FACULTY OF ARTS
M.A.(APE)/IMBA III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
SECOND LANGUAGE: TELUGU
PAPER – IIa

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

సూచన: క్రింది ప్రశ్నలకు ఒకపేజి మించకుండ సమాధానాలు వ్రాయండి.   (5x4=20)

1. కీర్తినీయట్టి యాగదీక్షితుడు లేడు–సందర్భసహిత వ్యాఖ్య వ్రాయండి.

2. ఇది మన ధర్మంలోని రహస్యం–సందర్భసహిత వ్యాఖ్య వ్రాయండి.

3. చంపకమాల – లక్షణం.

4. పరంధామయ్య – పాత్ర చిత్రణ.

5. ఉత్పలమాల.

Section – B

సూచన: క్రింది ప్రశ్నలకు నాలుగుపేజీలు మించకుండ సమాధానాలు వ్రాయండి.   (5x10=50)

6. a) ధర్మజుని వాక్చాతుర్యమును వివరించండి.

(లేదా)

   b) గుణనిధి తండ్రి, యజ్ఞదత్తుడి స్వరూప స్వభావాలను తెలపండి.

7. a) సాగరయ్య గుణశీలాలను గురించి చర్చించండి.

(లేదా)

   b) ఆర్తగీతంలో తిలక్ పెల్లడించిన ఆర్తిని వర్ణించండి.

8. a) మత్తేభం–ఛందో లక్షణాలను సోదాహరణంగా వివరించండి.

(లేదా)

   b) సీసం–ఛందో లక్షణాలను సోదాహరణంగా వివరించండి.

9. a) 'చలిచీమలు" అనే సాంఘిక నాటకం యొక్క నామ సార్థక్యాన్ని వివరించండి.

(లేదా)

   b) విశాలాక్షి వృత్తాంతాన్ని వివరించండి.

10. a) ఉత్పలమాల, చంపకమాల, మత్తేభం లక్య లక్షణాలను చెబుతూ, ఉదాహరణలు వ్రాయండి.

(లేదా)

   b) కందము, సీసము, ద్విపద లక్షణాలను తెలుపుతూ, ఉదాహరణలు వ్రాయండి.

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FACULTY OF ARTS
M.A.(APE)/IMBA III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
SECOND LANGUAGE: HINDI
PAPER – IIB

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

सूचना - निम्न लिखित प्रश्नों के उत्तर एक पृष्ठ से अधिक न हो ।   (5x4=20)

निम्न लिखित पयांशें की संदर्भ सहित व्याखा कीजिए.

1. बडा हुआ तो क्या हुआ, जैसे पेड खजूरि
   पंथी को छाया नहीं, फल लगौ अति दूरि

2. मेरा मन अनन्त कह सुख पादौ
   जैसे उडि जहान को पंछी, फिरी जहाज पर आवौ.

3. मुखिया मुख सो चाहिए, खान–पान को एक,
   पालै –पोसे सकल अंग, तुलसी साहित विवेक.

4. मेरे तो गिरिधर गोपाल दूसरों न कोई
   जाके सिर मोर मुकुट मेरो पाति सोई.

5. मेरी भव बाछा हरौ राछा नागारि सोई
   जा तन की झंई पेरौ, स्यामु हरित भूति होई.

Section – B

सूचना - निम्न लिखित प्रश्नों के उत्तर 4 पृष्ठों से अधिक न हो ।   (5x10=50)

6. a) वीरगाथाकाल की परिस्थितियों बताते हुए उस काल के काव्य की विशेषताऐं स्पष्ट कीजिए
   (ঙ৯)
   b) आदिकाल के प्रचलित कवियों के बारे में उनका परिचय लिखिए

7. a) भक्तिकाल के ज्ञानाश्रथी भक्ति धारा की विशेषताएं स्पष्ट कीजिए
   (ঙ৯)
   b) रीतिकाल की परिस्थितियों बताते हुए क्वि बिहारी का जीवन परिचय दीजिए

8. a) सगुण भक्ति धारा के बारें में विस्तारपूर्वक लिखिए
   (ঙ৯)
   b) मीराबाई और सूरदास का जीवन परिचय बताइये

9. a) **HIV/AIDS** पर अपने विचार व्यक्य कीजिए
   (ঙ৯)
   b) नोटबंदि से भ्रष्टाचार को किस प्रकार रोका जा सकता है? अपने विचार व्यक्य कीजिए

10. हिन्दि में अनुवाद कीजिए:
    i) Our national song is 'Vande Mataram'.
    ii) The Sea water is saltish.
    iii) Although he is poor, yet he is honest.
    iv) Trees keep the atmosphere cool
    v) I get up early in the morning.

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FACULTYOF ARTS
M.A. (ENGLISH) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
INDIAN WRITING IN ENGLISH - I
PAPER – II

Time: 3 Hours] [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Quit India Movement.
2. Sketch the character of Sohini.
3. Comment on Aurobindo's *The Golden Light*.
4. Myth in *The Man Eater of Malgudi*.
5. Bramo Samaj.

Section – B (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Discuss the Use of English for Political Awakening.
   (OR)
   b) Comment on the Indian National Movement.

7. a) Briefly discuss Sarojini Naidu's *Pardah Nashin* in a feministic purview.
   (OR)
   b) Highlight the autobiographical elements in Toru Dutt's poems prescribed for your study.

8. a) Portray Krupabai's *Kamala* as a tragic story of a high-caste Hindu woman.
   (OR)
   b) Discuss *Untouchable* as a fight against the social evil of Casteism.

9. a) Discuss Raja Rao's *Kanthapura* as a freedom struggle novel.
   (OR)
   b) Sketch the character of Vasu in R.K. Narayana's *The Man Eater of Malgudi*.

10. a) Comment on the Varna system according to Ambedkar's *The Annihilation of Caste*.
    (OR)
    b) The idea of Nationalism according to Tagore.

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FACULTY OF ARTS
M.A. (HINDI) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
AADHUNIC KAVYA
PAPER – II

Time: 3 hours]　　　　　　　　　　　　　　　　　　　　[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

सूचना - निम्न लिखित प्रश्नों के उत्तर एक पृष्ठ से अधिक न हो ।　　　(5x4=20)

1. सप्रसंग व्याख्या कीजिए:

    "नारी तुम श्रद्धा हो, विश्वास रजत नग पद तल में,
    पियुश स्रोत सी बहा करो, जीवन के सुन्दर समतल में"

2. अज्ञेय का साहित्यिक परिचय दीजिए ।

3. कामायनी महाकाव्य में निहित 'चिन्ता' सर्ग की विशेषता को बताइए ।

4. निराला की काव्यगत विशेषताओं को बताइए ।

5. नागार्जुन के साहित्य की विशेषताओं को बताइए ।

Section – B

सूचना - निम्न लिखित प्रश्नों के उत्तर 4 पृष्ठों से अधिक न हो ।　　　(5x10=50)

6. a) कामायानी में रुपक तत्व का निर्वाह हुआ है, इस विषय पर अपने विचार व्यक्त कीजिए ।
    (OR)
   b) 'कामायनी' काव्य के अधार पर मनु एवं श्रद्धा का चरित्र चित्रण कीजिए ।

7. a) 'राम की शक्ति पूजा' की कथावस्तु लिखिए ।
    (OR)
   b) हिन्दी की लम्बी कविताओं में 'राम की शक्ति पूजा' कविता का स्थान निर्धारित कीजिए ।

8. a) नागार्जुन के व्यक्तिव व कृतित्व पर प्रकाश डालिए ।
    (OR)
   b) नागार्जुन जनवादी कवि है! स्पष्ट कीजिए ।

9. a) 'असाध्य वीणा' कविता की विशेषता बताइए ।
    (OR)
   b) 'असाध्य वीणा' की कथावास्तु बताते हुए उसके उद्देश्य को बताइए ।

10. a) प्रसाद का साहित्यिक परिचय देते हुए कामायनी काव्य की विशेषताओं पर प्रकाश डालिए
    (OR)
    b) हिन्दी की लंबी कविताओं में 'राम की शक्ति पूजा' का स्थान निर्धारित कीजिए ।

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FACULTYOF SOCIAL SCIENCES
MCN III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
COMMUNICATION RESEARCH METHODS AND APPLICATIONS
PAPER – II

Time: 3 Hours] [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u> (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Survey of literature
2. Hypothesis
3. Reliability & Validity
4. Sample size and sample error
5. Correlation

<u>Section – B</u> (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) What are the steps involved in a research process? Explain each step briefly.
   (OR)
   b) What is scientific research? What are the various types of research?

7. a) What is content analysis? Describe briefly the steps in conducting a content analysis of a newspaper.
   (OR)
   b) Explain what a case study is with the help of an example.

8. a) How would you conduct in interview for a study on blind people? Describe the various methods one can employ in it
   (OR)
   b) What is the difference between a courses and a sample? Explain 5 non probability sampling methods.

9. a) Explain the need for research in Mass Communication.
   (OR)
   b) Explain the differences between analysis of Variance, Correlation, Partial Correlation and Regression.

10.a) What are the ways you can analyse the audio visual media?
   (OR)
   b) What are the research areas that can discuss media effects?

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FACULTY OF ARTS
M.A.(TSD) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
PROSODY, AESTHETICS & ALANKARAS
PAPER – II

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

సూచన: క్రింది ప్రశ్నలకు ఒకపేజి మించకుండ సమాధానాలు వ్రాయండి,   (5x4=20)

1. మాత్రా ఛందస్సు.

2. అచేతన

3. ఆనందవర్ధనుడు

4. ఆంత్యానుప్రాస

5. అతిశయోక్తి

Section – B

సూచన: క్రింది ప్రశ్నలకు నాలుగు పేజీలు మించకుండ సమాధానాలు వ్రాయండి.   (5x10=50)

6. a) మార్గ ఛందో భేదాలను పరిశీలించండి.

       (లేదా)

    b) జాతులను పరిచయం చేయండి.

7. a) జగన్నాథ పండితుని కావ్య నిర్వచనాన్ని వివరించండి.

       (లేదా)

    b) కావ్య హేతువులను విశదీకరించండి.

8. a) కళాతత్త్వంలో భావచిత్రం ప్రతీకల ప్రయోజనాన్ని గుర్తించండి.

       (లేదా)

    b) కళాతత్త్వ వివేచనలో భారతీయుల కృషిని పరిశీలించండి.

9. a) యమకం, ముక్తపదగ్రస్తం లక్ష్య లక్షణ సమన్వయం చేయండి.

       (లేదా)

    b) శబ్దాలంకారాలను సోదాహరణంగా వివరించండి.

10. a) శ్లేషాలంకారాన్ని లక్ష్య లక్షణ సమన్వయం చేయండి.

       (లేదా)

    b) అర్థాలంకారాల వలన కావ్యం ఏ విధంగా ఇనుమడిస్తుందో వివరించండి.

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FACULTY OF ARTS
M.A. (URDU) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
URDU NOVEL
PAPER – II

Time: 3 hours]   [Max. Marks: 70

SECTION – A سیکشن

نوٹ: ہر تمام سوالات کے جوابات مطلوب ہیں ۔ ہر جواب ایک صفحہ سے
زیادہ نہ ہو ۔   (5×4=20)

1 :۔ ناول میں کرداروں کی اہمیت واضح کیجیے ۔

2 :۔ اردو میں ناول نگاری کے آغاز کا پس منظر واضح کیجیے ۔

3 :۔ ڈپٹی نذیر احمد کی مکالمہ نگاری پر اظہار خیال کیجیے ۔

4 :۔ تلوکا کے کردار پر مختصر نوٹ لکھیے ۔

5 :۔ شعور کی رو سے کیا مراد ہے ۔ ناول میں اس تکنیک کے استعمال پر
جامع نوٹ لکھیے ۔

SECTION – B سیکشن

نوٹ: ہر تمام سوالات کے جوابات مطلوب ہیں ۔ ہر سوال کا جواب چار
صفحات سے زیادہ نہ ہو ۔   (5×10=50)

6 :۔ "امراؤ جان ادا" مشرقی کی مٹتی ہوئی تہذیب کی کہانی ہے ۔ بحث کیجیے ۔
یا
امراؤ جان کے فنی محاسن کا تجزیہ کیجیے ۔

7 :۔ ناول کی مختلف قسموں کا احاطہ کیجیے ۔
یا
انیسویں صدی میں اردو ناول کی روایت کا اجمالی جائزہ لیجیے ۔

P.T.O.

8 :- اردو ناول نگاروں نے اس صنف میں کس طرح کے تجربات کیے
تفصیل سے لکھیے ۔

_ یا _

اردو ناولوں میں حقیقت پسند ی کے رجحان کا جائزہ لیجیے ۔

9 :- آگ کا دریا کے موضوع اور پلاٹ کا تنقیدی محاکمہ کیجیے ۔

_ یا _

قرۃ العین حیدر کے فکر و فن کی امتیازی خصوصیات اجاگر کیجیے ۔

10 :- ناول ایک چادر میلی سی میں پنجاب کی دیہاتی زندگی کی ترجمانی
پر اظہار خیال کیجیے ۔

_ یا _

پریم چند کی ناول نگاری کی امتیازی خصوصیات واضح کیجیے ۔

FACULTY OF SOCIAL SCIENCES
M.A. (ECONOMICS) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
ECONOMICS OF GROWTH & DEVELOPMENT - I
PAPER – II

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Human Poverty Index
2. Organic Composition of Capital
3. Actual rate of Growth
4. Surplus labour
5. Choice of goods

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6.   a) Explain how to measure economic growth in an economy.
                    (OR)
     b) Enumerate the factors affecting growth and development.

7.   a) Discuss the Adam Smith theory of growth.
                    (OR)
     b) Evaluate critically Schumpeter's theory of economic development.

8.   a) Assess the impact of Human capital on economic development.
                    (OR)
     b) Describe the Merits and Demerits of Solow growth model.

9.   a) Write a critical note on Critical minimum effort model.
                    (OR)
     b) State and explain Lewis model of economic growth.

10. a) Examine the highlights of Balanced growth model.
                    (OR)
     b) Enlist the different investment criteria adopted in India.

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FACULTY OF SOCIAL SCIENCES
M.A. (Political Science) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
GOVERNEMNT AND POLITICS OF ANDHRA PRADESH
PAPER – II

Time: 3 Hours] [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Gentlemen Agreement
2. Council of Ministers
3. Left Parties
4. Mulki Rules
5. Tribal Movement

Section – B (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Explain the Political Theory of Andhra Pradesh.
   (OR)
   b) Write an essay on the frame work to the study of State Politics of A.P.

7. a) Describe the appointment and powers and functions of the Governor.
   (OR)
   b) Critically examine the functions of Chief Minister.

8. a) Describe the powers and functions of the Speaker of Assembly.
   (OR)
   b) Describe the Telangana Movement in 2009 and the Consequences.

9. a) Critically examine the Politics of BJP in Andhra Pradesh.
   (OR)
   b) Critically analyze the issues of Dalit Movement in A.P.

10. a) Critically examine the main issues of Nasality movement in Andhra Pradesh.
    (OR)
    b) How do you justify the 73rd Constitutional Amendment Act for Strengthening Decentralization Politics?

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FACULTY OF SOCIAL SCIENCES
M.A. (Public Admn.) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
FINANCIAL ADMINISTRATION
PAPER – II

Time: 3 Hours]   [Max. Marks: 70
Note: Answer all questions from Section – A and Section – B

Section – A   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Public Debt
2. Finance Minister
3. Fiscal Federalism
4. ZBB
5. Audit

Section – B   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Explain the meaning and importance of Financial Administration.
   (OR)
   b) Discuss the Source of Public Revenue.

7. a) Explain Principles of Taxation.
   (OR)
   b) Write an essay on Reserve Bank of India (RBI).

8. a) Examine the Central State Financial Relations.
   (OR)
   b) Explain the functions of Finance Commission.

9. a) Explain the Principles of Budget.

   (OR)
   b) Discuss the Enactment Process of Budget in India.

10.a) Examine the role of Parliamentary Committees.
   (OR)
   b) Discuss the functioning of Comptroller and Auditor of India.
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FACULTY OF SOCIAL SCIENCES
M.S.W. III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
DISASTER MANAGEMENT
PAPER – II

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. What is disaster?
2. Man-made disasters.
3. Action Planning.
4. Rehabilitation.
5. Voluntary organizations.

<u>Section – B</u>   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Define Natural disasters and elaborate on various types of Natural disasters.
   (OR)
   b) Differentiate between Natural and Man-made disasters and write about models of management.

7. a) Write about various kinds of Manmade disasters and their impact in India with examples.
   (OR)
   b) Elaborate on the various effects of Natural disasters in relation to physical, Socio-economic and psychological impact.

8. a) Write an essay on participatory assessment and elaborate on the steps involved in it.
   (OR)
   b) Write about the hazard risk assessment and support the argument on the need to have action plan.

9. a) What is disaster management? And write about various phases of disaster management.
   (OR)
   b) What is Actual disaster phase and write about short term and long term contingency plans.

10. a) Explain the need for social worker's intervention in disaster management with examples.
    (OR)
    b) "There is a need for joint efforts by voluntary and government agencies in handling the disaster management". Support the statement with examples.

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FACULTY OF BUSINESS MANAGEMENT
MBA III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
ORGANISATIONAL BEHAVIOUR
PAPER – II

Time: 3 Hours]   [Max. Marks: 70

Section – A   (5x3=15)

Answer the following questions in not more than **ONE** page each:

1. Define Organizational Behavior.
2. Concept of Motivation.
3. Team Vs group.
4. Decision Making.
5. Organizational change.

Section – B   (5x8=40)

Answer the following questions in not more than **FOUR** pages each:

6. a) Write the theoretical approaches to organizational behavior.
    (OR)
    b) Write the challenges for organizational behavior.

7. a) What is Perception? Explain the various stages of perceptional process.
    (OR)
    b) What are the determinants of Personality?

8. a) Explain the types of Teams and How the group development takes place in any organization.
    (OR)
    b) What are the sources of conflicts? And explain strategies to resolve the conflicts.

9. a) Who can be a Leader? Explain the Traits theory of Leadership.
    (OR)
    b) What are the factors required to effective communication?

10. a) Explain the factors of Resistance to change and how to bring change in large organizations.
    (OR)
    b) Explain the reasons for stress and discuss the coping strategies to overcome stress.

Section – C (Compulsory)   (1x15=15)

Employee Motivation: The Personnel Manager of Roshan Limited has received an application for the introduction of company conveyance for employees staying in town. Although Roshan Limited has provided living facilities to its employees about 60 percent of its 1000 employees still have to commute an average of 10km to come to work. The union and some of the employees living on campus have supported the demand. Though the management might favour such a move some sections of the work force are concerned that the introduction of the company conveyance facility may cut down their wages. The company under disguise of compensation allowance pays Rs.20/- per month for traveling to employees staying more than 8km away from the company premises.

Questions:

i) What factors would you take into account in evaluation of this demand from the workers?
ii) Provide the rationale for implementing or not implementing this demand.

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FACULTY OF COMMERCE
M.Com (GENERAL) III– SEMESTER REGULAR EXAMINATIONS, DEC-2017
COST ACCOUNTING
PAPER –II

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:
  1. Cost Accounting.
  2. Activity Based Costing.
  3. Absorption Costing Vs Variable Costing.
  4. Zero Based Budgets.
  5. Budgetary Control.

<u>Section – B</u>   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:
  6. a) Define Costing and explain the objectives and importance of Cost Accounting.

(OR)

   b) The following transactions have been extracted from the books of XYZ Ltd. You are required to make journal entries under

   (i) integrated accounts, and   (ii) Non-integrated accounts.

1.	Purchase of raw material on cash	Rs.4,00,000/-
2.	Carriage inward	Rs.5,000/-
3.	Productive wages paid	Rs.25,000/-
4.	Works overhead incurred	Rs.72,000/-
5.	Office expenses paid	Rs.4,200/-

  7. a) Describe the characteristics of ABC. Explain the steps in ABC system.

(OR)

   b) A product passes through three processes X, Y and Z. The normal waste of each process is a follows: process X = 3%, Process Y =5% and Process Z = 8%. Waste of process X was sold at 25 paise per unit that of process Y at 50 paise per unit and that process Z at Rs.1 per unit.
   10,000 units were issued to process X in the beginning of October, 2016 at a cost of Rs.1/- per unit. The other expenses were as follows:

Particulars	Process- X	Process-Y	Process-Z
Study materials	Rs. 1000/-	1500/-	500/-
Labour	Rs.5000/-	8000/-	6500/-
Direct Expenses	Rs. 1050/-	1188/-	2009/-
Actual output unit	Rs.9500/-	9100/-	8100/-

   Prepare the process accounts, assuming that there was no opening or closing stock.
   Also present the abnormal waste and abnormal gain accounts.

  8. a) Describe the differences between Absorption costing and variable costing in detail.

(OR)

   b) A single product company sells its product at Rs.60 per unit in 2015, the company operated at a margin of safety of 40%. The fixed costs amounted to Rs.3,60,000 and the variable cost ratio to sales was 80%.

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In 2016, it is estimated that the variable cost will go up by 10% and the fixed costs will increase by 5%.

Find the selling price to be fixed in 2016 to earn the same P/V ratio as in 2015.

Assuming the same selling price of Rs.60 per unit in 2015, find the number of units required to be produced and sold to earn the same profit as in 2015.

9. a) Explain different types of budgets in detail.

(OR)

b) For production of 10,000 bulbs the following budgeted expenses.

Particulars	Per unit (Rs.)
Direct Materials	60
Direct Labour	30
Variable overheads	25
Selling expenses (1,50,000)	15
Variable expenses (Direct)	5
Selling Expenses (10% fixed)	15
Administrative Expenses (Rs.50,000 Rigid for all levels of production)	5
Distribution Expenses (20% fixed)	5
Total cost of sale per unit	160

Prepare a budget for production of 6,000 and 8,000 bulbs showing distinctly marginal cost and total cost.

10. a) Describe the advantages and limitations of standard costing.

(OR)

b) In department X the following data is submitted for the week ended 31st October. Standard output for 40 hours per week 1400 units

Standard Fixed Overheads	Rs.1400
Actual output	1200 units
Actual hours worked	32 hours
Actual Fixed Overhead	1500

Prepare a statement of variances.

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FACULTY OF COMMERCE

M.Com. (E-Commerce) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017

E-COMMERCE AND *E*-BANKING

PAPER – II

Time: 3 Hours]   [Max. Marks: 50

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. What is meant by E-Banking?

2. Write a short note about B2B.

3. What is SSL?

4. Fire Wall.

5. Electronic Cheques.

<u>Section – B</u>   (5x6=30)

Answer the following questions in not more than **FOUR** pages each:

6. a) Critically examine the present status of E-Services in India.

(OR)

 b) Explain various Electronic Payment System in detail.

7. a) Describe the benefits and drawbacks of EDI in detail.

(OR)

 b) Explain the legal security and privacy concerns of Internet.

8. a) Describe various techniques of Encryption in detail.

(OR)

 b) Explain the mechanism of Credit Card Security in Banks.

9. a) Describe various methods of Authentification.

(OR)

 b) What are the factors to be considered while securing firewall? Explain.

10. a) Explain the process of designing electronic payment systems.

(OR)

 b) Describe the automated clearing and settlement system prevailing in banks.

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FACULTY OF SCIENCE
M.Sc.(Applied Statistics) – III SEMESTER REGULAR EXAMINATIONS, DEC-2017
RELIABILITY THEORY
PAPER : II

Time: 3 Hours] [Max. Marks: 70

Note: Answer all questions from Section – A and Section –B.
<u>Section–A</u> (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Distinguish between system reliability and component reliability.
2. Define the modular decomposition with suitable examples.
3. Distinguish between IFR and DFR and provide an illustration.
4. Define New Better than used. Give an example.
5. Explain the notion of ageing.

<u>Section–B</u> (5x10=50)

Answer the following questions in not more than **FOUR** page each:

6. a) State the basic properties of reliability and prove any two of them.

(OR)

b) If $\emptyset$ is structure function, then prove or disprove the following:

$$\emptyset\left(\underline{x} \, v \, \underline{y}\right) \geq \emptyset(\underline{x}) \, v \, \emptyset\left(\underline{y}\right) \; and$$
$$\emptyset\left(\underline{x} \cdot \underline{y}\right) \leq \emptyset(\underline{x}) \cdot \emptyset\left(\underline{y}\right).$$

7. a) Explain the use of modular decomposition in improving system reliability bounds.

(OR)

b) Find the reliability of a bridge structure with five components which having
   P_i; i=1, 2, 3, 4 and 5 as individual probabilities.

8. a) i) Define the conditional reliability of an unit of age and stage the exponential.
      ii) State and prove the inequality on NBU.

(OR)

b) Establish the IFRA closure theorem and state its importance.

9. a) Estimate the parameters of Weible distribution.

(OR)

b) What is the role of renewal process in reliability theory? Derive the fundamental
   equation of renewal function.

10. a) Define a coherent structure and explain how you would represent it in terms of
       minimal path sets and minimal sets. Also obtain the system reliability in each case.

(OR)

b) State the no aging property of exponential and prove that the exponential distribution
   having constant failure rate.

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FACULTY OF SCIENCES
M.Sc. (Biotechnology) III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
INDUSTRIAL BIOTECHNOLOGY
PAPER – II

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Write a note on primary screening of microbes
2. Describe solid state fermentation
3. Define biosensors
4. Enumerate two yoghurt producing bacteria
5. Write about BGG vaccine

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6. a) Describe the technique of secondary screening of microorganism for an industrial
       product.

(OR)

   b) Describe various techniques for preservation of microbes.

7. a) Give a comparison of aerobic & anaerobic fermentation process.

(OR)

   b) Describe techniques for the growth of bacterial cells.

8. a) Describe various approaches for design of fermentation media.

(OR)

   b) Discuss the process of production of lysine using microbes.

9.   a) Discuss the role of microbes in production of alcoholic beverages.

(OR)

   b) Explain the industrial production of amylase and lipases.

10. a) Describe recombinant vaccines and explain their merits & demerits.

(OR)

   b) Discuss various steps of cheese production.

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FACULTY OF SCIENCES
M.Sc. (BOTANY) III – SEMESTER REGULAR EXAMINATION, DEC- 2017
CARBON ASSIMILATION & CROP PRODUCTIVITY

PAPER – 02

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Kranz Anatomy
2. C_3 Pathway
3. Stomatal behavior in CAM Plants
4. Sucrose Metabolism
5. Aspartate formers

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6. a) Give an account of Catalytic role of RuBisCO.

(OR)

   b) What are the physiological and biochemical bases for the efficiency of C_4 Plants explain?

7. a) Explain the mechanism of CO_2 fixation in CAM Plants.

(OR)

   b) What do you understand by photorespiration? Explain the mechanism of Photorespiration.

8. a) Explain the source-sink relationship and its influence on yield of crop plants.

(OR)

   b) Discuss about cyclodextrin and fructans.

9. a) Explain plastid genome and genes encoding plastid proteins in higher plants.

(OR)

   b) Give a brief account of regulation of gene expression during chloroplast development.

10. a) Describe the efficiency and productivity of C_4 Plants.

(OR)

   b) Enumerate in detail starch metabolism.

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FACULTY OF SCIENCES
M.Sc. (GEOINFORMATICS) III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017

DIGITAL IMAGE PROCESSING

PAPER – II

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Image Display Types
2. Noise Filtering
3. Distinguish Image and Photograph
4. Image Stretching
5. Histogram Equalization

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6.   a) Write in detail about various types of Satellite Sensory and their Data Products.

(OR)

   b) Discuss the steps included in Radiometric Correction.

7.   a) Justify the need of Hybrid Classification.

(OR)

   b) Discuss the steps involved in unsupervised classification and its usefulness?

8.   a) Describe the purpose of Principle Component Analysis.

(OR)

   b) Justify the role of Accuracy Assessment after Image Classification.

9.   a) Write about Contrast Manipulation and Color Coding.

(OR)

   b) Discuss the role of Image Classification for Land Cover Analysis and Land Use
      Planning.

10. a) What is Error Matrix & how is it evaluated after Image Classification?

(OR)

   b) Discuss the role of Thresholding While evaluating a Classification Image.

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FACULTY OF SCIENCE
M.Sc. (CHEM-OC/PCH-2YPGP) III – SEMESTER REGUALAR EXAMINATIONS, DEC- 2017
MODERN ORGANIC SYNTHESIS
PAPER – 02
(*Common paper*)

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all the following questions from Section-A and Section-B

<u>Section – A</u>   (5x4=20)

Answer all the following questions in not more than **ONE** page each:
1.   Write a note on protection of Amines.
2.   Discuss the applications of organoboranes in C-C bound formation.
3.   Explain the following coupling reactions
     a) Heck   b) Stille
4.   Write a note on PTC (Phase transfer catalyst)?
5.   Discuss the protection of 1.2-diols?

<u>Section – B</u>   (5x10=50)

Answer all the following questions in not more than **FOUR** pages each:
6 a) Discuss the Homogeneous catalytic hydrogenations.
                                (OR)
   b) i) Discuss the following Oxidation Reagents.
         a) DDQ   b) Swern oxidation

7 a) Write the applications of Grignard Reagent in Organic Synthesis.
                                (OR)
   b) Write about the following:
         a) Tebbe reactions   b) Witting reactions.

8 a) Discuss the following reactions:
         a) Ugi   b) Sonogashira.
                                (OR)
   b) Write the mechanism of following reactions with suitable example.
         a) Baylis-Hillman   b) Mitsunobu

9. a) Discuss the determination of Absolute configuration by Mosher's method?
                                (OR)
   b) Write the Synthesis of Shikimic acid from D-arabinose.

10. a) Account the following:
         a) Prevost hydroxylation b) Birch reduction.
                                (OR)
    b) Explain briefly olefin ring closing metathesis using Grubbs' Catalyst.
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FACULTY OF SCIENCE
M.Sc. (PCH-5YIPGP) III - SEMESTER REGULAR EXAMINATIONS, DEC-2017
SUBJECT: **ENVIRONMENTAL SCIENCE**
PAPER – II

Time: 3 Hours]　　　　　　　　　　　　　　　　　　　　[Max. Marks: 70

Note: Answer all the following questions from Section-A and Section-B

Section – A　　　　　　　　　　　　(5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Write a note on types of environmental pollution.
2. What is demineralization?
3. What is Soil-fertility?
4. Write a note on cryogenic fuels.
5. Write the types of earth spheres.

Section – B

Answer the following questions in not more than **FOUR** pages each:　　　(5x10=50)

6　a) Discuss acid rains and ozone depletion. Write their consequences on environment.
(OR)
　b) Write the harmful effects of water pollution and its control strategies.

7　a) Enlist the criteria of water for domestic use. Discuss the physical parameters.
(OR)
　b) Write the principles of waste water management for industrial use.

8　a) Write a detailed note on types of Solid Waste and its management.
(OR)
　b) What are hazardous wastes? Classify them and write a note on their treatment.

9　a) What are Renewable and Non-renewable Energy Resources? Explain about Solar cell and Fuel cell constriction.
(OR)
　b) Discuss the basic concepts of Forest Conservation Act and explain the role of IT in energy management.

10 a) Write a detailed note on nuclear reactions and their commercial applications.
(OR)
　b) Discuss the biological effects and disasters of radioactive pollution.

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FACULTY OF SCIENCE
M.Sc. (PHYSICS/PE) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
MODERN OPTICS
PAPER – II

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all the following questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. List out characteristic properties of laser light.
2. Explain the concept of spatial coherence.
3. Classify the lasers based on the nature of active medium.
4. Write short note on Volume Hologram.
5. Explain self focussing of light in non-linear medium.

<u>Section – B</u>   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6 a) What is threshold condition and obtain the equations for threshold population inversion.

(OR)

  b) Derive the equations for radiations density in terms of Einstein Coefficients and establish the relation between them.

7 a) Discuss the basic modes of vibration of CO_2 molecule. Explain the working principle of CO_2 laser with energy level diagram.

(OR)

  b) Discuss the working principle of Dye lasers and explain the importance of Dye lasers when compared with solid state lasers.

8 a) Describe the in-line holography and how its limitations are overcomed in off axis holography.

(OR)

  b) What is Holography? Explain its advantages over the photography and describe the recording of amplitude and phase of an object.

9 a) Describe Fourier transforming property of a thin lens when the object is placed in front of the lens.

(OR)

  b) Explain second harmonic generation of light and show that it does not occur in centro, inversion symmetric and isotropic medium.

10 a) Explain the working of He-Ne laser and how the laser light will be polarized.

(OR)

  b) Explain in detail optical mixing and obtain phase matching condition for it.

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FACULTY OF SCIENCE
M.Sc. (MATHEMATICS) III – SEMESTER REGULAR EXAMINATIONS, DEC-2017
ELEMENTARY OPERATOR THEORY
PAPER – II

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Prove that a linear operator on a finite dimensional complex normed space $X \neq \{0\}$ has at least one eigen value.
2. Show that the zero operator on any normed space is compact.
3. Define a projection P on a Hilbert Space H, where $H = Y \oplus Y^{\perp}$. Also show that I - P is a projection of H on to $Y^{\perp}$.
4. *Let* $T: H \to H$ be a bounded self adjoint linear operator on a complex Hilbert Space H then all the eigen values of T are real.
5. Prove compactness of $T: l^2 \to l^2$ defined by $y = (n_j) = T_x$ where $n_l = \frac{\xi_j}{j}$ for J = 1, 2, 3 . . . .

<u>Section – B</u>   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Prove all matrices representing a given linear operator $T: X \to X$ on a finite dimensional normed space X relative to various bases for X have the same eigen values.

(OR)

   b) Let $T \in B(X,X)$, where X is a Banach Space. If $\|T\| < 1$ then $(I - T)^{-1}$ exists as a bounded linear operator on the whole space X and $(I - T)^{-1} = \sum_{i=0}^{\infty} T^i = I + T + T^2 + \cdots$

7. a) Let X and Y be normed spaces and then
       i) Every compact linear operator $T: X \to Y$ is bounded and continuous.
       ii) If dem X = ∞, then identify operator $I: X \to X$ is not compact.

(OR)

   b) Let $T: X \to X$ be compact linear operator on a normed space X then for every $\lambda \neq 0$ the range of $T_\lambda = T - \lambda I$ is closed.

8. a) Let $T: H \to H$ be a bounded self-adjoint linear operator on a complex Hilbert Space H. Then a number λ belongs to the resolvent set $P(T)$ of T if and only if there exists $C > 0$ such that
           $\|T_\lambda x\| \geq$ c $\|x\|$ for all $x \in H$
           Where $T_\lambda = T - \lambda I$.

(OR)

   b) Every Positive bounded self-adjoint linear operator $T: H \to H$ on a Complex Hilbert Space H has a Positive Square root A. Which is unique. This operator A commutes with every bounded linear operator on H which commutes with T.

9. a) A bounded linear operator $P: H \to H$ on a Hilbert Space H is a projection if and only if P is self-adjoint and idempotent.

(OR)

   b) Let P_1 and P_2 be projections on a Hilbert Space H then:
       i) The difference $P = P_2 - P_1$ is a projection on H if and only if $Y_1 \subset Y_2$ where $Y_c = P_c$ (H).
       ii) If $P = P_2 - P_1$ is a projection, P projects H onto Y, where Y is orthogonal complement of Y_1 in Y_2.

P.T.O

10. a) Let (T_n) be a sequence of compact linear operators from a normed space X into a Banach Space Y. If (T_n) is uniformly operator convergent say $\|T_n - T\| \to 0$ then the linear operator T is compact.

(OR)

b) The Spectrum $\sigma(T)$ of a bounded self-adjoint linear operator $T: H \to H$ on a complex Hilbert Space H lies in the closed interval [m, M] on the real axis. Where

$$m = \inf_{\| x \| = 1} < Tx, x >, \qquad M = \operatorname{Sup}_{\| x \| = 1} < Tx, x >.$$

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FACULTYOF SCIENCES
M.Sc. (Zoology) III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
SERICULTURE
PAPER – II

Time: 3 Hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

<u>Section – A</u>   (5x4=20)

Answer the following questions in not more than **ONE** page each:

1. Write in brief about the Viral Diseases of Mulberry Plants?
2. Explain about the preparation of Silkworm laying.
3. Write about the care to be taken during transportation of cocoons.
4. Describe the circulatory system of Silkworm?
5. Write in detail about synchronization in grainage.

<u>Section – B</u>   (5x10=50)

Answer the following questions in not more than **FOUR** pages each:

6. a) Define disinfection? Write about the different disinfecting methods?
    (OR)
    b) Define mounting? Write in brief about the different mountages.

7. a) Describe the structures of Silk gland with a diagram?
    (OR)
    b) Write the different rearing methods followed for Chawkie worms.

8. a) Explain in detail about the food plants of different Silkworms?
    (OR)
    b) Give a brief account of the morphology of B.mori life stages?

9. a) Write in detail about the commercial characters of Cocoons.
    (OR)
    b) Describe in brief how the cocoons are reeled?

10. a) Write about the mulberry and non mulberry Silkworms.
    (OR)
    b) Write about the mulberry leaf quantity and quality required for different Silkworm instars.

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FACULTY OF SCIENCES
MCA III – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
DATABASE MANAGEMENT SYSTEM

PAPER – II

Time: 3 hours]   [Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Discuss different types of Entities.
2. Write about Embedded SQL.
3. What is ISAM? Explain briefly.
4. Write a short note on Deadlock.
5. Discuss in brief about Log File.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain the advantages of DBMS.

(OR)

b) What is Constraint? Write about different constraints in Relational Model.

7. a) What is Cursor? Discuss in detail.

(OR)

b) Write about Row Level Triggers in detail.

8. a) Discuss Insert, Delete Operations on B+ Trees.

(OR)

b) Discuss the following:
    i) Static Hashing   ii) Linear Hashing.

9. a) Define Concurrency Control. Explain Lock-Based Concurrency Control.

(OR)

b) What is transaction? Explain ACID properties.

10. a) Discuss the following:
    i) WAL   ii) Check Pointing.

(OR)

b) Write in detail about Database Security.

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