define straw board.
8. Define the terms – run ability.
9. What is printability of paper?
10. Write down the size of A5 and A3 paper.

SECTION – B

II. Answer ALL the questions. (4x5=20)

11. a) Explain the manufacturing process of mechanical and chemical pulps.
    (or)
    b) What is fibrous materials and explain common fibers used in paper making process.

12. a) Describe the various operations involved in stock preparation of paper making.
    (or)
    b) Explain briefly the various stages in paper finishing.

13. a) Write the process involved in manufacturing of board.
    (or)
    b) Explain about raw materials for manufacturing board.

14. a) State the properties of paper and boards used in printing finishing operations.
    (or)
    b) Explain the different kinds of printing board.

SECTION – C

III. Answer any TWO questions. (2x10=20)

15. Write short notes on (i) Brightness (ii) Opacity (iii) international paper sizes.

16. Explain in detail about printability of paper.

17. Briefly explain about paper problems and remedies.

18. Explain briefly the different types of board.

CYCLE TEST SEP – 2017
ADVANCED JAVA PROGRAMMING

Class	: I M.Sc., C.S.	**Marks**	: 50
Paper Code	: 17PCS03	**Time**	: 2 Hrs

SECTION – A

Answer all the questions: (4 x 5 = 20)

1. a) What is thread? How do you create a
      multiple thread? Explain.
                 (or)
   b) Elucidate inter thread communication with an
      example.

2. a) Discuss about byte stream classes with an
      example.
                 (or)
   b) Explain InetAddress in java with suitable
      example.

3. a) List out the AWT classes with an example.
                 (or)
   b) Give details on working methods of
      graphics in applet.

SECTION – B

Answer all the questions: (3 x 10 = 30)

6. a) Discuss about TCP/IP server socket in
      detail.
                 (or)
   b) Explain datagram server and client with
      suitable example.

7. a) Elaborate the event classes in java with
      example.
                 (or)
   b) Explain AWT control's fundamental in detail.

8. a) Write a program for multithread with
      explanation.
                 (or)
   b) Write a program to read, write and copy a
      file using character stream.

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CYCLE TEST – 2017
PROGRAMMING IN JAVA

Class : III BCA	**Marks : 50**
Paper Code : 12UCA09	**Time : 2 Hrs**

SECTION – A

I. Answer any five questions (5 x 2 = 10)

1. Define variables.
2. What is package?
3. State the wrapper class.
4. Mention the difference between overloading and overriding.
5. What is a class?
6. Define inheritance.
7. List out the meaning of public static void main.
8. Write the types of errors.
9. Define hiding classes.
10. What do you mean by the finally keyword?

SECTION – B

II. Answer ALL the questions (4 x 5 = 20)

11. a) How packages are created in java? Explain in detail.

(or)

b) What is class? Explain with an example.

12. a) Describe the various forms of implementing interface.

(or)

b) How will you define a subclass and subclass constructor?

13. a) Define final class and finalizer method.

(or)

b) Explain in detail about the life cycle of a thread.

14. a) How to implement the interface in class.

(or)

b) How will you declaring your own exception?

SECTION – C

III. Answer ALL the questions (10 x 2 = 20)

15. a) Give a brief account on interfaces in java.

(or)

b) Summarize the time-scaling.

16. a) Explain packages in detail with example programs.

(or)

b) Discuss about the different forms of inheritance with example.

CYCLE TEST SEP - 2017
BUSINESS LAW

Class	: II B.Com. (CA)	**Marks : 50**
Paper Code	: 08UCC06	**Time : 2Hrs**

SECTION – A
Answer ANY FIVE the questions:　　　　　5x2=10

1. Give the meaning of contract of guarantee.
2. What is agreement?
3. Define performance of contract.
4. What do you meant by valid contract?
5. Define bailment.
6. Give the meaning of contingent contract.
7. What is pledge?
8. Describe the quasi contract.

SECTION – B

Answer ALL the questions:　　　　　4x5=20

9. (a) Explain the reason for discharge of a contract.

(or)

(b) Who can demand the performance of contract?

10. (a) What is bailment? And give its feature.

(or)

(b) Explain the rights of bailer.

11. (a) Explain the essential features of agency.

(or)

(b) Discuss the types of quasi of a contract.

12. (a) Who is an minor?

(or)

(b) Enumerate the types of guarantee.

SECTION – C
Answer ANY TWO questions:　　　　　2x10=20

13. (a) Discuss the types of contract.

(or)

(b) Explain the essential elements of a valid Tender?

14. (a) Describe the types of agent.

(or)

(b) Explain the differences between indemnity and Guarantee.

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CYCLE TEST SEP - 2017
BUSINESS LAW

Class	: II B.Com.	Marks : 50	
Paper Code	: 12UCM05	Time : 2Hrs	

SECTION – A

Answer ANY FIVE the questions:　　5x2=10

1. Give the meaning of contract of guarantee.
2. What is agreement?
3. Define performance of contract.
4. What do you meant by valid contract?
5. Define bailment.
6. Give the meaning of contingent contract.
7. What is pledge?
8. Describe the quasi contract.

SECTION – B

Answer ALL the questions:　　4x5=20

9. (a) Explain the reason for discharge of a contract.

(or)

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10. (a) What is bailment? And give its feature.

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Answer ANY TWO questions:　　2x10=20

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14. (a) Describe the types of agent.

(or)

(b) Explain the differences between indemnity and Guarantee.

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CYCLE TEST SEP-2017
ORGANIC CHEMISTRY-I

Class : I M.Sc Chem.	Mark : 50
Paper Code : 17PCH01	Time : 2 Hrs

SECTION - A

Answer ALL the questions: (6×5=30)

1. a) Differentiate between SN^1 and SN^2 reaction.
   (or)
   b) Discuss the nucleophillic substitution of aliphatic trigonal and vinylic carbon atoms.

2. a) Explain the Hydrolysis of ester.
   (or)
   b) Describe the Williamson reaction.

3. a) Write a short note on Houben Hoesch reaction
   (or)
   b) Discuss the following reactions.
   (i) Gattermann (2)
   (ii) Ziegler alkylation. (3)

4. a) Give the mechanism of Friedel-Crafts acylation and alkylation.
   (or)
   b) Write a note on the following reactions
   (i) Vilsmeir reaction. (3)
   (ii) Gattermann Koch reaction. (2)

   (ii) Gattermann Koch reaction. (2)

5. a) Write the synthesis and structural elucidation of Reserpine.
   (or)
   b) Discuss the synthesis and structural elucidation of Anthocyanins.

6. a) Give the synthesis and structural elucidation of Morphine.
   b) Describe the synthesis of Isoflavones.

SECTION - B

Answer ALL the questions: (2×10=20)

7. (a) Explain the following:
   (i) Von-braun reaction. (5)
   (ii Ambident nucleophile. (5)
   (or)
   (b) Sketch the synthesis and structural Elucidation of Quinine.

8. (a) Discuss the following reactions
   (i) SNAr reaction. (4)
   (ii) Benzyne reaction. (3)
   (iii) Chichibabin reaction. (3)
   (or)
   (b) Draw the structural elucidation of Flavones.

CYCLE TEST- SEP 2017
ALLIED CHEMISTRY - I

Class : II B.Sc. Physics	Marks : 50
Paper Code: 12UCHA01	Time : 2 hrs

SECTION – A

Answer any FIVE questions: (5X2=10)

1. Define Hybridisation.
2. State inductive effect.
3. What do you mean by Racemisation?
4. Write a short note on chiral molecule.
5. State Huckle's rule.
6. How will you prepare pyrrole from acetylene?
7. Mention two uses of furan.
8. Define aromaticity.

SECTION – B

Answer ALL the questions: (4X5=20)

9. a) Discuss the geometry and hybridization of Methane molecule.

(or)

b) Draw the geometrical isomerism in maleic and fumaric acid.

10. a) Explain the geometry and hybridization of Acetylene molecules.

(or)

b) Elaborate the Hyper conjugative and steric effects.

11. a) Explain the nitration of benzene with mechanism.

(or)

b) Discuss the halogenation reaction of benzene.

12. a) Elaborate the Preparation, properties and uses of Thiophene.

(or)

b) What are the elements of symmetry? Explain it types.

SECTION – C

Answer any TWO questions: (2X10=20)

13. a) Discuss the resonance and hyper conjugation effects. (5)

b) Explain the optical activity in tartaric acid. (5)

14. a) Explain the mechanism of acylation of benzene. (4)

b) Write the preparation, properties and uses of pyrrole. (6)

15. a) Explain the Preparation and properties of furan. (5)

b) Elaborate the characteristics of aromaticity with Huckle's rule. (5)

CYCLE TEST – 2017
BUSINESS ECONOMICS

Class	: II BBA	Marks : 50
Paper Code	: 12UECA03	Time : 2 Hrs

SECTION – A

I Answer any five questions: (5X2=10)

1. Define variable cost.
2. What do you mean by opportunity cost?
3. What is explicit cost?
4. What is meant by break even point?
5. What is marginal revenue?
6. Define perfect competition.
7. What is imperfect competition?
8. What do you mean by monopoly?
9. Write any two characteristics of monopolistic competition.
10. State the types of monopoly.

SECTION – B

II Answer the following questions: (4X5=20)

11. a) What are the different types of cost?

    or

    b) What are the assumptions of break even analysis?

12. a) Different between short-run and long-run average cost curve.

    or

    b) Give a brief sketch on the factors determines the cost of production.

13. a) Analyse the features of monopolistic competition.

    or

    b) What are the characteristics of perfect competition?

14. a) What is monopoly? How price is determined under monopoly market?

    or

    b) What is oligopoly? Its characteristics.

SECTION – C

III Answer the following questions: (2X10=20)

15. a) Write the short notes on:
    - ❖ Average revenue
    - ❖ Marginal revenue
    - ❖ Total revenue

    or

    b) Write the short notes on:
    - ❖ Cost of production
    - ❖ Opportunity cost
    - ❖ Fixed cost
    - ❖ Variable cost

16. a) Explain the different kinds of monopoly.

    or

    b) Illustrate how price is determined under perfect competition.

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CYCLE TEST – 2017
PRINCIPLES OF MANAGEMENT

Class	: I BBA	**Marks**	: 50
Paper Code	: 17UBA01	**Time**	: 2 Hrs

SECTION – A

I Answer any five questions: (5X2=10)

1. Define management.
2. What do you understand by scientific management?
3. State the three levels of management.
4. What are the scopes of management?
5. Define organization.
6. What is organizational structure?
7. Define the term planning.
8. Enumerate decision making process.
9. What is directing?
10. Define staffing.

SECTION – B

II Answer the following questions: (4X5=20)

11. a) Discuss the nature of management.

(Or)

b) Distinguish between management and administration.

12. a) What are the different types of planning?

(Or)

b) Discuss the process of MBO.

13. a) Briefly explain the process of organization.

(Or)

b) Discuss briefly the different types of delegation.

14. a) What are the functions of management.

(Or)

b) State the merits and demerits of MBO.

SECTION – C

III Answer the following questions: (2X10=20)

15. a) Discuss briefly the henry fayol's principles of management.

(Or)

b) Explain the importance and scope of management.

16. a) Explain the steps involved in planning process.

(Or)

b) Enumerate the basic principles of organization.

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CYCLE TEST - 2017

MATHEMATICAL STATISTICS

CLASS : I B.Sc MATHS	MAX.MARKS:50
PAPER CODE: 12USTA01	TIME : 2HRS

SECTION-A

I. Answer ANY FIVE questions: (10x2=20)

1. Define Random variable.

2. Explain probability mass function.

3. Explain probability density function.

3. Define characteristic function.

4. Let X be a random variable and C be a constant, then
   $M_{c+x}(t) = e^{ct}M_X(t)$

5. Define Mathematical Expectation.

6. Write any two properties of Normal distribution

7. What are the properties of the regression coefficient?

8. What do you mean by Curve fitting?

9. Prove that the two independent variables are uncorrelated.

10. What is exponential curve? Write its equations.

SECTION-B

II. Answer ALL the questions: (4x5=20)

11. a) A random variable X having the
    following probability distribution is a given by

X	1	2	3	4
p(x)	a	2a	3a	2a

   Find i) value of a   ii) mean value of x.

(or)

   b)) Verify whether $f(x) = \frac{2x}{9}$, $0 \le x \le 3$ can be a density
   function. Hence find its mean.

12. a) Prove that the mathematical expectation of the sum of the two
    random variables is equal to the sum of their expectations.

(or)

   b) State and prove Multiplication theorem.

13. a) The joint distribution of X and Y is given by
    $(x,y) = \frac{x+y}{21}$, $x = 1,2,3$ and $y = 1,2$ find the marginal distributions.

(or)

   b) Define distribution function and mention its properties.

14. a) Explain the properties of characteristics function.

(or)

   b) Explain the properties of MGF.

SECTION-C

III. Answer ALL the questions: (3x10=30)

16. a) Two random variables X and Y have the following joint p.d.f
    f(x,y) = 2-X-Y; 0≤X≤1, 0≤Y≤1
    = 0   ; otherwise
    find the mean values of x and y. Also find the V(x) and V(y) and
    Cov (x,y).

(or)

   b) The joint p.d.f of the two dimensional random variable is

   $f(x,y) = \frac{8}{9}xy$; $1 \le x \le y \le 2$
   = 0   : otherwise
   i) Find the marginal density function of x and y.
   ii) Find conditional density function of x given y and y given x.

17. a) State and prove Tchebychev's inequality.

(or)

   b) Explain the central moments.

-------------------- **All the Best** -----------------

Cycle Test – Sep 2017

Measure theory and Integration

Class : II M.Sc Maths	Marks : 50
Paper Code: 12PMA10	Time : 2Hrs

Section – A

Answer Any Five questions: (5x2=10)

1. Prove that $p + n = t$.
2. If $'f'$ be a bounded variation on $[a, b]$. Then f' exist for almost all x in $[a, b]$.
3. Define Differentiation of integral.
4. Define absolutely continuous function.
5. Write the definition of $\sigma - algebra$.
6. If $A, B \in \mathfrak{B}$ and $A \subset B$, then $\mu A \leq \mu B$.
7. Define positive set.
8. Write the definition of Hahn Decomposition theorem.
9. Define Integration.
10. Write the definition of Signed measures.

Section – B

Answer ALL the questions: (4x5=20)

11. a) If f is continuous on $[a, b]$ and one of its derivative $(say D^+)$ is every where non negative on (a, b) then f is non decreasing on $[a, b]$ ie, $f(x) \leq f(y)$ for $x \leq y$.

(or)

b) Prove that $p - n = f(b) - f(a)$

12. a) If f is of bounded variation on $[a, b]$, then prove that $T_b^a = P_b^a + N_b^a$ and $f(b) - f(a) = P_b^a - N_b^a$.

(or)

b) If f is absolutely continuous on $[a, b]$, then it if of bounded variation on $[a, b]$

13. a) If $E_i \in \mathfrak{B}, \mu E_1 < \infty$ and $E_i \supset E_{i+1} \forall i$. Prove that
$$\mu(\cap_{i=1}^{\infty} E_i) = \lim_{n \to \infty} m E_n$$

(or)

b) State and Prove Hahn Decomposition theorem on signed measure

14. a) Let E be a measurable set such that $0 < \gamma E < \infty$. Show that there is a positive set $A \subset E$ with $\gamma A > 0$.

(or)

b) State and Prove Fatous lemma

Section – C

Answer ALL the questions: (2x10=20)

15. a) State and Prove Vitali covering lemma

(or)

b) If $'f'$ is absolutely continuous on $[a, b]$ and $f'(x) = 0$ a.e then f is constant.

16. a) State and Prove Radon Nikodym theorem

(or)

b) State and Lebesgue Decomposition theorem

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MODEL EXAM – OCT 2017

ELECTRICITY AND MAGNETISM

Class : III B.Sc. Physics   Marks: 75

Paper Code: 12UPH05   Time : 3 Hrs

SECTION – A

I. Answer ALL the questions.   (10x2=20)

1 Define capacitor.
2 Give the uses of a quadrant electrometer.
3 Write the principle of potentiometer.
4 Define Peltier coefficient.
5 Write the principle of Carey Foster Bridge.
6 What is self-inductance?
7 Derive the frequency of LCR circuit.
8 Write the importance of wireless telegraphy.
9 Define skin effect.
10 What is Wattles current?

SECTION – B

II. Answer ALL the questions.   (5x5=25)

11 a)Derive the capacitance of spherical capacitors.

(or)

b)Explain about Kelvin's attracted disc electrometer.

12 a) How to measure Thomson effect and Thomson coefficient in S.G.starling method?

(or)

b) Explain about Carey Foster's bridge.

13. a) Write a note on coefficient coupling.

(or)

b) Describe Anderson's method for the measurement of self inductance of a coil.

14 a) Derive the expression of growth of current in LR circuit.

(or)

b) Explain the concept of wireless telegraphy.

15. a) Discuss the growth of charge in CR circuit.

(or)

b) Explain about energy losses in transformer.

SECTION – C

III. Answer any THREE questions. (3x10=30)

16 Discuss the construction and working of a quadrant electrometer.

17 Given the account of thermodynamics of thermocouple.

18 Explain in detail about Moving Coil Ballistic Galvanometer.

19 Derive the expression for decay of current in LCR.

20 Express the AC current flow in LCR circuit.

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MODEL EXAM – OCT 2017
SOCIAL GROUP WORK

Class : I MSW		Marks : 75
Paper Code: 17PSW03		Time : 3 hrs

SECTION – A

I. Answer all the questions: (5X5=25)

1. (a) What is Group Work? Explain its characteristics.

(or)

(b) Define social group and list out types and functions of group.

2. (a) State the purpose of group work.

(or)

(b) Describe the limitations of group work.

3. (a) Discuss the historical development of group work.

(or)

(b) List out the various techniques used in Programme Planning

4. (a) Write short note on philosophy of social group work.

(or)

(b) Explain the Model of Social group work.

5. (a) Enumerate the roles of social group workers

(or)

(b) Explain group work tools-sociometry and sociogram

SECTION –B

II. Answer all the questions: (5x10=50)

6. (a) Illustrate the stages of group development.

(or)

(b) Explain the types of leadership.

7. (a) Elaborate the group process.

(or)

(b) Give notes on group work process.

8. (a) Elaborate the importance of Recording.

(or)

(b) Enumerate the principles of group work.

9. (a) Discuss the skills of social group workers.

(or)

(b) Detail on applications of group work methods in educational and hospital setting.

10. (a) Write an essay on supervision in group work.

(or)

(b) Elaborate about principles and process of programme planning.

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MODEL EXAMINATION – 2017

GRAMMAR AND SEMANTICS

| Class | : III BA ENGLISH | Mark : 75 |
| Paper Code | : 12UEN09 | Time : 3 Hrs |

SECTION – A

I. Answer ALL the questions in about 30 words each.

(10 x 2 = 20)

1. What is a morpheme?
2. What is a sentence?
3. What are the constituents of noun phrase?
4. What is a Kernnel sentence?
5. Write down the PS rule for Auxiliaries.
6. Define Affixation.
7. What are acronyms?
8. Write any four clippings.
9. How does Leech define semantics?
10. What is meant by utterance meaning?

SECTION – B

II. Answer ALL the questions in about 100 words each.

(5 x 5 = 25)

11. (a) How are words divided into categories?

(or)

(b) Explain functional labels with suitable examples.

12. (a) Discuss Deep and Surface structure.

(or)

(b) Write a summary on PS- Rules governing IC analysis.

13. (a) What are free and bound morphemes? Give examples.

(or)

(b) Mention the properties of the Inflectional suffixes.

14. (a) Write the full form for the following Acronyms. B2C, UNICEF, LASER, BASIC, UNESCO.

(or)

(b) Explain compound formation.

15. (a) Write a paragraph on sentence-meaning and utterance meaning.

(or)

(b) Explain entailment and presupposition.

SECTION – C

III. Answer any THREE of the following questions in about 200 words each.

(3 x 10 = 30)

16. What is grammar and what are the five fundamental units of grammatical structure?

17. Bring out the limitations of structural grammar with reference to T. G. grammar.

18. Give a morphological analysis of the following a) Democratization b) Fulfillment c) Rearrangeable d) Unprofitably e) Dissatisfied

19. Write a detailed note on the use of prefixes in the formation of words in English.

20. Write an essay on sense and reference.

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Model Exam – October 2017

Adobe Photoshop

Class	: II D.P.M.	Mark : 75
Paper Code : 12UDP03		Time : 3 Hrs

SECTION – A

Answer ALL questions: (10X2=20)

1. List out the file formats used in Photoshop.
2. What are the re-touching tools in Photoshop?
3. Define Resolution.
4. Narrate the purpose of hand tool.
5. How to enable grid in Photoshop?
6. Where can we use magic wand tool?
7. Is the usage of transform tool only for scaling?
8. Which are the tools used for creating shapes?
9. Elaborate i) TIFF ii) PSD iii) PDF iv) MPEG
10. Give the list of filters in Photoshop.

SECTION – B

Answer ALL questions: (5X5 = 25)

11. a) Differentiate the vector and raster graphics.

(or)

b) List out and explain the colour correction tools.

12. a) Procedure for working with the scanned image.

(or)

b) How to crop and straighten an image?

13. a) Elucidate defining patterns, shapes and brush.

(or)

b) Narrate the steps for saving images for web.

14. a) Explain about any 5 filters with examples.

(or)

b) Detail about applying distort filter in Photoshop.

15. a) Give the method for linking, merging and flatten layers.

(or)

b) Enumerate creating and modifying text.

SECTION – C

Answer ANY THREE questions: (3X10 = 30)

16. Draw Photoshop window and explain in detail.
17. Narrate the palettes in Photoshop.
18. Brief about Photoshop layers.
19. Explain about the free transform tool.
20. What are the auto commands?

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MODEL EXAMINATION – 2017
ADVANCED JAVA PROGRAMMING

Class	: I M.Sc., CS	Marks : 75
Paper Code : 17PCS03		Time : 3Hr

SECTION-A

I. Answer the following questions: **(5 X 5=25)**

1(a). What is Thread? How do you create a Thread in Java?. Explain.

(or)

(b). Explain byte streams with example.

2(a). Write in detail about frame window in Applet.

(or)

(b). Discuss about layout manager in Applet.

3(a). Describe image observer in detail.

(or)

(b). Explain servlet API.

4(a). Write note on javax.servlet.http package.

(or)

(b). Explain servlet life cycle.

5(a). Discuss architecture of EJB.

(or)

(b). What are the roles of EJB? Explain.

SECTION-B

II. Answer the following questions: **(5 X 10 = 50)**

6(a). What are the event classes in java? Explain.

(or)

(b). Explain TCP / IP server socket with example.

7(a). Discuss on graphics in java.

(or)

(b). Explain on control fundamentals in java.

8(a). Write in detail on image in java.

(or)

(b). How do you create a swing? Explain.

9(a). Implement client / server communication using servlet.

(or)

(b). Explain client / server application using RMI.

10(a). Discuss about EJB session bean in java.

(or)

(b). Explain EJB entity bean with example.

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MODEL EXAM OCT – 2017

PROGRAMMING IN C++

Class	: II B.C.A	Time	: 3 Hrs
Paper Code: 12UCA04		Marks: 75	

SECTION – A

Answer all the questions: (10x 2 =20)

1. Write the structure of a C++ program.
2. Define friend and virtual function.
3. Write the usage of break statement?
4. What are setw and endl?
5. Define inline function.
6. Give the difference between classes and objects.
7. Describe class template.
8. What is abstract class?
9. Define streams.
10. Summarize error handling and functions.

SECTION – B

Answer all the questions: (5 x 5 = 25)

11. a) Write the various kinds of operators.

(or)

   b) Write a short note on OOP.

12. a) Explain function overloading. Give examples.

(or)

   b) Compare call by reference and return by reference.

13. a) Discuss virtual and pure virtual function with an example.

(or)

   b) Elaborate the multiple inheritance with sample program.

14. a) Summarize the stream classes for file operation.

(or)

   b) Elucidate input / output operation in detail.

15. a) Explain about the exception handling mechanism.

(or)

   b) Describe the class template with an example.

SECTION – C

Answer any three questions: (3X10=30)

16. Narrate the sequence, selection and looping statement with an example.

17. Explain the following:
   1. Arrays of objects.
   2. Constructors with example.
   3. Destructor with example.

18. List out the types of inheritance with an example program.

19. State file handling in detail.

20. Discuss the overloading of template function.

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MODEL EXAMINATION – 2017
BANKING THEORY

Class : II B.Com	Max. Marks : 75
Paper Cod: 12UCM07	Time: 3Hrs

SECTION – A

I. Answer ALL the questions: (10 X 2 = 20)

1. Define banking.
2. What is mean by scheduled bank?
3. Define central bank.
4. What is CRR?
5. Write short note on of e-banking?
6. Define mobile banking.
7. What is internet banking?
8. What is ATM?
9. What is mean agricultural banking?
10. Give the meaning NABARD

SECTION – B

II. Answer ALL the questions: (5 X 5 = 25)

11. (a) Write short note on role of banking of banking in the economic development of a country.

(or)

(b) What are the features of banking?

12. (a) Different between commercial banks and central bank.

(or)

(b) Explain the importance central bank?

13. (a) What are the benefits of E- banking?

(or)

(b) What is mobile banking? State its services.

14. (a) State the features of ATM.

(or)

(b) Explain the mechanism of ATM.

15. (a) What are the advantage of co operative Society?

(or)

(b) What are the important objectives NABARD?

SECTION – C

III. Answer any THREE questions: (3 X 10 = 30)

16. Explain the functions of commercial banks.
17. What are the functions of central bank? Explain.
18. What are the advantages of E-banking?
19. Describe the major issues internet banking?
20. Explain the functions of NABARD.

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MODEL TEST 2017

MARKETING

Class : II B.COM CA   Marks:75

Paper Code: 08UCCS01   Time: 3 Hours

SECTION – A

I. Answer all the Questions   (10×2=20)

1. Define marketing.
2. Mention any two objectives of marketing.
3. Write any two differences between storage and warehouse.
4. What is meant by assembling?
5. Explain packaging.
6. State labelling.
7. What do you meant by product planning?
8. Mention any two importance of product testing.
9. What is product life cycle?
10. How is product diversification.

SECTION–B

II. Answer ALL the Questions   (5×5=25)

11. (a) Explain the importance of marketing.

(Or)

(b) Explain product mix strategies?

12. (a) What are the services of bonded warehouse?

(Or)

(b). Explain any five buying methods

13. (a) List out the advantages of standardisation and Grading.

(Or)

(b) Explain the types of packaging.

14. (a) What are the importance of product planning?

(Or)

(b) What are the basic requirements of a new product?

15. (a) What are the benefits of product life cycle?

(Or)

(b) Why do company go for diversification?

SECTION – C

II. Answer any three Questions   (3×10=30)

16. Explain the functions of marketing.

17. Explain the types of transport.

18. What are the characteristics of packaging?

19. What are the reasons for failure of a new product?

20. Explain the stages of product life cycle.

MODEL EXAM - 2017

AGRICULTURAL CHEMISTRY

Class	: III B.Sc. Chem.	Marks : 75
Paper Code: 12UCHS03		Time : 3 Hrs

SECTION – A

Answer ALL the questions: (10x2=20)

1. Mention any four micro nutrients in plant growth.

2. Define manures.

3. Write on Oil cakes.

4. Give three natural Fertilizers.

5. State Toxicity.

6. Give two examples for Organic Pesticides.

7. What are the Compounds used in Fungicides?

8. Mention Bordeaux mixture.

9. How will you find out acidity of soil?

10. What is soil?

SECTION – B

Answer ALL the questions: (5x5=25)

11. a) What are the Natural Fertilizers? Give examples.

(or)

b) Explain the effects of Nitrogen on the plants' growth.

12. a) Write the Difference between Fertilizers and Manures.

(or)

b) Describe the handling practices of manures.

13. a) Draw and explain the structure of DDT.

(or)

b) Write a note on Pyrethrin and Nicotine.

14. a) Explain Copper Compounds.

(or)

b) Give a note on Rodenticides and Reppllents.

15. a) Write the Properties of soils.

(or)

b) Explain the soil minerals and soil temperature.

SECTION-C

Answer ANY THREE questions: (3x10=30)

16. Discuss about Urea and Triple super phosphate.

17. Write note on:

(i) Farm yard Manures. (5)

(ii) Blood meals. (5)

18. Draw and explain the structure of BHC and Pyrethirum compounds.

19. Discuss about the Herbicides.

20. Explain the Soil testing and Soil water.

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MODEL EXAM-2017

INORGANIC CHEMISTRY-II

Class	: II M.Sc. Chemistry	Max. Marks:75	
Paper Code: 12PCH07		Time	: 3 Hrs

Answer ALL the questions:

Section- A (5 x 5 = 25)

1. (a) What is metallo carborane? How is it prepared?
   Explain its structure.

   (or)

   (b) Write a note on Wades rule.

2. (a) Discuss the principle involved in PES.

   (or)

   (b) Write a note on Photo substitution reactions.

3. (a) Discuss the effect of RS coupling on the d^2
   configuration and deduce the ground term.

   (or)

   (b) What is spin–orbit coupling?

4. (a) Discuss the various types of titrations involved in
   Amperometry.

   (or)

   (b) What is EDTA titrations? Explain the methods
   which are employed for carrying out EDTA
   titrations.

5. (a) Give the limitations of IR spectroscopy.

   (or)

   (b) Elaborate the structural elucidation of urea.

Section-B

Answer ALL the questions: (5 x 10 = 50)

6. (a) How are Boranes and Carboranes classified
   on the basis of their skeletal structures?
   Explain them with examples.

   (or)

   (b) What is Metal clusters? Discuss the
   structure of $[Re_2Cl_8]^{2-}$.

7. (a) Explain: i) The PES of HI CO H_2O and NH_3, (5)
   ii) Photo redox reactions and Photo
   isomerisation processes. (5)

   (or)

   (b) Write about the applications of ESCA.

8. (a) Construct the Orgel diagram for d^2
   configuration and explain the hole formalism.

   (or)

   (b) Explain the difference between Orgel and
   Tanabe–Sugano diagram with examples.

9. (a) Write about the apparatus used in
   polarography. What are the advantages of DME?

   (or)

   (b) i) Discuss in detail various types of currents.
   ii) How can the migration current be eliminated?

10.(a) Discuss the selection rule of Raman and IR
   spectra. How these spectra are useful in the
   determination of the structure of the
   following: i) N_2O, ii) NO_3, iii) NSF_3.

   (or)

   (b) Explain the use of IR and Raman spectroscopy in
   the structural elucidation of thiourea and cyanide.

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MODEL EXAMINATION – 2017
PRINCIPLES OF MANAGEMENT

Class	: I BBA	Marks	: 75
Paper Code	: 17UBA01	Time	: 3 Hrs

SECTION – A

I Answer all the questions: (10X2=20)

1. Define management.
2. What is called unity of command?
3. Explain planning.
4. Enumerate the concept of decision making.
5. What is organizational structure?
6. Write a short note on delegation of authority.
7. Who is leader?
8. Distinguish line and staff authorities.
9. Why coordination is needed?
10. What are the steps in controlling?

SECTION – B

II Answer the following questions: (5X5=25)

11. a) Distinguish between management and administration.

(Or)

b) What are the functions of management.

12. a) Bring out the advantages of planning.

(Or)

b) Discuss the process of MBO.

13. a) State the various methods of departmentation.

(Or)

b) What do you meant by line and staff organization and its merits?

14. a) What are the different styles of leadership?

(Or)

b) Why coordination plays a vital role in an organization?

15. a) Why control important in a management?

(Or)

b) Detail the principles of directing.

SECTION – C

III Answer any three questions: (3X10=30)

16. Explain the henry fayol's principles of management.

17. Analyse the different types of plan in business.

18. Enumerate the basic principles of organization.

19. Discuss maslow's need hierarchy theory of motivation.

20. Evaluate the traditional and modern methods of controlling.

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தோன் போஸ்கோ கல்லூரி

இளங்கலைமாணிட் - மூன்றாம் பருவம்
மாதிரித்தேர்வு

தாள் - 3 காப்பியங்களும் புதிலழும்

காலம் : 3 மணி   12UFTA03   மதிப்பெண் -75

பகுதி - அ

I. அனைத்திற்கும் விடையளி:   (10X2=20)

1. "அடம்பொழில் புகல்லலை ஆதியூரின்
   மழைத்தொன்மெம் பெயர்ப்...... இடம் சுட்கே.

2. "............ புல்லாய்த்தபி மிடலரி
   உழையில் சிக்கி மிடநடுதா மிடநடுதது" - இடம்
   சுட்கே.

3. மெய்ப்பொருள் நாயனாரின் பண்பு நலன்களைக்
   கூறுக.

4. இறைவன் அழதரிக்க மரியாள் கொண்டியது யாது?

5. கடம்பூர்கள் எதுகையம்பர்?

6. குரங்கம்பியின் குன்றை யாது?

7. பெரிய புராணத்தின் வேறு பெயர் என்ன?

8. கம்பராமாயணம் முதன் முதலில் எங்கு
   அரங்கேற்றப்பட்டது?

9. யாப்பின் உறுப்புகள் எத்தனை?

10. அணி என்ற சொல்லின் பொருள் யாது?

பகுதி - ஆ

II. அனைத்து வினாக்களுக்கும் விடையளி:

11. அ) கோப்பெருஞ்சோழன் கண்ட திக்கணாயின்
       திறத்தை எழுதுக
                                (அல்லது)
    ஆ) சாதுவன் ஆதியைரின் வரலாற்றைக் கூறு.

12. அ) முத்தநாதலை மெய்ப்பொருள் நாயனார்
       தொழுது வென்ற நிலைமலைை விளக்குக.
                                (அல்லது)
    ஆ) மரியாளுக்கு வந்த மணத்தூது பற்றி
       விளரிக்க.

13. அ) அழும்பில்வேரின் மதிநுட்பத்தினை விளரி.
                                (அல்லது)
    ஆ) குரங்கம்பியின் பணியு நலன்களை விளக்குக.

14. அ) சமணர்களின் தமிழ்த்தொண்டினை எழுதுக.
                                (அல்லது)
    ஆ) வாழ்த்து அணி எத்தங்குக்கான்டென் எழுதுக.

பகுதி - இ

III. எவையேனும் மூன்று வினாக்களுக்கு விடையளி   (10X3=30)

15. அ) தலைவாகளின் வகைகளைக் கூறி சான்று
       தருக.
                                (அல்லது)
    ஆ) பெரிய புராணம் - குறிப்பு வரைக.

16. அ) வழக்குரைக காதையில் இடம் பெற்றுள்ள
       காட்சிகளைக் தொகுத்துரைக்க

17. அ) இராமன் கண்டு மகிழ்ந்த வழிநடைக்
       காட்சிகளை விளக்குக.

18. அ) வழிசிமாநகரம் புகழத்தில் செய்திகளைத்
       தொகுக்க.

19. அ) மெய்ப்பொருள் நாயனாரின் பெருமைகளையும்
       அவரது சிவத்தொண்டையும் எடுத்துரைக்க.

20. அ) சீகாலின் வகைகளைத் தக்க சான்றுடன்
       விளக்குக.

CYCLE TEST – FEBRUARY 2018
SPACE SCIENCE

Class	**: I PHYSICS**	**Max Marks : 50**
Paper Code : 17UPHS02		**Time: 2 Hrs**

SECTION – A

I. Answer any FIVE questions: **(5 x 2 = 10)**

1. What are sun spots?
2. Name the types of star closters.
3. What is constellation?
4. Define variable star.
5. What is natural satellite?
6. What are binary Stars?
7. What are solar plages?

SECTION – B

II. Answer any FOUR questions: **(4 x 5 = 20)**

8. Explain solar prominences.
9. Describe the structure of the moon with diagram
10. What are globular cluster? Explain them.
11. Explain spiral and irregular galaxies.
12. Give the features of photosphere and chrmosphere.

SECTION – C

III. Answer any TWO questions: **(2 x 10 = 20)**

13. Discuss the types of variable stars.
14. Explain the structure of the sun.
14. Explain in detail about binary stars.

CYCLE TEST – FEBRUARY 2018
QUANTUM MECHANICS

Class : III PHYSICS
Paper Code : 12UPH09

Max Marks : 50
Time: 2 Hrs

SECTION –·A

I. Answer any FIVE questions: (5 x 2 = 10)

1. What is meant by tunnelling effect?
2. What is linear harmonic oscillator?
3. Draw a diagram of a square well potential of infinite depth.
4. Define Hamiltonian operator.
5. Define parity operator.
6. What is meant by zero point energy of LHO?
7. Define rigid rotator.
8. Write the relation between Cartesian and spherical polar coordinates.

SECTION – B

II. Answer any FOUR questions: (4 x 5 = 20)

9. 10kv electrons are passed through a thin flim of metal for which the atomic spacing $5.5*10^{-11m}$. what is the angle of deviation of first order diffraction maximum?

10. Calculate the probability of transmission that a 1.0 eV electron will penetrate a potential barrier of 4.0 eV when the barrier width is $2.0*10^{-10}$.

11. Find the de-Broglie wave length associated with an electron of mass $9.1*10^{-31}kg$ moving with velocity $10^{7}m/s$.

12. Derive the schrodinger wave equation for rigid rotator.

13. Explain barrier penetration problem.

SECTION – C

III. Answer any TWO questions: (2 x 10 = 20)

14. Obtain the time independent schrodinger wave equation for Hydrogen atom.

15. Explain LHO.

16. Derive the commutation rules for the component of orbital angular momentum(L).

தமிழ்த்துறை

இளங்கலை முதலாமாண்டு – இரண்டாம் பருவம்

சுழற்சித் தேர்வு - பிப்ரவரி 2018

தாள் : இடைக்கால இலக்கியங்களும் சிறுகதையும்

காலம் : 2 மணி   **17UFTA02**   மதிப்பெண்-50

பகுதி - அ

I. அனைத்து வினாக்களுக்கும் விடையளி:

(5X2=10)

1. 'நட்சத்திரக் குழந்தை' எனும் சிறுகதையின் ஆசிரியர் யார்?
2. 'அன்பளிப்பு' சிறுகதையில் இடம்பெறும் கதாப்பாத்திரங்களைக் குறிப்பிடுக.
3. ஆண்டி வழக்கமாக பாடும் பாடல் எது?
4. சைவ சமயக் குரவர்களைச் சுட்டுக.
5. முதலாழ்வார்கள் மூவர் யாவர்?

பகுதி - ஆ

II. அனைத்து வினாக்களுக்கும் விடையளி: (4X5=20)

6. அ) குழந்தை ரோஹிணி கண்டு ரசித்த மாலைநேரக் காட்சியை எழுதுக.

(அல்லது)

ஆ) 'விடியுமா' சிறுகதையில் நேரிடும் துன்ப நிகழ்வினை விளக்குக.

7. அ) பெரியநாயகி உலா வந்த பாங்கினை எழுதுக.

(அல்லது)

ஆ) அம்பையின் பயண அனுபவங்களை விளக்குக.

8. அ) டாக்டர் கே - உடன் காட்டிற்குள் சென்ற போது நடந்த நிகழ்வினை எழுதுக.

(அல்லது)

ஆ) சைவத் திருமடங்களின் தமிழ்ப்பணி குறித்து எழுதுக.

9. அ) நாலாயிரத் திவ்யப் பிரபந்தம் - விளக்கம் தருக.

(அல்லது)

ஆ) இலக்கண நூல்களை விளக்குக.

பகுதி-இ

III. எவையேனும் இரண்டு வினாக்களுக்குக் கட்டுரை வடிவில் விடையளி.   (2X10=20)

10. 'காலனும் கிழவியும்' என்ற சிறுகதையில் புதுமைப்பித்தன் கூறும் செய்திகளைத் தொகுத்துரைக்க.

11. கி. ராஜநாராயணனின் 'நாற்காலி' சிறுகதையை விவரிக்க.

12. பன்னிரு திருமுறைகள் குறித்துக் கட்டுரைக்க.

CYCLE EXAM - 2018
MICROPROCESSORS AND MICROCONTROLLERS

Class	: I M.Sc. Physics	**Marks:50**
Paper Code	:17PPH06	**Time: 2 Hrs**

PART – A

I. Answer ALL the questions: (6x1=6)

1. Which of the following is not an ALU function?
   a) Addition
   b) Shifting
   c) Power up
   d) Complement

2. For 8255 PPI IC, MODE 1 represent for
   a) Bi-directional I/O data transfer
   b) Simple I/O
   c) I/O with handshake
   d) All of above

3. In 8255 PPI, I/O data transfer takes place via
   a) Parallel
   b) Series
   c) Interface
   d) None of these

4. In flag register of 8051, bit B3 and B4 used for
   a) CY/ AC
   b) AC/FO
   c) RS1/RS2
   d) RS2/OV

5. What is meant by microcontroller?

6. Which is the highest priority interrupt determined by polling·sequence in 8051?
   a) IE0
   b) TF0
   c) IE1
   d) TF1

PART –B

II. Answer all the questions (4x5=20)

7. a) Write a note on closed loop control system.
   (OR)
   b) Explain the open loop control system with an example.

8. a) Explain the functional block diagram of 8255 PPI.
   (OR)
   b) Discuss about the operating panel of temperature monitor system.

9. a) Explain the four different timer modes in 8051.
   (OR)
   b) Discuss the key feature of 8051.

10. a) Write a note on I/O ports of 8051.
    (OR)
    b) Discuss about the interrupt structure of 8051.

PART –C

III. Answer the questions (3x8=24)

11. a) With a neat diagram, discuss about μP based crystal growth control system.
    (OR)
    b) Elaborate μP temperature monitoring system with needed block diagram.

12. a) Discuss the functions of A/D conversion using ADC 0809 interface.
    (OR)
    b) Discuss the functions of major hardware components of 8051 μC.

13. a) Explain the memory organization of 8051 μC.
    (OR)
    b) Explain in detail about special function registers.

CYCLE TEST
URBAN COMMUNITY DEVELOPMENT

Class : II MSW **Marks** : 50
Paper Code: 12PSW16C **Time** : 2 Hrs

SECTION – A

I. Answer ALL the questions. (4x5=20)

1. (a) Write the meaning of UrbanCommunity Development.

(or)

(b) What are the characteristics of a city?

2. (a) Define slum and explain its approaches.

(or)

(b) Elaborate the application of social work methods in urban community.

3. (a) Narrate the role of community workers.

(or)

(b) Discuss Urban Community and explain its characteristics.

4. (a) Point out the problems of prostitution and drug addiction.

(or)

(b) Mention the problems of housing and juvenile delinquency

SECTION – B

II. Answer ALL the questions (3x10=30)

5. (a) Discuss Rural – Urban contrast.

(or)

(b) Define city and explain its classification.

6. (a) Explain the culture and classification of slum.

(or)

(b) Enumerate the theories of Urbanization.

7. (a) Elaborate urbanization and urbanism.

(or)

(b) As a social worker how do you see urban problems? - Write some commends to solve it.

DON BOSCO COLLEGE

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Cycle Test – 2018
Human Resource Management

Class	: I MSW	Max. Marks: 75
Paper Code: 17PSW09A	Time	: 2 hrs

Section – A

Answer Any Three Questions (3 X 10 = 30)

1. Enumerate the principles of Management
2. Explain the functions of Management
3. Enumerate the reasons to state that human resources are better than other resources.
4. Explain the recruitment process
5. List out and explain the methods of on-the job training

Section – B

Answer All questions (3 X 15 = 45)

6. a) List out and explain the methods of off- the job training

Or

b) Enumerate the roles of HR

7. a) List out your learning from your observation visits to the industries

Or

b) Present the historical development of human resource management

8. a) List out your learning on HRM from the national symposium

Or

b) Enumerate the distinction between PM and HRM

CYCLE TEST FEB - 2018
FOUNDATION ENGLISH - IV

Class II BA/B.SC/B.COM	Marks: 50
Paper Code: 12UFEN04	Time :2 Hrs

SECTION-A (1x15=15)

I) Answer the following:

A) Choose the correct meaning with their synonyms:

1) **Wretched** a) very happy b) joy c) miserable d) great

2) **Dismay** a) distress b) encourage c) nerve d) satisfaction

B) Choose the correct meaning with their Antonyms:

1) **Minimize** a) maximize b) short c) reduce d) small

2) **Vanish** a) disappear b) dissolve c) appear d) fade

II) Choose the correct meanings of the following expressions:

1) **Nevertheless:** at a short notice/ not less than that/ however

2) **Liable to:** likely to / lying with/ lovable towards

III) Fill in the blanks with suitable words given in brackets:

1) The police -------------- (personnel/ personal) talked in a tone of authority.

2) The lion-------------- (remained/reminded) at large for more than a day.

IV) State whether the following statements are True or False.

1) The lion was captured by Lamb.

2) Rex is the name of the author's dog.

V) Match the following words with their meanings

1) Condemn - confront

2) Encounter- a state of great excitement

3) Breathless- difficult to explain

4) Mysterious- express disapproval

VI) Identify the Error

1) The God is costly

2) Vimala is a MA graduate

3) John Milton was one of greatest poets in Elizabeth era

4) Two and two------- four (make/makes)

5) No news.....good news (is/are)

SECTION- B (3X5=15)

VII) Answer the following questions in about100 words

1 a) Explain the sad end of Desdemona and Othello.

(Or)

b) What does Portia say on the quality of mercy?

2 a) Write the features of minutes writing.

(Or)

b) You have completed your post graduation in computer science. Apply for the post of a computer programmer in Infosys.

3 a) Give five expressions of Complaining

(Or)

b) Give five expressions at leaving someone for a short time.

Section- C (2x10=20)

VIII) Answer any TWO of the following questions in about 300 words each.

1) Describe how the fiercest lion escaped and how it was captured?

2) How did Matilda's Infirmity cost her life?

3) Write an essay on "If You are Wrong; Admit it."

CYCLE TEST FEB - 2018
FOUNDATION ENGLISH - IV

Class II BA/B.SC/B.COM	Marks: 50
Paper Code: 12UFEN04	Time :2 Hrs

SECTION-A (1x15=15)

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Section- C (2x10=20)

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3) Write an essay on "If You are Wrong; Admit it."

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CYCLE EXAM – FEBRUARY 2018
INTRODUCTION TO INTERNET

Class : I B.Sc. D.P.M   Mark : 50
Paper code : 17UDP02   Time : 2 hrs.

SECTION – A

I. Answer any FIVE questions. (5x2=10)

1. Define website.
2. Explain file format.
3. Describe HTML frames.
4. Clarify IMG tag.
5. Write down the formats of colors in HTML.
6. Write a small program using frames.
7. Describe hyperlink.
8. Explain graphics tools.
9. Explain HTML backgrounds.
10. How to change marquee direction?

SECTION – B

II. Answer ALL the questions. (4x5=20)

11. a) Give examples of table creation.

(or)

b) Write about the frame system.

12. a) Give a short note about Image tag and its attributes.

(or)

b) Write a note on HTML buttons.

13. a) Describe HTML backgrounds with sample program.

(or)

b) Explain briefly HTML fonts with attributes.

14. a) Create a webpage for birthday greeting using IMG elements.

(or)

b) Create a college prospectus image, pictures and text etc.

SECTION – C

III. Answer any TWO questions. (2x10=20)

15. Explain about color in HTML with program.

16. Write a note on form and controls with program.

18. How do you publish and maintain a website?

CYCLE TEST – FEB 2018
PACKAGING TECHNIQUES

Class : III B.Sc, DPM	Marks : 50
Paper Code : 12UDP12	Time : 2 Hrs

SECTION- A

Answer any FIVE questions: (5X2=10)

1. Define folding carton.
2. Mention the types of steel rule die.
3. What is tensile strength?
4. Define varnishing.
5. Write short note on lamination.
6. List out the corrugated box styles.
7. Mention the manufacturing procedure of rigid box.
8. Define adhesive.
9. List out the types of closures.
10. Write the purpose of cushioning material.

SECTION- B

Answer ALL the questions: (4X5=20)

11. a) Explain the tools and appliances for die making.

(Or)

b) Elucidate tensile strength with diagram.

12. a) Explain in detail about lamination with diagram.

(or)

b) Describe the styles of corrugated box with diagram.

13. a) Explain in detail on conversion of corrugated boards into boxes.

(or)

b) Write in detail about the types of rigid box with diagram.

14. a) Describe the types of closures with diagram.

(or)

b) Write the importance and purpose of cushioning materials.

SECTION-C

Answer any TWO questions: (2X10=20)

15. Explain the types of folding cartons with diagram.
16. Explain the types of varnishing in details.
17. Write in detail about the dispensers devices with diagram.

CYCLE TEST FEB. – 2018
DATA MINING TECHNIQUES

Class	: II M.Sc.C.S.	Marks	: 50
Paper Code	: 17PCS08	Time	: 2 Hrs

SECTION – A

Answer all the questions: (4 x 5 = 20)

1. a) Explain briefly user defined composite.

(or)

b) Give a brief note on Scree Plot Criterion.

2. a) Explain the combination function in weighted and unweighted voting.

(or)

b) What is Classification? Explain various tasks in classification.

3. a) Write short notes on decision tree.

(or)

b) Develop R script for the following to get the input from user and perform numerical operations. (MAX, MIN, AVG, SUM, SQRT, ROUND).

4. a) Develop R script to perform statistical operations (Mean, Median, Mode and Standard deviation).

(or)

b) Elucidate the single linage cluster.

SECTION – B

Answer all the questions: (3 x 10 = 30)

5. a) Discuss about K – Nearest Neighbor Algorithm.

(or)

b) Give a brief note CART Algorithm.

6. a) Develop R script to perform data pre-processing operations
   i) Handling Missing data
   ii) Min-Max Normalization

(or)

b) Discuss about CART Algorithm applied to real data.

7. a) Give a detailed note on the major Clustering methods with example.

(or)

b) Explain the working of hierarchical clustering methods.

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CYCLE TEST – 2018
SBEC V – SOFT SKILLS

Class : III BCA	Marks : 50
Paper Code : 12UCAS05	Time : 2 Hrs

SECTION – A

I. Answer any five questions   **(5 x 2 = 10)**

1. Describe the term "job interview".
2. Define interview process.
3. What is the difference between learned skills and intuitive skills?
4. List the types of interview questions.
5. Define conversation.
6. What is a GD?
7. Differentiate between GD and debate.
8. List out the steps in GD.
9. What do you meant by exchanging opinions?
10. Describe accepting and rejecting proposals.

SECTION – B

II. Answer ALL the questions   **(4 x 5 = 20)**

11. a) What are the characteristics of the job interview?

(or)

b) Explain the strategies of practices.

12. a) Discuss about good manners and positive behavior of interviewer.

(or)

b) What are the alternative interview formats?

13. a) What are the different strategies in group discussion?

(or)

b) Explain the importance of GD.

14. a) Discuss about leadership skills in GD.

(or)

b) How to exchange suggestions and proposals in GD?

SECTION – C

III. Answer ALL the questions   **(2 x10 = 20)**

15. a) Explain about the pre-interview preparation techniques.

(or)

b) How to project a positive image of the employer?

16. a) Illustrate the characteristics of successful GD.

(or)

b) Explain selection group discussion.

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CYCLE TEST – 2018
OPERATING SYSTEM

Class   : II B.C.A.   Marks : 50
Paper Code: 12UCA08   Time   : 2 Hrs

SECTION – A
Answer any FIVE questions: (5x 2 =10)

1. Differentiate between fixed and dynamic partition.

2. Define page and segment.

3. What is virtual memory?

4. List out the requirement of memory management.

5. What are internal and external fragmentations?

6. List out the types of processor scheduling.

7. What is turnaround and response time?

8. What are the classifications of multiprocessor scheduling?

SECTION – B
Answer ALL the questions: (4 x 5 = 20)

9. a) Give details on page with suitable example.
   (or)
   b) Discuss about segmentation with example.

10. a) Explain operating system software with example.
    (or)
    b) Discuss about various types of processor scheduling.

11. a) Explain I/O management system in OS.
    (or)
    b) List out the types of processor and explain.

12. a) Discuss about virtual memory in OS.
    (or)
    b) Explain disk scheduling with an example.

SECTION – C
Answer any TWO questions: (2 x 10 = 20)

13. Discuss the basic memory partition method with an example.

14. Explain hardware and control structure in memory management.

15. Elaborate the scheduling algorithm with an example.

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CYCLE TEST – FEB 2018

FINANCIAL MARKETS AND INSTUTUIONS

Class	: I M.Com	Max. Marks : 50
Paper Code	: 17PCME03	Time : 2Hrs

SECTION – A

I. Answer ALL Questions: 4 x 5 = 20

1. a. What is Merchant Banking? Discuss the various functions performed by merchant banker.

   (or)

   b. Explain the code of conduct of merchant banker.

2. a. What do you mean by the term "Credit Rating"? What are its features?

   (or)

   b. Explain the features of Venture Capital finance?

3. a. State the functions of Financial Markets?

   (or)

   b. What are financial Instruments? How are they classified?

4. a. Describe the mode of operations in call money market.

   (or)

   b. Explain the mechanism involved in Government securities.

SECTION – B

II. Answer any THREE Questions: 3 x 10 = 30

1. Explain the role of merchant banker in capital market.

2. Briefly explain the stages of Venture Capital Financing.

3. Explain the various non banking statutory financial organizations.

4. What are the advantages of credit rating?

5. Describe the mode of operations in call money market.

Cycle Test – 2018
Entrepreneurial Development

Class	: III B.Com	Max. Marks: 50	
Paper Code: 12UCM16		Time	: 2 hrs

Section – A

Answer any FIVE questions   (5 X 2 = 10)

1. Define the term entrepreneur.

2. Who is an "Intrapreneur"?

3. State any four qualities of a successful entrepreneur.

4. Expand DIC, SIDBI, NSIC, TIIC.

5. Define "Women Entrepreneur".

6. Mention any three objectives of EDPs.

7. What is project report?

8. What are the elements of entrepreneurs?

Section – B

Answer All questions   (4 X 5 = 20)

9. a) Distinguish between entrepreneur and entrepreneurship.

(or)

b) Bring out the characteristics of an entrepreneur.

10. a) Discuss the role of entrepreneur in economic development.

(or)

b) Explain the contents of the project report.

11. a) Explain the need for entrepreneurship development in India.

(or)

b) Briefly discuss the various categories of entrepreneurs according to motivation.

12. a) Enumerate the various functions of SIPCOT.

(or)

b) Explain the significance of project report.

Section – C

Answer any TWO questions   (2 X 10 = 20)

13. Discuss the different classification of projects.

14. Discuss the problems of women entrepreneurs.

15. What are DICs? Describe its functions.

CYCLE TEST – 2018
COMPANY LAW

Class	: II BBA	**Marks**	: 50
Paper Code	: 12UBA15	**Time**	: 2 Hrs

SECTION – A

I Answer any five questions: (5X2=10)

1. Define by Prospectus.
2. Write a brief note on statement in lieu of prospectus.
3. What is meant by mis-statement of prospectus?
4. Enumerate transfer of shares.
5. Explain allotment of shares
6. Who is director?
7. Who are first director?
8. State any four reasons for not eligible to become a director.
9. What are the rights of members?
10. Mention any six qualities for director.

SECTION – B

II Answer the following questions: (4X5=20)

11. a) State the various types of debentures.

(Or)

b) Statement – in – lieus – of prospectus-Mis statement in prospectus.

12. a) Differences between shares, debentures and stock.

(Or)

b) Bring out the various kinds of resolutions.

13. a) How to be allotted a shares.

(Or)

b) Detail in preference shares and equity shares.

14. a) What are the duties of directors?

(Or)

b) Bring out the rights and liabilities of director.

SECTION – C

III Answer the following questions: (2X10=20)

15. a) Briefly explain contents of prospectus.

(Or)

b) State the various steps for transfer of shares.

16. a) What are the liabilities of members & memberships?

(Or)

b) Describe the various formalities for appointing a new director.

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CYCLE TEST – 2018
ORGANIZATIONAL PSYCHOLOGY

Class	: I BBA	Marks : 50	
Paper Code	: 17UBA03	Time : 2 Hrs	

SECTION – A

I Answer any five questions: (5X2=10)

1. Define morale.
2. What is meant by job satisfaction?
3. Enumerate the concept of stress.
4. Explain environment.
5. Write a short note on work environment.
6. Who conducted Hawthorne experiment?
7. Why housekeeping is needed?
8. State any four reasons for job dissatisfaction.
9. What are the benefits for job satisfaction?
10. Mention any two types of environment.

SECTION – B

II Answer the following questions: (4X5=20)

11. a) Explain the determinants of morale.

(Or)

b) Bring out the various personal factors of job satisfaction.

12. a) State the factors determining the morale of employees.

(Or)

b) Difference between internal and external environment.

13. a) State the importance of housekeeping.

(Or)

b) What measures should be taken to ensure employees do not suffer from work-related fatigue?

14. a) Detail the different approaches to managing stress.

(Or)

b) Mention the various purpose of housekeeping method.

SECTION – C

III Answer the following questions: (2X10=20)

15. a) Explain the personal and organizational factors that cause stress.

(Or)

b) Discuss the methods available for the measurement of morale of employees.

16. a) Describe in detail hawthorne experiments and their importance.

(Or)

b) Explain the methods of managing stress.

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CYCLE TEST FEB – 2018

ALLIED CHEMISTRY-II

Class	: II B.Sc. Physics	Marks : 50
Paper Code: 12UCHA02		Time : 2 Hrs

SECTION – A

Answer Any FIVE questions: (5x2=10)

1. What is Carbohydrate? Give an example.
2. Define Amino acid.
3. How will you prepare Glycine?
4. State the uses of cellulose.
5. Indicate any two uses of penicillin.
6. Define anaesthetics. Give an example.
7. How will you prepare streptomycin?
8. Mention any one treatment of cancer.

SECTION – B

Answer ALL the questions: (4x5=20)

9. a) Write a short note on Starch.

(or)

b) Explain the properties of Cellulose.

10. a) Discuss the preparation of Glycine.

(or)

b) Write a short note on Diabetes.

11. a) Explain the preparation of sulphadiazine.

(or)

b) Write a note on analgesics and hypnotics.

12. a) Explain the classification of Carbohydrates.

(or)

b) Discuss the treatment of Cancer.

SECTION-C

Answer Any TWO questions: (2x10=20)

13. Explain the interconversion of Glucose to Fructose and Fructose to Glucose.

14. Discuss the applications of Penicillin and Chloramphenicol.

15. i) Give the preparation of sulphafurazole. (5)

ii) Write a short note on AIDS. (5)

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CYCLE TEST – FEB - 2018
FOOD AND NUTRITION

Class : I B.Sc. Chem	Marks: 50
Paper Code: 17UCHS01	Time : 2 Hrs

SECTION – A
Answer any FIVE questions: (5x2=10)
1. Classify the Vitamins.
2. What is mean by scurvy?
3. Write the source of Vitamin-A
4. Give any two example for biological function of Magnesium.
5. Define Adulteration.
6. What is meant by Nutrients?
7. Narrate the causes of Dyspepsia.
8. Define Food Poisoning.

SECTION – B
Answer ALL the questions: (4x5=20)
9. a) Explain the sources and deficiency diseases of Vitamin-E.
   (or)
   b) State the deficiency diseases caused by Vitamin-B_1 and B_2.

10. a) Write the deficiency and daily requirements of Vitamin-D
    (or)
    b) Explain the source and daily requirements of Mg.

11. a) Write the causes of Acidity.
    (or)
    b) Explain the causes and remedies for Constipation.

12. a) Discuss bacterial food poisoning.
    (or)
    b) Describe the types of food adulteration.

SECTION – C
Answer any TWO questions: (2x10=20)

13. Discuss the source and biological importance of Iron and K.

14. Write a note on sources biological functions and deficiency diseases of vitamin C and Sulphur.

15. Write an account of effects and detection of Food Adulterants.

சுழற்சித் தேர்வு - (பிப்ரவரி-18)
முதுகலைத் தமிழ் - இரண்டாமாண்டு
சங்க இலக்கியம்

காலம் : 2மணி   **12PTA14**   மதிப்பெண் - 50

பகுதி - அ

I. அனைத்து வினாக்களுக்கும் விடையளி   (4X5=20)

1. அ) ஆலங்குடி வங்கனாரின் பாடல் கருத்தைக் குறுந்தொகை வாயிலாகக் கூறுக.

(அல்லது)

ஆ) செலவு அழுங்குவித்தப் பத்து – பொருள் தருக.

2. அ) பிரிவிடை மாலைப்பொழுது கண்ட தலைவியின் நிலை யாது?

(அல்லது)

ஆ) கலித்தொகை - குறிப்பு வரைக.

3. அ) இடைச்சுரப்பத்து உணர்த்தும் செய்தி யாது?

(அல்லது)

ஆ) புறநானூற்றின் சிறப்பை எழுதுக.

4. அ) வேள்பாரியைக் கபிலர் புகழ்ந்து பாடியச் சூழலை எழுதுக.

(அல்லது)

ஆ) பதிற்றுப்பத்து – குறிப்பு வரைக.

II. அனைத்து வினாக்களுக்கும் விடையளி   (2X15=30)

5. அ) மணிமிடைப்பவளம் - சான்று பகரும் செய்தியை விளக்குக.

(அல்லது)

ஆ) தலைவியின் ஊடலைத் தீர்க்க தலைவன் மேற்கொண்ட செயல்பாட்டினை விவரி.

6. அ) செலவுப்பத்தில் கூறப்பட்டுள்ள வாழ்வியலை எடுத்துரைக்க.

(அல்லது)

ஆ) கபிலர் பாடலின் செய்தியைப் புறநானூறு வாயிலாக நிறுவுக.

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CYCLE TEST – Feb 2018
VECTOR ANALYSIS

CLASS	: I B.Sc. MATHS	MARKS	: 50
PAPER CODE	: 17UMA04	TIME	: 2Hrs

SECTION – A

I. Answer any FIVE questions: (5× 2=10)

1. Prove that $\nabla.(\nabla \times \vec{F}) = 0$.

2. If $\vec{A}$ and $\vec{B}$ are irrotational, show that $\vec{A} \times \vec{B}$ is solenoidal.

3. If $\vec{A}$ is a constant vector, prove that div.$\vec{A} = 0$.

4. Prove that $\nabla.(\nabla\varphi) = \nabla^2\varphi$.

5. If $\vec{F} = xy\vec{i} + yz\vec{j} + 2x\vec{k}$, show that $\nabla^2\vec{F} = 0$.

6. Define line integral.

7. Evaluate : $\int_0^{\pi}(3sint\vec{i} + 2cost\vec{j})dt$.

8. Write the application of line integral.

9. If $\vec{f}(t) = (t - t^2)\vec{i} + 2t^3\vec{j} - 3\vec{k}$. Evaluate $\int_1^2 \vec{f}(t)dt$.

10. Evaluate : $\int \vec{F}.d\vec{r}$, where $\vec{F} = 3x^2\vec{i} + (2xz - y)\vec{j} + z\vec{k}$ and c is the straight line from A(0,0,0) to B(2,1,3).

SECTION – B

II. Answer ALL the questions: (4x5=20)

11. (a) Show that $\nabla^2(e^r) = e^r + \frac{2}{r}e^r$.

(or)

(b) Prove that $\nabla \times \vec{r} = 0, \nabla.\vec{r}=3$.

12. (a) Show that $\nabla^2 \log r = \frac{1}{r^2}$.

(or)

(b) Show that $(\vec{v} \times \nabla) \times \vec{r} = -2\vec{v}$.

13. (a) If $\vec{F} = 3xy\vec{i} - y^2\vec{j}$. Evaluate $\int \vec{F}.d\vec{r}$ where c is the curve on the xy plane $y = 2x^2$ from (0,0) to (1,2). (or)

(b) The acceleration of a particle at time 't' is given by $\vec{a} = 18cos3t\vec{i} + 8sin2t\vec{j} + 6t\vec{k}$. Find the velocity and displacement at time 't' given that the velocity and displacement are zero and time t=0.

14. (a) Evaluate $\int \vec{f}(t)\vec{g}(t)$ where $\vec{f}(t) = t\vec{i} - t\vec{j} + (t - 1)\vec{k}$, $\vec{g}(t) = 2t^2\vec{i} + 6t\vec{k}$

(or)

(b) Find the total workdone in a moving particle in a force field given by $\vec{F} = 3xy\vec{i} - 5z\vec{j} + 10x\vec{k}$ given by x=t, y=t², z=t³ from t=1 to 2.

SECTION - C

III. Answer ALL the questions: (2x10=20)

15. (a) Prove that $\nabla.(\vec{u} \times \vec{v})= \vec{v}(\nabla \times \vec{u}) - \vec{u}(\nabla \times \vec{v})$

(or)

(b) Show that $\nabla^2 f(r) = \frac{d^2f}{dr^2} + \frac{2}{r}\frac{df}{dr}$

16. (a) If $\vec{F} = yz\vec{i} + zx\vec{j} - xy\vec{k}$ and find $\int \vec{F}.d\vec{r}$. where c is given by $x = t, y = t^2, z = t^3$ from P(0,0,0) to Q(2,4,8).

(or)

(b) Find $\int \vec{F}.d\vec{r}$ where $\vec{F} = z\vec{i} + x\vec{j} + y\vec{k}$ along the arc of the curve $\vec{r} = cost\vec{i} + sint\vec{j} + t\vec{k}$ from 0 to 2π.

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CYCLE TEST – Feb 2018
QUANTITATIVE APTITUDE- III

CLASS	: II B.Sc. MATHS	MARKS	: 50
PAPER CODE	: 12UMAS03	TIME	: 2Hrs

SECTION – A

I. Answer any FIVE questions: (5× 2=10)

1. Evaluate: i)$\log_3 27$ ii) $\log_7(\frac{1}{343})$

2. If $\log_{\sqrt{8}} x = 3\frac{1}{3}$ find the value of x.

3. If $\log_{10} 2 = 0.30103$ find the value of $\log_{10} 50$.

4. In a Km race, A beats B by 28 meters or 7 seconds. Find A's time over the course.

5. In a game of 80 points, A can give B 5 points and C 15 points. Then how many points B can give C in a game of 60.

6. One side of the a rectangular field is 15m and one of its diagonals is 17m. Find the area of the field.

7. Find the area of a square, one of whose diagonals is 3.8m long.

8. If the diagonal of a rectangle is 17cm long and its perimeter is 46cm, find the area of the rectangle.

9. Find the area of a triangle whose sides measure 13cm, 14cm, and 15cm.

10. Find the area of a right- angled triangle whose base is 12cm and hypotenuse 13cm.

SECTION – B

II. Answer ALL the questions: (4x5=20)

11. (a) Find the value of x which satisfies the relation
$\log_{10} 3 + \log_{10}(4x + 1) = \log_{10}(x + 1) + 1$.

(or)

(b) Evaluate i) $\log_5 3 \times \log_{27} 25$ ii) $\log_9 27 - \log_{27} 9$

12. (a) In a 100m race, A runs at 8kmph. If A and B a start of 4m and still beats him by 15 seconds, what is the speed of B?

(or)

(b) A can run 1km in 3min.10sec and B can cover the same distance in 3min.20sec. By what distance can A beat B?

13. (a) In measuring the sides of a rectangle, one side is taken 5% in excess, and the other 4% in deficit. Find the error percent in the area calculated from these measurements.

(or)

(b) The perimeters of two squares are 40cm and 32cm. Find the perimeter of a third square whose area is equal to the difference of the areas of the two squares.

14. (a) In two triangles, the ratio of the areas is 4:3 and the their heights is 3:4. Find the ratio of their bases.

(or)

(b) Find the ratio of the areas of the incircle and circumcircle of a square.

SECTION - C

III. Answer ALL the questions: (2x10=20)

15. (a) Simplify : (i) $\frac{1}{\log_{xy}(xyz)} + \frac{1}{\log_{yz}(xyz)} + \frac{1}{\log_{zx}(xyz)}$

(ii) $\log\frac{75}{16} - \log\frac{5}{9} + \log\frac{32}{243}$

(or)

(b) A runs $1\frac{3}{4}$ times as fast as B. If A gives B a start of 84m, how far must the winning post be so that A and B might reach it at the same time?

16. (a) If a radius of a circle is decreased by 50%, find the percentage decrease in its area.

(or)

(b) The altitude drawn to the base of an isosceles triangle is 8cm and the perimeter is 32cm. Find the area of the triangle.

★★★★★★★★★★★★★★★★★

தொன் போஸ்கோ கல்லூரி

அதியமான் முகவழிச் சாலை, கோகத்தூர் அஞ்சல், தருமபுரி 636 809
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தமிழ்த்துறை, மாதிரித் தேர்வு (ஏப்ரல் - 2018)
முதுகலைத் தமிழ் இரண்டாமாண்டு – நான்காம் பருவம்
திறனாய்வுக் கோட்பாடுகள்

காலம்: 3 மணி   **12PTA16**   மதிப்பெண்:75

I அனைத்து வினாக்களுக்கும் விடையளிக்க.   (5 x 3= 15)

1. அ) இலக்கியக் கோட்பாடுகள் என்றால் என்ன?
   (அல்லது)
   ஆ) இலக்கிய வரலாறு என்றால் என்ன?

2. அ) புதுத்திறனாய்வுத் தோற்றமும் வளர்ச்சியும் - குறிப்பு வரைக.
   (அல்லது)
   ஆ) சமூகச்சூழல் திறனாய்வு பற்றி குறிப்பு வரைக.

3. அ) வில்லியம் எம்சன் பற்றி குறிப்பு வரைக.
   (அல்லது)
   ஆ) புதுத்திறனாய்வுக் கோட்பாடுகளை எழுதுக.

4. அ) மொழியியல் திறனாய்வில் ரோமன் யாக்ப்சனின் அட்டவணையை எழுதுக.
   (அல்லது)
   ஆ) இலக்கியமும் வரலாற்று மொழியியலும் யாது?

5. அ) உளவியல் அணுகுமுறையும் மனப்பகுப்பு - குறிப்பு வரைக.
   (அல்லது)
   ஆ) வாழ்க்கை வரலாற்றுத் திறனாய்வு என்றால் என்ன?

II.அனைத்து வினாக்களுக்கும் விடையளிக்க.   (5X12=60)

6. அ) புதுத்திறனாய்வுக் கோட்பாட்டாளர்களைப் பட்டியலிட்டு கட்டுரைக்க.
   (அல்லது)
   ஆ) வரலாற்றியியல் விறனாய்வின் தோற்றமும் வளர்ச்சியும் குறித்து கட்டுரைக்க.

7. அ) போலச்செய்தலின் தாக்கங்கள் குறித்து பல்வேறு வகைகளைக் கட்டுரைக்க.
   (அல்லது)
   ஆ) பெண்ணியத்தின் - தோற்றம் வளர்ச்சிக் குறித்து கட்டுரை வரைக.

8. அ) பெண்ணியத் திறனாய்வுக்கும், மார்க்சிய கொள்கைக்கும் உள்ள வேற்றுமை, ஒற்றுமையை கட்டுரைக்க.
   (அல்லது)
   ஆ) பின் காலனித்துவத்தின் திறனாய்வுக் கோட்பாட்டினை விவரி.

9. அ) தலித்திலக்கியத் திறனாய்வுப் பற்றிக் கட்டுரைக்க.
   (அல்லது)
   ஆ) பின் காலனித்துவ இலக்கியங்களைக் கட்டுரைக்க.

10. அ) அறிவியலும் சூழலியல் திறனாய்வுப் பற்றி விவரிக்க.
    (அல்லது)
    ஆ) பண்பாடு இயற்கைப் பற்றி திறனாய்வுக் கூறும் செய்திகளை தொகுக்க.

தான் போஸ்கோ கல்லூரி

அதியமான் புறவழிச் சாலை, சோகத்தூர் அஞ்சல், தருமபுரி 636 809
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முதுகலைத் தமிழ் முதலாமாண்டு - இரண்டாம் பருவம்
காப்பியங்கள்

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காலம்: 3 மணி   **17PTA07**   மதிப்பெண்:75

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பகுதி - அ   (5X3=15)

I. அனைத்து வினாக்களுக்கும் விடையளி.

1) அ) சிலப்பதிகார காப்பிய அமைப்பினைச் சுட்டுக.

                        (அல்லது)

   ஆ) காயசண்டிகைக்கு ஏற்பட்ட சாபம் என்ன?

2) அ) பெருங்கதைச் செய்திகளை சுருக்கமாக எழுதுக.

                        (அல்லது)

   ஆ) சீவகசிந்தாமணி மணநூல் என்றழைக்கக் காரணம் யாது?

3) அ) இராமன் கங்கைக்குச் செல்ல காரணம் என்ன?

                        (அல்லது)

   ஆ) பெரியபுராணம் - குறிப்பு வரைக.

4) அ) இராமானுசர் பற்றி சிறு குறிப்பு வரைக.

                        (அல்லது)

   ஆ) இராமானுசரின் இறைப்பற்றினைக் கூறுக.

5) அ) இயேசு சிலுவைத் தண்டனையை ஏற்பதற்கு காரணம் யாது?

                        (அல்லது)

   ஆ) சீறாப்புராணம் குறிப்பு வரைக.

பகுதி - ஆ   (5X12=60)

II. அனைத்து வினாக்களுக்கும் விடையளி.

6) அ) மங்கல வாழ்த்து, மனையறம் படுத்தக் காதையின் சிறப்புகளை எடுத்துரைக்க.

                        (அல்லது)

   ஆ) ஆதிரை பிச்சையிட்டக் காதையின் சிறப்பை விளக்குக.

7) அ) உதயணன் பெண்ணுருக்கொண்டு பந்தாடிய விதத்தை பெருங்கதை மூலம் விவரி?

                        (அல்லது)

   ஆ) சீவகன் காந்தருவ தத்தையாரை மணம் செய்வதைக் குறித்து விவரிக்க.

8) அ) அப்பூதியடிகள் நாயனார் புராணத்தின் மேன்மையைச் சுட்டுக.

                        (அல்லது)

   ஆ) இராமன் கண்ட வழிநடைக் காட்சியின் சிறப்புகளை விளக்குக.

9) அ) அரங்க மாநகருக்கு இராமானுசர் சென்ற காரணத்தை விவரிக்க.

                        (அல்லது)

   ஆ) இராமானுசரின் வாழ்க்கை வரலாற்றை விளக்குக.

10) அ) பாடுகளின் பாதைகள் குறித்துக் கட்டுரைக்க.

                        (அல்லது)

   ஆ) மதியை அழைப்பித்தப் படலத்தின் சிறப்பினை எடுத்துரைக்க.

.... வாழ்த்துகள் ....

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MODEL EXAM – 2018
LASER AND SPECTROSCOPY

Class : III B.Sc. Physics	**Marks : 75**
Paper Code : 12UPHE05	**Time : 3 Hrs**

Section – A

I Answer ALL questions (10X2=20)

1. Explain fine structure.
2. Point out the applications of FP etalon.
3. Define microwave spectroscopy.
4. Explain mass reduction.
5. Discuss the properties of laser.
6. Define population inversion in laser.
7. Write a note on energy of a diatomic molecule.
8. What is the principle of single beam IR Spectrometer?
9. Define Raman effect.
10. Discuss the difference between Raman and IR spectra.

Section – B

II Answer ALL questions (5X5=25)

11. a) Write a short note on constant deviation spectrometer.

(or)

b) Explain LG plate.

12. a) Explain pure rotational spectra of a diatomic molecule.

(or)

b) Explain the theory of microwave spectroscopy.

13. a) Discuss the pumping methods in laser system.

(or)

b) Explain the principle and working of ruby laser.

14. a) Describe the simple harmonic oscillator of IR.

(or)

b) Elaborate how breakdown happens in the Born-oppenheimer principle.

15. a) Brief the pure rotational Raman spectra of linear molecule.

(or)

b) Discuss the structure determination of Raman Spectra.

Section – C

III Answer any THREE questions (3X10=30)

16. Discuss the principle, construction and working of Fabry Perot etalon along with its application.

17. Explain the pure rotational spectrum of a diatomic molecule.

18. Discuss the He-Ne laser in detail.

19. Explain the technique and instrumentation of double and single beam operation of IR.

20. Explain the classical and quantum theory of Raman Spectra.

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MODEL EXAM – 2018
NUCLEAR PHYSICS

Class	: III B.Sc. PHYSICS	Marks : 75	
Paper Code: 12UPH08		Time : 3Hrs	

SECTION – A

I. Answer All questions: (10X2=20)

1. Mention any two properties of α particles.
2. Define nuclear isomerism.
3. What are the advantages of proportional counter?
4. Write down the principle of synchrotron.
5. What are spin and magnetic moment of neutron?
6. Write a note on nuclear size.
7. Write a note on elastic scattering.
8. What are magic numbers?
9. Define multiplication factor.
10. Define Baryon number.

SECTION – B

II. Answer All questions: (5X5=25)

11. a) Explain the law of successive disintegration.
    (Or)
    b) Distinguish the transient and secular equilibrium.

12. a) With suitable diagram, explain the working of scintillation counter.
    (Or)
    b) Describe the construction and working of Proton synchrotron, and give it's necessary theory.

13. a) Deduce the Q-value equation for a nuclear reaction.

    (Or)
    b) Describe the Rutherford's experiment for artificial transmutation.

14. a) Explain shell model.
    (Or)
    b) Explain proton neutron theory of nucleous. Give an example.

15. a) Explain controlled thermonuclear reactions.
    (Or)
    b) Explain the constructions of Nuclear reactor in detail.

SECTION – C

III. Answer Any THREE questions: (3X10=30)

16. Explain the Gamow's theory of α- decay. Also give the experimental verification.

17. Explain in detail the principle, construction and working of electron synchrotron.

18. Discuss the Bohr's theory of nuclear disintegration.

19. a) What are the similarities between drop of liquid and nucleus?
    b) Explain the Weizacker's semi empirical mass formula of nucleus.

20. Explain the Bohr – Wheeler theory of nuclear fission. What is meant by chain reaction and multiplication factor?

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MODEL EXAM
QUANTUM MECHANICS

Class : III B. Sc., PHYSICS	Max Marks : 75
Paper Code :12UPH09	Time :3Hrs

SECTION-A

I. Answer ALL the questions (10 x 2 = 20)

1. Define de-Broglie wave length.
2. Define Phase velocity.
3. What are two observables said to be compatible?
4. What are the self-adjoint operators?
5. Draw the first two energy eigen functions for a particle in 1D box.
6. What is meant by linear harmonic oscillator?
7. Define parity operator.
8. Define rigid rotator.
9. State the postulates of special theory of relativity.
10. Write down the Lorentz transformation equations.

SECTION – B

II. Answer ALL the following questions (5 x 5 = 25)

11. a) Derive the expression for De-Broglie wave length in terms of Energy (E) and voltage (V).
    (OR)
    b) Obtain the relation between phase velocity and group velocity for a non-relativistic free particle.

12. a) Find the expectation value of the following:
    (i) Position vector   (ii) Momentum.
    (OR)

    b) Describe the basic postulates of wave mechanics.

13. a) Apply Schrödinger's wave equation to a particle in one dimensional box and calculate the eigen value.
    (OR)
    b) Find the energy of a linear harmonic oscillator.

14. a) Derive Einstein's mass energy relation.
    (OR)
    b) Derive the relativistic formula for the variation of mass with velocity.

15. a) Define the angular momentum of a particle and find the commutation relation of its components.
    (OR)
    b) Derive the commutation rules for the components of orbital angular momentum(L).

SECTION – C

III. Answer ANY THREE questions (3*10=30)

16. Describe G.P Thomson experiment for the study of electron diffraction. What are the results of the experiment?
17. Obtain the energy eigen values and eigen functions for a particle in a one dimensional box.
18. Obtain the energy eigen values and eigen functions of a rigid rotator.
19. Find the solution of the polar part of the Schrödinger's equations of the hydrogen atom.
20. Obtain the relativistic formula for the variation of mass with velocity and hence derive the Einstein's mass energy relation.

*******ALL THE BEST*********

Model Exam - 2018
COMMUNITY ORGANIZATION AND SOCIAL ACTION

Class	: 1 MSW	Marks	: 75
Paper Code	: 17PSW06	Time	: 3 Hrs

SECTION – A

I. Answer all the questions.   (5x5 = 25)

1. a) What is the meaning of community organization?

(or)

  b) Mention the scope of community organization.

2. a) Elaborate Protests and Demonstration.

(or)

  b) How are community dynamics influence integrative and disintegrative forces?

3. a) Write a short note on Community Development.

(or)

  b) Elaborate the functions of subgroups.

4. a) What are the uses of recording?

(or)

  b) Explain the models of Community Organization.

5. a) Bring out Gandhi's Spirituality and his social action.

(or)

  b) Critically analyze the approaches of Paulo.

SECTION – B

II. Answer all the questions.   (5x10 = 50)

6. a) Explain the types of recording and its importance of narrative process recording.

(or)

  b) Describe briefly about recording and give detailed notes on principles of recording.

7. a) Elaborate on the recent methods of social action with current and political issues.

(or)

  b) How is dimension of community power relevant to community organization?

8. a) Describe the various skills required for a community organizer.

(or)

  b) Discuss the various principles of community organization.

9. a) Explain Community as social system.

(or)

  b) Differentiate between the Rural, Urban and Tribal communities.

10. a) Discuss the model of social action and its principles.

(or)

  b) Sketch the various process of community organization.

MODEL EXAM - 2018
RURAL COMMUNITY DEVELOPMENT

Class	: II MSW	Marks	: 75
Paper Code	: 12PSW15C	Time	: 3 Hrs

SECTION – A

Answer all the questions: (5 x 5 = 25)

1. a) What is the state of community health in rural India.

(or)

   b) Enumerate the feature of rural community.

2. a) List down the various principles of extension education.

(or)

   b) What is the need for people participation?

3. a) What are the functions of cooperatives?

(or)

   b) Mention the principles of cooperative movement.

4. a) Enumerate the role of banks in rural development.

(or)

   b) Explain the objectives of CAPART.

5. a) Define micro finance & explain the functions of it.

(or)

   b) Discuss rural appropriate technology.

SECTION – B

Answer all the questions: (5 x 10=50)

6. a) Describe the problems related to agriculture.

(or)

   b) Suggest practical solution to reduce unemployment.

7. a) Sketch the philosophy & principles of community development.

(or)

   b) Delibrate the various approaches of extention education.

8. a) Write an essay on 73rd amendment regarding panchayat raj.

(or)

   b) Discuss the contribution of cooperation movement & list down the reason for failure.

9. a) Elaborate on the current situation concerning training of community functionaries for rural development.

(or)

   b) Justify the significance & role of banks in rural development.

10. a) Critically analyses the Swarnajayanthi Gram Swarozgar Yojana(SGSY)

(or)

   b) Elucidate the role of social workers in rural development.

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MODEL EXAM -2018
PROBABILITY THEORY

CLASS : II M.Sc. Maths   MARKS:75
PAPER CODE: 12PMA13   TIME :3Hrs

SECTION – A

Answer ALL the questions.   (10x2=20)

1. Define random experiment.
2. State mutually exclusive events.
3. What do you mean by random event?
4. State the properties of expected values.
5. Define characteristic function.
6. Show that $E(aX+b)=aE(X)+b$.
7. Explain poisson distribution.
8. Define marginal distribution.
9. State De-Moivre Laplace theorem
10. Define WLLN.

SECTION – B

Answer ALL the question.   (5x5=25)

11. a) If the events A and B satisfy the condition $A \subset B$, then prove that $P(A) \leq P(B)$.

(or)

b) The events A_1, A_2 are independent of one another, then prove that complementary of A_1, A_2 are also independent of one another.

12. a) State and prove the properties of expected values.

(or)

b) The random variable X takes the value 2 and 4 with probabilities $P(X=2) =0.2$ and $P(X=4) =0.8$, then find $E(X^2)$.

13. a) State and prove properties of characteristic function.

(or)

b) Explain the concept of semi invariants.

14. a) Prove that the variance of one point distribution is zero.

(or)

b) Derive the additive property of poisson disribution.

15. a) Derive Lind Berg theorem.

(or)

b) Explain the concept of Bernaulli law of large numbers.

SECTION – C

Answer any THREE questions.   (3x10=30)

16. State and prove Baye's theorem on probability.
17. State and Prove Liaponov inequality.
18. Find the p.d.f of random variable X whose characteristic function is $\phi(t)=e^{-t2/2}$
19. Find the characteristic function of normal distribution.
20. State and prove Levy-Cramer's theorem

MODEL EXAM- 2018
LANGUAGE AND LINGUISTICS

Class : II B.A ENGLISH	Marks : 75
Sub Code : 12UENA04	Time : 3.hrs

SECTION A

I. Answer the following in about 30 words each
                                                    (10X2=20)

1. How can you become a powerful presenter?
2. What are the characteristics of language?
3. What is linguistics?
4. Write the levels of linguistic analysis.
5. Define: Parole.
6. What is a sign and what are the components of sign?
7. What is meant by homoloquens?
8. Define Pragmatics.
9. What is language?
10. Expain in short Semantics.

SECTION B

II. Answer the following questions in about 100 words each: (5X5=25)

11. a) Write about the arbitrary nature of language.
                        (or)
    b) Comment on Productivity and Interchangeability of language.

12. a) Explain the characteristics of science.
                        (or)
    b) Write about the scope of linguistics.

13. a) Write the features of phonetics and phonology.
                        (or)
    b) Write in short about Psycholinguistics.

14. a) Comment on Competence and performance
                        (or)
    b) Explain in short about Sign and symbol.

15. a) How does syntagmatic and paradigmatic relationship govern language structure.
                        (or)
    b) Write short notes on substance and form.

SECTION C

III. Answer any three of the following in about 200 words each: (3X10=30)

16. Write an essay on the characteristics of language.
17. Explain in detail Linguistics as science.
18. Comment on the branches of linguistics.
19. Explain the chief characteristics of langue and parole.
20. Explain in detail Diachronic and synchronic approaches.

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MODEL EXAM – 2018
PROSE

Class : III B.A	Max. Marks: 75
Paper Code : 17UEN03	Time : 3 Hrs

Section – A

I. Answer the following questions in about 30 words each: (10 x 2 = 20)

1. What are the various use of studies according to Bacon in his essay "Of studies"?
2. Who is an honest man according to Bacon?
3. Comment on the opinion of James on 'Laughter'.
4. Write a brief account of Sir Roger.
5. Who is Captain Sentry and what type of person is he?
6. Compare the transition from warmth to coldness according to Leigh Hunt.
7. Whom should the youth follow?
8. How is our ignorance far and wide?
9. Who is a true bore?
10. Why was Mr.Kelada called as Mr.Know All?

Section – B

II. Answer the following questions in about 100 words each: (5x5 = 25)

11. a) How do studies serve man according to Bacon?
    (or)
    b) Discuss the usefulness of ambitious men.

12. a) Sketch the character of Will Honeycomb of the Spectator Club.
    (or)
    b) How was Sir Roger escorted to the Theatre?

13. a) How does Lamb bring out the opposite traits of his cousin James?
    (or)
    b) Why according to Leigh Hunt is shaving villainous?

14. a) What are the problems of today's youth?
    (or)
    b) Write an account of our ignorance on nature pointed out by Lynd.

15. a) Write an account on the various bores described by Lucas.
    (or)
    b) Describe Mr.Kelada.

Section – C

III. Answer any Three of the following questions in about 200 words each : (3x 10= 30)

16. Discuss Bacon as the father of the English Essay with reference to his essay 'Of Studies'.
17. How does Steele describe the members of the Spectator club
18. Write about Lamb's style of narration with respect to his essays 'My Relations'.
19. Bring out Kipling's Values in life'
20. Describe the result of Kelada's examination of Mrs.Ramsay's pearls..

MODEL EXAM - APRIL 2018
INTRODUCTION TO INTERNET

Class	: I B.SC D.P.M	Mark : 75	
Paper Code	: 17UDP02	Time : 3 Hrs.	

SECTION – A
I. Answer ALL questions. (10X2=20)

1. Define Internet.
2. Narrate the purpose of HTML page.
3. What is WWW?
4. Expand URL.
5. Write short notes on Web Portal.
6. Enumerate the purposes of template.
7. Write the theme enclosed in E –Mail.
8. Give some HTML tags.
9. Elaborate Frame tag with an example.
10. Explain Web Browser.

SECTION – B
II. Answer ALL questions: (5X5=25)

11. a) Write a note on WWW.
    (or)
    b) Describe Internet protocol and Internet addressing.

12. a) Explain steps in creating Email-ID.
    (or)
    b) Explicate the advantages and disadvantages of email

13. a) Explain the structure of HTML tag.
    (or)
    b) Write a program to create a table in HTML.

14. a) Narrate briefly about HTML frames and services.
    (or)
    b) Explain about image tag and its attributes.

15. a) Write a note on HTML buttons.
    (or)
    b) In detail explain news and news groups classification.

SECTION – C
III. Answer any THREE questions. (3X10=30)

16. Trace the history of internet and protocol details.
17. Clarify the overview of E-mail in details.
18. Explain HTML tags with suitable example.
19. Explain about the colors in HTML.
20. Discuss about the attributes of <frame> tag.

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MODEL EXAM – 2018
DESIGNING AND PLANNING FOR PRINT PRODUCTION

Class	: II B.SC D.P.M	Mark: 75
Paper code : 12UDP07		Time : 3 hrs.

SECTION – A

I. Answer all the questions.　　　　(10x2=20)

1. What is a design?
2. State the principles of symmetrical and asymmetrical arrangements.
3. Define layout preparation and dummy.
4. What are the typographic fundamentals?
5. Why colour is important in printing?
6. Name ten fonts name.
7. Write the types of work involved in pre-press?
8. State the different types of proof stages.
9. What is colour?
10. Describe warm and cool colour.

SECTION – B

II. Answer the following questions.　　(5x5=25)

11. (a) Explain the work of contrast in design.

(or)

(b) Write about colour elements.

12. (a) State the importance of book work typography .

(or)

(b) How far dummy and layout preparation plays vital role in press?

13. (a) Write the types and classification of magazine.

(or)

(b) Explain the parts of the news paper.

14. (a) What are the proof reading symbols, meanings and its importance?

(or)

(b) Explain the qualification of a proof reader.

15. (a) What are the advantages and disadvantages of second generation typesetters?

(or)

(b) Elaborate the history of typesetting.

SECTION – C

III. Answer any three questions.　(3x10=30)

16. What are the design elements, which gives more effectiveness in design?
17. State the importance of legibility and readability.
18. Elaborate the parts of a book.
19. What are the principles of news paper layout design?
20. Explain the stages of proofs for different kinds of jobs.

Model Exam – April 2018
DIGITAL PREPRESS

Class	: III DPM	Marks	: 75
Paper Code : 12UDP13		Time	: 3 Hrs

SECTION – A

Answer the following questions.   **(10 x 2 = 20)**

1. List out the methods for digitizing originals.
2. What is digital printing?
3. Elaborate and define PDF.
4. Narrate the flat bed image setter.
5. What is CTP?
6. Classify the light source used in CTP
7. Write the importance of gravu flow inking system.
8. Explain about direct imaging.
9. Elaborate E-Print.
10. Give the technologies of digital printing.

SECTION – B

Answer the following questions.   **(5 x 5 = 25)**

11. a) What are quality requirements of finished art?

(or)

b) Explain the work flow of digital pre-press.

12. a) Differentiate the film material used in image setters.

(or)

b) Write and explain the layout of internal drum exposure.

13. a) Detail the working principle of external drum exposure.

(or)

b) Narrate the necessity of CTP.

14. a) List out and explain the advantages of E- Print.

(or)

b) Differentiate the copy based and job based process.

15. a) Give the digital proofing processes.

(or)

b) How does the electro photography work?

SECTION – C

Answer any THREE of the following questions.

(3 x 10 = 30)

16. Draw and explain the capstan type exposure.

17. Narrate the working principle of 74 Karat digital press.

18. Brief about the possibility and limitations of different exposure.

19. Explain the Ionography process.

20. Detail about Continues inkjet process.

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MODEL EXAMINATION – 2018
INTERNET AND ITS APPLICATIONS

Class	: I BCA	**Marks : 75**	
Paper Code	: 17UCAS01	**Time**	: 3 hrs

SECTION–A

I. Answer all the questions: (10 X 2=20)

1. What is internet?
2. Define Network.
3. Explain modem.
4. State internet address.
5. What are the common domain names?
6. List out the formatting tags.
7. How will you preview an image in html?
8. Write the uses of frame.
9. What are the sections available in html documents?
10. What is case study?

SECTION – B

II. Answer the following questions: (5X 5 = 25)

11. a) Discuss about the concepts of www.

(or)

b) Illustrate the file transfer protocol.

12. a) Elucidate modulation and demodulation.

(or)

b) Write a note on physical connection of a network.

13. a) Expound complex layouts.

(or)

b) Write the commands to create hyperlinks and anchors.

14. a) Explain the various options for formatting tables.   (or)

b) Discuss on controlling image size and padding.

15. a) Describe case study of online train reservation system.

(or)

b) Discuss about online gas services.

SECTION – C

III. Answer any Three question: (3 X 10 = 30)

16. Explain about the electronic mail.

17. Elucidate internet explorer.

18. Give an example program for formatting text using HTML tags.

19. Write the HTML Tags for tables.

20. How will you apply for passport through online? Explain it.

MODEL EXAMINATIONS APRIL - 2018
.NET PROGRAMMING

Class: IM.Sc. (CS)	Marks: 75
Paper Code: 17PCS06	Time : 3Hrs.

PART- A

I. Answer all the questions   (5x5 = 25)

1. a) Explain in detail about the framework classes.
   (or)
   b) Describe in brief what is common language specification with its feature.

2. a) Explain various types of arguments in details with suitable examples.
   (or)
   b) Illustrate about structures in VB.Net.

3. a) Explain about common dialog control.
   (or)
   b) Mention the class characteristics in VB.Net.

4. a) Enumerate some of the exception statements in VB .Net .
   (or)
   b) Write a program for student mark using ASP.NET.

5. a) Define about conditional expression in C# with example.
   (or)
   b) Write short notes on two dimensional arrays.

PART- B

II. Answer all the questions: (5x10 = 50)

6. a) Discuss about the concept of arrays in .Net.
   (or)
   b) Explain about variables as object.

7. a) Discuss about queue with an example.
   (or)
   b) Describe the properties of Form control.

8. a) Explain the various properties of Rich text box.
   (or)
   b) Discuss about data binding in detail.

9. a) Explain the important properties and methods of a dataset.
   (or)
   b) Explain in detail about web controls.

10. a) Discuss the different types of constructor with suitable example.
    (or)
    b) How to work database access with ADO.Net.

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MODEL EXAM APR-2018
PROGRAMMING IN JAVA

Class	: II BSC CS'A'&'B'	**Time**	: 3 Hrs
Paper Code	: 12UCS05	**Marks**	: 75

SECTION – A   (10x 2 =20)

I. Answer ALL the questions:

1. What is java?
2. Define byte code.
3. When do you declare a member of class?
4. What is constructor?
5. How do you create packages in java?
6. Define interface.
7. State multithreading.
8. What is applet?
9. Expand AWT and API.
10. Write an applet program to display the college details.

SECTION – B   (5 x 5 = 25)

II. Answer ALL the questions:

11. a) Explain the features of object oriented programming language .

(or)

b) Discuss data types in java.

12. a) Explain the function overloading with an example.

(or)

b) Write a java program to illustrate the recursion.

13. a) Write a short note on packages.

(or)

b) Explain any five Built in exceptions with an example.

14. a) Discuss about PL/SQL block structure.

(or)

b) Illustrate the types of exception with an example.

15. a) Discuss inter process thread communications.

(or)

b) Explain how to draw line and rectangles in java.

SECTION – C (3 x 10 = 30)

III. Answer any THREE questions:

16. Explain the operators in java.
17. Briefly describe the functional breakdown of java API packages.
18. Discuss errors in exception handling.
19. Elucidate life cycle of multithread.
20. Illustrate the complete life cycle of applet.

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MODEL EXAM APR-2018
RELATIONAL DATABASE MANAGEMENT SYSTEM

Class	: II BCA	**Time**	: 3 Hrs
Paper Code	: 12UCA06	**Marks**	: 75

SECTION – A   (10x 2 =20)

I. Answer ALL the questions:

1. Define RDBMS.
2. What do you mean by physical data independence?
3. Write the general form of tuple relational calculas.
4. What is the purpose of normalization?
5. State the BCNF.
6. What do you mean by data encryption?
7. Define cursor.
8. Expand PL/SQL.
9. What is triggers?
10. Write the syntax of declaring a PL/SQL table.

SECTION – B   (5 x 5 = 25)

II. Answer ALL the questions:

11. a) Explain the functions of Database Administrator.

(or)

b) What is weak entity set? Explain with an example?

12. a) Describe the various aggregate functions.

(or)

b) Explain the formal definition of tuple relational calculus.

13. a) Write a short note on BCNF.

(or)

b) Explain the 5NF with an example.

14. a) Discuss about PL/SQL block structure.

(or)

b) Illustrate the types of exception with an example.

15. a) Write the syntax to create procedural command.

(or)

b) Discuss various composite types in PL/SQL.

SECTION – C (3 x 10 = 30)

III. Answer any THREE questions:

16. Elaborate the database system architecture.
17. Explain the relational algebra operations with an example.
18. Describe normalization with an suitable examples.
19. Discuss the two types of cursors in PL/SQL with a suitable example.
20. Write a brief notes on PL/SQL triggers.

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MODEL EXAMINATION – 2018
BUSINESS MANAGEMENT

Class	: I B.Com.	Max. Marks	: 75
Paper Code	: 17UCM04	Time	: 3Hrs

SECTION – A

I. Answer ALL the questions: (10 X 2 = 20)

1. Define 'management'.
2. Write about scalar chain.
3. Explain planning.
4. What are the planning processes?
5. Mention delegation.
6. What is meant by types of organization?
7. Explain organization.
8. Mention any two styles of leadership.
9. Define motivation.
10. State communication.

SECTION – B

II. Answer ALL the questions: (5 X 5 = 25)

11. (a) List out the nature of management.

(or)

(b) What are the principles of Henry Fayol?

12. (a) Write down the importance of planning.

(or)

(b) Explain the decision making process.

13. (a) What are the objectives of organisation?

(or)

(b) Explain the features of decentralization.

14. (a) Narrate the qualities of a good leader.

(or)

(b) Show the difference between X theory and Y theory.

15. (a) Point out the importance of communication.

(or)

(b) Examine the features of control

SECTION – C

III. Answer any THREE questions: (3 X 10 = 30)

16. What are the functions of management?

17. Examine the merits and demerits of planning.

18. Explain the types of organisation.

19. Elucidate the Maslow's theories of motivation.

20. Explain the barriers for effective communication.

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MODEL EXAMINATION– 2018
FINANCIAL MANAGEMENT

Class	: III B.Com	Marks	: 75
Paper Code : 12UCME02		Time	: 3 Hrs

Section – A

Answer ALL Questions   (10x 2 =20)

1. Define Financial Management.
2. What is Profit Maximization?
3. Define Capital Structure.
4. Write a short note on Optimum Capital Structure..
5. Define Cost of Capital.
6. What is Cost of Debt?
7. Explain the concept of Leverage?
8. Write a note on Combined Leverage.
9. Define Working Capital Management.
10. What is Working Capital?

Section – B

Answer ALL Questions   (5x5=25)

11. a. Explain the significance of financial management. (or)
    b. Describe the objectives of Financial Management.

12. a. What are the features of Capital Structure?
        (or)
    b. Briefly explain the Optimum Capital Structure.
13. a. Write a note on Cost of Debt.
        (or)
    b. What is the significance of Cost of Capital?
14. a. List out the importance of Leverages.
        (or)
    b. How will you calculate financial leverage?.
15. a. What are the importance of Working Capital?
        (or)
    b. Explain the factors influencing Working Capital.

Section – C

Answer any THREE Questions   (3x10=30)

16. Enumerate the role of Financial Manager in financial decision making.

17. Explain the factors determining Capital Structure.

18. What are the components of computation of Capital Structure?

19. Define Leverage. Various types of leverages.

20. Briefly explain the types of Working Capital.

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MODEL EXAM -2018
HUMAN RESOURCE DEVELOPMENT

Class: II B.Com CA   **Marks: 75**
Paper Code: 08UCCS06   **Time: 3 Hrs**

SECTION – A

I. Answer ALL the questions: **(10X2=20)**

1. Define HRM.
2. State any two qualities of HR manager.
3. Give the meaning of HRD.
4. Mention the meaning of recruitment.
5. What are the methods of recruitment?
6. Bring out the meaning of transfer.
7. What is interest test?
8. State the meaning of selection.
9. Mention the meaning of training.
10. What do you understand by job rotation?

SECTION –B

II. Answer ALL the questions: **(5X5=25)**

11. a) Explain the objectives of HRM.
    (Or)
    b) Describe the qualities of HR Manager.

12. a) State the importance of HRD.
    Or)
    b) Briefly explain the features of HRM.

13. a) Discuss the merits of internal source of Recruitment.
    (Or)
    b) Explain the demerits of external source of Recruitment.

14. a) Describe the different types of test.
    (Or)
    b) List out the various types of interview.

15. a) Explain the need for training.
    (Or)
    b) Discuss the benefits of training.

SECTION –C

III. Answer any THREE questions: **(3X10=30)**

16. Explain the functions of HRM.

17. Explicate the importance of HRD.

18. Enumerate the various methods of recruitment.

19. Discuss the various stages involved in selection.

20. Elaborate the various methods of training.

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MODEL EXAM - 2018
POLYMER CHEMISTRY

Class	: II B.Sc.,Chem.	Marks	: 75
Paper Code : 12UCHS02		Time	: 3 Hrs

SECTION – A

Answer ALL the questions: (10x2=20)

1. What are Polymers?
2. Define Co ordination polymerization.
3. Write a note on Buna-S.
4. What is meant by Glass transition temperature?
5. Define Syndiotactic polymer.
6. Write a note on butyl rubber.
7. Define Pigments.
8. What is meant by lubricants?
9. How will you define Graft Polymers?
10. What is Co- polymerization?

SECTION – B

Answer ALL the questions: (5x5=25)

11. a) Explain Addition and Condensation polymerization.

(or)

b) Write a note on Synthetic and Natural polymers.

12. a) Explain stereochemistry of polymers.

(or)

b) Elaborate the crystalline melting point.

13. a) Describe the Number average molecular weight of polymers.

(or)

b) Write a short note on Homo, block and graft co-polymer.

14. a) Give a Note on two synthetic rubbers.

(or)

b) Write down Silicone Rubber, Freons and polyurethane.

(or)

15. a) Briefly note on Dyes, Polymeric plasticizers.

(or)

b) Write a short note on pigment and fillers.

SECTION – C

Answer any THREE questions: (3x10=30)

16. Explain (i) General preparation of polymers. (5)
    (ii) Co ordination polymerization. (5)
17. Write short note on Linear, Branched and Cross linked polymers.
18. Explain the viscosity method for the determination of molecular weight of a polymer.
19. Write a note on
    (i) Polyethylene (2) (ii) PFTE (2) (iii) PVC (2)
    (iv) Buna-N (2) (v) Silicone rubber (2).
20. Distinguish thermoplastic resins and thermosetting resins .

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MODEL EXAM - APR 2018
INORGANIC CHEMISTRY - II

Class	: III B.Sc. Chem.	Marks : 75
Paper Code : 12UCH07		Time : 3 Hrs

SECTION - A

Answer ALL the questions.   (10 x 2 = 20)

1. Write down the structure of Hemoglobin.
2. Mention the structure and hybridization of $Cr(CO)_6$.
3. What are the ionic organo metallic compounds?
4. Explain any two methods of preparation of Organo metallic boron compounds.
5. Distinguish between conductor and semiconductor.
6. Write any two consequences of Frenkel defect.
7. Draw the structure of BrF_3 and give its uses.
8. State Pseudohalogens and halogens.
9. What is meant by axis of rotation?
10. Define the term of magnetic susceptibility.

SECTION - B

Answer ALL the questions: (5 x 5 = 25)

11. a) Explain the bonding in metal carbonyls.
    (or)
    b) Derive the expression for essential and trace elements in biological activity.

12. a) Mention the preparation and properties of Ferrocene.
    (or)
    b) Write the applications of organometallic compounds.

13. a) What are semiconductors? Explain their types.
    (or)
    b) Write the applications of Nano materials.

14. a) Write the classification of Carboranes ?
    (or)
    b) Discuss the preparation and properties of IF_5

15. a) Describe the applications of magnetic measurements.
    (or)
    b) Mention the point groups of the following molecules: i) CH_2Cl_2 ii) NH_3 iii) H_2O.

SECTION - C

Answer ANY THREE questions: (3 X 10 = 30)

16. Explain the classification of Silicates.
17. How will you prepare Zeise's salt ? Discuss the chemistry of Lithium compounds.
18. i) Discuss the band theory of conductors.(5)
    ii) Explain the metal deficiency and metal excess defects in crystals with examples.(5)
19. i) Write about the basic properties of iodine.(5)
    ii) What are Interhalogen compounds? Elucidate the structure of IF_7.(5)
20. Describe the Para, Dia, Ferro and Anti Ferromagnetism.

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MODEL EXAM - 2018

ORGANIC SPECTRA, PERICYCLIC AND PHOTO CHEMISTRY

Class	: II M.Sc. Chem.	Marks : 75	
Paper Code	: 12PCHZ04	Time : 3 Hrs	

SECTION – A

Answer ALL the questions: (5x5=25)

1. (a) Explain the Woodward-Fieser rules for dienes.

(or)

(b) How do you distinguish intramolecular H-bonding from intermolecular type using IR spectroscopy?

2. (a) Write a short notes on axial haloketone rule.

(or)

(b) Discuss the applications of mass spectra.

3. (a) Explain the spin-spin coupling in AX type spectra.

(or)

(b) Give the Zero field splitting of ESR spectra.

4. (a) Elaborate the Patterno Buchi reaction.

(or)

(b) Discuss the Photochemistry of 2, 5 cyclohexadienes.

5. (a) Describe the Cope Rearrangement.

(or)

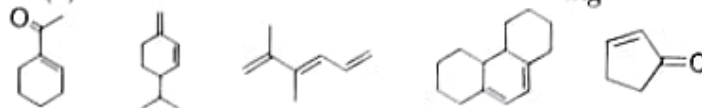(b) Explain the classifications of pericyclic reaction with examples.

SECTION – B

Answer ALL the questions: (5x10=50)

6. (a) Discuss the factors influencing vibrational frequencies.

(or)

(b) Calculate the λmax values for the following

7. (a) Briefly discuss the Octant Rule for ketone.

(or)

(b) Explain the Cotton Effect.

8. (a) (i) Define Chemical shift. What are the factors that influence the chemical shift?

(ii) How is Lanthanide compounds used a shift reagent.

(or)

(b) (i) Write a note on Kramer's degeneracy.

(ii) Explain the Splitting pattern in the AMX type in NMR Spectra.

9. (a) (i) State Photo Isomerization of cyclic compounds.

(ii) Write a notes on Norrish Type II reaction.

(or)

(b) (i) Give an account of the photo reduction of ketone.

(ii) Explain the Various Photophysical processes in Jablonski diagram.

10.(a) Write a short notes on the following:

(i) Sommelet Hauser rearrangement

(ii) Claisen rearrangement.

(or)

(b) Analyze the sigmatropic reactions using FMO method.

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MODEL EXAMINATION – 2018
BUSINESS POLICY AND STRATEGIC MANAGEMENT

Class	: III BBA	Marks : 75
Paper Code	: 12UBA15	Time : 3 Hrs

SECTION – A

I Answer all the questions: (10X2=20)

1. Mention any two features of business policy.
2. What is mean by SWOT analysis?
3. What do you mean by functional level strategy?
4. Definition of strategic management.
5. Enumerate the marketing policy.
6. List out the various process of business policy.
7. Point out the kinds of growth strategy.
8. Write note on "strategic business unit".
9. Explain: Business ethics.
10. Bring out importance the social responsibility.

SECTION – B

II Answer all the questions: (5X5=25)

11. a) List out the objectives business policy.

(Or)

b) Bring out the purpose of business policy.

12. a) Explain the steps involved in policy making.

(Or)

b) Discuss designing of the Production policy.

13. a) Write a note on ETOP analysis.

(Or)

b) Explain the various process of responsibility in business towards community.

14. a) Point out the features of social audit

(Or)

b) List out the components of strategy.

15. a) Discuss the merits of social responsibility.

(Or)

b) Narrate the essential characteristics of personnel policy.

SECTION – C

III Answer any three questions: (3X10=30)

16. Describe the classification of business policy.

17. Enumerate the BCG matrix method and bring out the limitations.

18. Describe the various kinds of major business strategies.

19. What are the merits and demerits of growth strategy?

20. What is social audit? Describe its benefits.

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MODEL EXAMINATION – 2018
EXPORT IMPORT AND DOCUMENTATION PROCEDURES

Class	: II BBA	Marks : 75	
Paper Code	: 12UBAS05	Time : 3 Hrs	

SECTION – A

I Answer all the questions: (10X2=20)

1. Define the term export.
2. State any four advantages of import.
3. Define letter of credit.
4. What is role of an agent?
5. Write a short on pre-shipment.
6. Mention any three roles of customs department.
7. Expand: Liners and tramps.
8. Brief out the term shipping bill.
9. List out the objectives of import.
10. Explain the functions of export finance.

SECTION – B

II Answer all the questions: (5X5=25)

11. a) Methods of preparing documentation.

(Or)

b) Write a short note on credit and collections.

12. a) Bring out the various role of forwarding agents.

(Or)

b) What are the objectives of custom control?

13. a) Illustrate the procedures for pre-shipment inspection.

(Or)

b) Difference between export and import cargo.

(Or)

14. a) List down the kinds of shipping bills.

(Or)

b) Explain in detail container procedures.

15. a) Discuss the merits of import and export.

(Or)

b) Narrate the essential processing of an export order.

SECTION – C

III Answer any three questions: (3X10=30)

16. Briefly explain types of letter of credit.
17. State the various kinds of pre-shipment inspection.
18. Describe the foreign bills of exchange.
19. Explain the importance of liners and tramps.
20. Difference between import documentation and import licensing.

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MODEL EXAMINATION – 2018
QUANTITATIVE APTITUDE-III

CLASS : II B.Sc., MATHS **MARK : 75**
PAPER CODE : 12UMAS03 **TIME : 3 Hrs**

SECTION – A

1. Answer ALL the questions: **(10× 2=20)**

1. Find the simple interest on Rs. 68000 at $16\frac{2}{3}\%$ per annum for 9 months.
2. At what rate percent per annum will a sum of money double in 16 years.
3. Find the compound interest on Rs. 7500 at 4% p.a. for two years compounded annually.
4. In what time will Rs. 1000 become Rs. 1331 at 10% per annum compounded annually?
5. If log 2=0.3010. Find the value of log 25.
6. In a km race, A beats B by 28m or 7sec. Find A's time over the course.
7. One side of a rectangular field is 15 m and one of its diagonals is 17 m. Find the area of the field.
8. Find the area of a square, one of whose diagonals is 3.8 m long.
9. Find the volume and surface area of a cuboid 16 m long. 14 m broad and 7 m high.
10. The diagonal of a cube $6\sqrt{3}$ cm. Find its volume and surface area.

SECTION – B

II. Answer ALL the questions: **(5×5=25)**

11. (a) What annual instalment will discharge a debt of Rs. 1092 due in 3 years at 12% simple interest?

(or)

(b) The simple interest on a sum of money is $\frac{4}{9}$ of the principal. Find rate percent and time, if both are numerically equal.

12. (a) A certain sum amounts to Rs. 7350 in 2 years and to Rs.8575 in 3 years. Find the sum and rate percent.

(or)

(b) If Rs. 500 amounts to Rs. 583.20 in 2 years compounded annually, Find the rate of interest per annum.

13. (a) Find the value of x which satisfies the relation
$$\log_{10} 3 + \log_{10}(4x + 1) = \log_{10}(x + 1) + 1.$$

(or)

(b) In a game of 80 points, A can give B 5 points and C 15 points. Then how many points B can give C in a game of 60?

14. (a) The perimeters of two square are 40 cm and 32 cm. Find the perimeter of a third square whose area is equal to the difference of the areas of the two squares.

(or)

(b) Find the ratio of the areas of the incircle and circumcircle of a square.

15. (a) If each edge of a cube is increased by 50%, find the percentage increase in its surface area.

(or)

(b) If 1 cubic cm of cast iron weights 21 gms, then find the weight of a cast iron pipe of length 1 metre with a bore of 3 cm and in which thickness of the metal is 1 cm.

SECTION - C

III. Answer any THREE questions: **(3x10=30)**

16. A sum of Rs. 800 amounts to Rs. 920 in 3 years at simple interest. If the interest rate is increased by 3%, it would amount to how much?
17. The difference between C.I and S.I accrued on an amount Rs. 18000 in two years Rs.405. What was the rate of interest p.c.p.a?
18. Simplify : (i) $\frac{1}{\log_{xy}(xyz)} + \frac{1}{\log_{yz}(xyz)} + \frac{1}{\log_{zx}(xyz)}$

(ii) $\log\frac{75}{16} - \log\frac{5}{9} + \log\frac{32}{243}$

19. A room is half as long again as it is broad. The cost of carpeting the room at Rs. 5 per sq. m Rs.270 and the cost of papering the four walls at Rs.10 per m^2 is Rs.1720. If a door and 2 windows occupy 8 sq. m, find the dimensions of the room.
20. If the radius of a sphere is increased by 50%, find the increase percent in volume and the increase percent in the surface area.

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MODEL EXAM - 2018
THE VICTORIAN AGE

Class : I M.A. ENGLISH   Mark: 75
Paper Code : 17PEN05   Time : 3 hrs

SECTION – A (3X5=15)

I. Annotate any THREE of the following :

1. a) "Time to taste life" another would have said,
   Up with the curtain!"
   (or)
   b) Sleep, crop and herd! sleep, darkling thrope
   and croft,
   Safe from the weather!

2. a) I ask but that my death may find
   The freedom to my life denied;
   Ask but the "folly of mankind",
   Then, at last, to quit my side.
   (or)
   b) Nor bring, to see me cease to live,
   some doctor full of phrase and fame,
   To shake his sapient head and give
   The ill he cannot cure a name.

3. a) "It is my kiss that saved her life".
   (or)
   b) The little girl in the bed is my baby".

4. a) A desirable young man? Dust and ashes!
   "I see nothing desirable but death".
   (or)
   b) "To be nailed to a continuation and
   exaggeration of my present life"

5. a) He was one of the great Anglican churchmen
   who made up of the Oxford Movement
   (or)
   b) He is most famous as the headmaster of Rugby
   school.

SECTION – B (5X6=30)

II. Answer the following questions:

6. a) Describe the poem "Tithonus" was.
   dedicated to whom and why.
   (or)
   b) Describe the theme of the poem "The Darkling
   Thrush".

7. a) Explain briefly the theme of a mother in
   Swinburne's poem
   (or)
   b) Discuss the feeling of duchess in Browning
   poem.

8. a) Write a brief note on "After Death".
   (or)
   b) Explain the feeling of the Lady love in the
   Poem of "After Death".

9. a) Write the adventures in the play "Peter Pan".
   (or)
   b) Sketch the character of Christy.

10. a) Write a short notes on Thomas Arnold.
   (or)
   b) Write the biography of Goldsmith.

11. a) Sketch the character of Heathcliff.
   (or)
   b) Write a brief note on "Middlemarch"

SECTION – C (3X10=30)

III. Answer any THREE of the following questions

12. Differentiate the thoughts of students and
   Grammarian

13. Enumerate the thirst of Hardy in "The Darkling
   Thrush".

14. Discuss the play "Peter Pan".

15. Comment on "The Wuthering Heights".

16. Discuss the contribution of Florance
   Nightingale in Victorian age.