R-16&19

Code:1002/16/19/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: GENERAL ENGLISH

Time: 3 hours

Max Marks: 80

Section-A

I. Answer any *four* of the following (4x5=20 Marks)

1. Write the initial medial and final positions for the given monophthongs.
   Eg: /i:/ each beat tea
   a) / a /
   b) / I /
   c) / o /
   d) / i: /
   e) / u: /

2. Fill in the blanks with suitable tense forms of the verbs given in the brackets.
   a) Hyderabad ..... (be) the capital of Telangana.
   b) I ..... (do) homework now.
   c) Prem ..... (come) home tomorrow.
   d) Dinesh ..... (bring) dosa for lunch yesterday.
   e) Do you ..... (know) Satish's brother?

3. Pick out right spelt words from the options given
   a) concentration , consentration , concentrasion , concentretion
   b) illustrasion, illustration, ilustration, illustretion
   c) asimilation, assimillation, assimilation, assimiletion
   d) profution, profestion, preofusion, profusion
   e) comprehention, comprehension, comprahension, comprehension

4. Fill in the blanks choosing suitable words from those given.
   (Polysyllabic, anti-national, pre-independence, hyperactive, proactive, disagree)
   a) The spy was arrested for his ..... activities.
   b) Madhu was really ..... in making sure that everything went according to plan.
   c) Someone who is more active than normal is called .....
   d) A word with more than three syllables is called a ..... word.
   e) I ..... with you on this. I do not like this plan.

5. Write a short paragraph on 'your goal in life'.

6. Write a short paragraph on 'How Mohandas Gandhi tried to shed his bad habits?'

Section-B

II. Answer the following questions (4x15=60 Marks)

7. (a) (i) Compare and contrast Arun with the narrator in the story 'The Thief' in 150 words. (8 Marks)

   (ii) Read the following passage and answer the questions given below. (7 Marks)

   I hesitated long enough for the train to leave without me. When it had gone and the noise and busy confusion of the platform had subsided, I found myself standing alone on the deserted platform. The knowledge that I had a hundred stolen rupees in my pyjamas only increased my feeling of isolation and loneliness. I had no idea where to spend the night. I had never kept any friends because sometimes friends can be one's undoing.

   Questions:
   1. Who is the narrator of the passage?
   2. Why was the speaker standing alone on the platform?

3. Why did he not have any friends?
4. Which word in the extract is an antonym of the word 'crowded'?
5. How much amount the narrator has with him?
6. What is meant by 'Isolation'?
7. What part of speech is the word 'hesitate'?

(OR)

(b) (i) Annotate the following in about 75 words. (8 Marks)

It's time I did some real work, I told myself. I'm getting out of practice ... If I don't take the money, he'll only waste it on his friends.

(ii) Read the following passage and answer the question given below. (7 Marks)

The young lift-man in a City office who threw a passenger out of his lift the other morning and was fined for the offence was undoubtedly in the wrong. It was a question of 'Please'. The complainant entering the lift, said, 'Top'. The lift-man demanded 'Top-please' and this concession being refused he not only declined to comply with the instruction but, hurled the passenger out of the lift. This, of course was carrying a comment on manner too far. Discourtesy is not a legal offence, and it does not excuse assault and battery.

Questions:

1. Why did the lift man throw the passenger out of the lift?
2. Why was the lift man fined?
3. What did the passenger say on entering the lift?
4. What did the passenger decline?
5. Pick the word from the passage which means 'throw'?
6. Write an antonym for the word 'instruct'.
7. What part of speech is the word 'assault'?

8. (a) (i) Describe the ways in which the narrator tried to kill the mosquito in the 'A Fellow Traveller' in about 150 words. (8 Marks)

(ii) Read the following passage and answer the question given below. (7 Marks)

I flicked him off again. He skipped away, took another jaunt round the compartment, returned, and seated himself impudently on the back of my hand. It is enough, I said: magnanimity has its limits. Twice you have been warned that I am someone in particular, that my august person resents the tickling impertinences of strangers. I assume the black cap. I condemn you to death. Justice demands it, and the court awards it. The counts against you are many. You are a vagrant; you are a public nuisance; you are travelling without a ticket; you have no meat coupon. For these and many other misdemeanors you are about to die.

1. When was the author annoyed with the mosquito?
2. What does the sentence 'I assume the black cap' mean?
3. What did the mosquito do after it had been flicked off?
4. What was the warning of the author?
5. What is the meaning of 'vagrant'?
6. Write an antonym for the word 'condemn'.
7. What part of speech is the word 'impudent'?

(OR)

(b) (i) Annotate the following in about 75 words. (8 Marks)

I took up my paper and he came and sat on it. Foolish fellow, I said, you have delivered yourself into my hands.

(ii) Read the following passage and answer the question given below. (7 Marks)

Vemulawada is a famous pilgrimage place in Telangana. Devotees from various places of erstwhile Andhra Pradesh throng the town to have a darshan of the God. It is an abode of Raja Rajeshwara Swami, an incarnation of Lord Shiva. The presiding deity of the temple located in the town is Sri Raja RajeswaraSwamy who is locally popular as Rajanna. He is adorned on both the sides by the idol of Sri Raja Rajeswari Devi on the right side and to the left is the idol of Sri

LaxmiSahithaSiddiVinayaka. Vemulawada Raja Rajeswara temple is situated 38 km from Karimnagar. This famous temple dedicated to Lord RajarajeswaraSwamy, draws pilgrims in large numbers. There is a Dargah inside the temple complex where all devotees offer prayers, irrespective of caste and creed. Pilgrims have divine bath in a holy tank called Dharma Gundam, before proceeding for darshan and these holy waters are believed to have medicinal properties. Every year at the time of Maha Shiva Rathri, devotees in large numbers flock to Vemulawada, to offer prayers to Lord Shiva. This temple also has a very special offering made by devotees called' KodaMokku'. Kodamokku is a ritual where the devotee makes the pradakshinam of the temple with a kode (bull) which is vahanam(nandi) of Lord Shiva. Rajarajeshvara temple was built by King RajarajaChola. Inside is a massive shivalinga.

Questions:

1. How is Sri Raja Rajeshwara Swamy popularly known?
2. Which idol is found on the right side of Sri Raja Rajeshwara Swamy?
3. What is there inside the temple complex?
4. What do pilgrims do before going for darshan?
5. What do pilgrims do in the name of Kodamokku?
6. Who is Rajanna?
7. What part of speech is the word 'erstwhile'?

9. (a) (i) What is the attitude of Irish airman's attitude in the poem 'An Irish Airman Foresees His Death'? (8 Marks)

(ii) Write a short paragraph on 'Education and employability skills.' (7 Marks)

(OR)

(b) (i) Annotate the following in about 75 words. (8 Marks)

My country is Kiltartan cross,
My countrymen Kiltartan's poor

(ii) Write a conversation of 7 exchanges each about introducing each other about describing your colleges and courses. (7 Marks)

Ex: Shirin: Hi. I am Shirin.
Preethi: You look a bit worried. Do you need any help?

10. (a) (i) What is Prince Dimitri's attitude towards death in 'The Death Trap'? (8 Marks)

(ii) What does Abraham Lincoln's story teach you about the importance of hard work and ambition. (7 Marks)

(OR)

(b) (i) Annotate the statement 'Gentlemen, I fear my business is more grave. (8 Marks)

I have the saddest of duties to perform. I know you would all gladly lay down your lives for your Prince, but there are some perils which even your courage cannot avert.'

(ii) Write a conversation of 7 exchanges each about health habits you have. (7 Marks)

Ex: **Sumana:** Hello, I am Sumana. I get up regularly at 5 am.
Usha: Hi! I am Usha, nice to meet you. I get up at 6 am.

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R-16

Code:1005/16/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Second Language Telugu

Time: 3 Hours

Max Marks: 80

విభాగం -ఎ

I. ఈ క్రింది ఏవైనా ఐదు ప్రశ్నలకు సమాధానములు వ్రాయండి. (5x4=20 Marks)

1. 'ఒక సూనృత వాక్యము మేలు చూడగన్' సందర్భసహిత వ్యాఖ్య రాయండి.
2. 'సుఖము దు:ఖంబు కార్యార్థి చూడడెందు' సందర్భసహిత వ్యాఖ్య రాయండి.
3. 'ప్రేమ నిలిపిన ప్రేమ నిలుచును' – సందర్భసహిత వ్యాఖ్య రాయండి.
4. 'ప్రజల హర్షధ్వనులు మిన్ను పగులుదన్నె' – సందర్భసహిత వ్యాఖ్య రాయండి.
5. అనుమాణము, సరలత్వము, వీరబద్రుడు, సుభాసితము – సాధు రూపాలను రాయండి.
6. కొఱవి గోపరాజు – కవి పరిచయం రాయండి.
7. దాశరథి కృష్ణమాచార్యులు – కవి పరిచయం రాయండి.
8. పేర్వారం జగన్నాధం – కవి పరిచయం రాయండి.

విభాగం - బి

II. ఈ క్రింది ప్రశ్నలకు సమాధానములు వ్రాయండి. (5x12=60 Marks)

9. (a) రవికుల వార్ధిచంద్రుడగు రాముని సేమము చాల వింటినా
వివిధములైన పాట్లు పృధివీపతికిం దగఁజెప్పఁగల్గినే
డవిరళభంగి నీవలన నచ్చుగ నేనుపకార మేమియుం
దవిలి యొనర్చలేను వసుధాస్థలి వర్ధిలు బ్రహ్మకల్పముల్

(లేదా)

ఆవె నీ చుట్టపుఁజిల్కపిండ్లెదురుగా నన్యోన్యమేతెంచె; న
ల్లవె నీతోడి సతీర్థ్య శారికలు సఖ్యంబెంతయుం దెల్పుచు
న్నవి శోకప్రమదోష్ణ శీతఘన భాష్పాంబు ప్రవాహంబులన్;
భవదంత: కరణమ్ము మమ్మునకటా! పాయంగనెట్లుండెనో!

(b) శకుంతల రాజసభలో చేసిన ధర్మోపన్యాసాన్ని వివరించండి.

(లేదా)

కొఱవి గోపరాజు చంద్రోదయాన్ని వర్ణించిన విధానాన్ని తెలపండి.

10.(a) బంగారం కన్నా ప్రేమ గొప్పదని గురజాడ 'కాసులు'లో ఎలా నిరూపించాడు?

(లేదా)

(b) గంగిరెద్దుల వాడి వాక్చాతుర్యాన్ని తెలిపి, తద్వారా పొందిన ఫలితాన్ని తెల్పండి.

11.(a) రుద్రమదేవి పాత్రను వర్ణించండి.

(లేదా)

(b) మదనమంజరి రుద్రమదేవి కొలువులో చేరిన విధానాన్ని వర్ణించండి.

12.(a) రుద్రమదేవి మహాదేవరాజును ఓడించిన విధానాన్ని వర్ణించండి.

(లేదా)

(b) మదనమంజరి రుద్రమదేవికి సోమదేవుని వృత్తాంతాన్ని చెప్పడం వల్ల కలిగిన పరిణామాలను రాయండి.

13. ఈ క్రింది వాటిలో నాలిగింటిని విడదీసి, సంధిపేరు తెలిపి, సూత్రం రాయండి. (4x3=12 Marks)

(a) తీర్థాభిగమనం
(b) శకుంతలోపాఖ్యానం
(c) ఇట్లనియె
(d) ఇత్తన్వి
(e) సత్యమువల్కె
(f) కట్టుగ్రము
(g) నమ్మకుండుట
(h) ప్రత్యేకము

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R-19

Code: 1005/19/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Second Language Telugu

Time: 3 Hours

Max Marks: 80

అ భాగం (సంగ్రహ సమాధానాలు)

I. ఈ క్రింది ఏవేని నాలుగు ప్రశ్నలకు క్లుప్తంగా సమాధానాలు వ్రాయండి. (4x5=20Marks)

1. "పాలేలా యారగింపవు లింగమూర్తి"– సందర్భ సహిత వ్యాఖ్య వ్రాయండి.
2. "ప్రేమ నిచ్చిన ప్రేమ వచ్చును ప్రేమ నిలిపిన ప్రేమ నిలుచును" – సందర్భ సహిత వ్యాఖ్య వ్రాయండి.
3. పల్లా దుర్గయ్య గురించి వ్రాయండి.
4. కింది పదాలకు నానార్థాలు వ్రాయండి.
   a. (i) పాలు (ii) పొలం (iii) నరుడు (iv) సురభి (v) అస్త్రము
5. కింది పదాలకు పర్యాయ పదాలు వ్రాయండి.
   a. (i) మహిళ (ii) నీరు (iii) శైలము (iv) పులి (v) దేవాలయం
6. నందనవనం గురించి వ్రాయండి.

ఆ భాగం (వ్యాసరూప సమాధానాలు)

II. అన్ని ప్రశ్నలకు వివరంగా సమాధానాలు వ్రాయండి. (15X4=60 Marks)

7. నుతజల పూరితంబు లగు నూతులు నూఱిటికంటె సూనృత
   వ్రత యొకబావి మేలు మఱి బావులు నూఱిటికంటె నొక్కస
   త్క్రతు వదిమేలు తత్క్రతు శతంబునకంటె సుతుండు మేలు త
   త్సుతశతకంబుకంటె నొక సూనృత వాక్యము మేలు సూడఁగన్

   (లేదా)

   నాళీకాప్తుఁడు గోరగించునట మున్ ప్రత్యూష కాలంబునన్
   వాలాయంబుగ ఫుల్లతామరస భవ్యంబైన శృంగారపుం
   గేళాకూళినిఁ దీర్ధమాడి యనురక్తిన్ ధౌతకాషాయుఁడై
   ఫాలాది స్థలులందు నవ్యభసిత ప్రాగల్భ్య మేపారఁగన్.

   (పై పద్యాలలో ఒక పద్యానికి సందర్భం, కవిపరిచయం, ప్రతి పదార్థతాత్పర్యాలు, వ్యాకరణాంశాలు వివరించండి.)

8. (a) 'గొడగూచి' ముగ్ధభక్తి గూర్చి వర్ణించండి.

   (లేదా)

   (b) 'బంగారం కన్నా ప్రేమ గొప్పది' అని 'కాసులు' పాఠ్యభాగంలో గురజాడ తెలిపిన విధానాన్ని వివరించండి.

9. (a) 'రుద్రమదేవి' ప్రతాపాన్ని గురించి వివరించండి.

   (లేదా)

   (b) గోన గన్నారెడ్డి పాత్ర స్వభావాన్ని విశ్లేషించండి.

10. (a) క్రియలను ఆధారంగా చేసుకొని వాక్యాలను ఎన్ని రకాలుగా విభజించవచ్చు? సోదాహరణంగా వివరించండి.

    (లేదా)

    (b) ఈ క్రింది సంధులను లక్ష్యలక్షణ సమన్వితంగా వివరించండి.

    (1) వృద్ధి సంధి (2) త్రిక సంధి (3) యణాదేశ సంధి

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R-16

Code:1003/16/BL

Faculty of Arts, Commerce, Sciences, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Second Language Hindi

Time : 3 Hours | Max Marks : 80

Section – A

I. निम्नलिखित प्रश्नों में से किन्हीं पाँच प्रश्नों के उत्तर दीजिए। **(5X4=20 Marks)**

1. मनुष्य की विशेषता उसके चरित्र में है; विश्लेषण कीजिए।
2. 'भाभी' पाठ की विधवा भाभी का जीवन संक्षिप्त में लिखिए।
3. 'सद्‌गति' पाठ के दुखिया समाज में अछूत क्यों है? अपने शब्दों में लिखिए।
4. 'प्रायश्चित' पाठ में पंडित द्‌वारा झूठे कर्मकांड क्या है लिखिए।
5. निम्नलिखित वाक्यों को शुद्ध कीजिए।
   a) तुम तुम्हारी घर जाओ।
   b) गीता गाना गारी।
   c) अध्यापिका आ रहा है।
   d) आप किधर से आए
   e) तुम मुझे कल स्कूल में मिलो।
6. लेखक के अनुसार बाजार को हमें कैसे सार्थक बनाना चाहिए।
7. संस्कृति का भारत में कैसे संगम हुआ है?
8. 'चीफ की दावत' पाठ में माँ को बेटा क्यों छुपाना चाहता है?

Section – B

II. निम्नलिखित प्रश्नों के उत्तर दीजिए। **(5X12=60 Marks)**

9. (a) 'चरित्र-संगठन' के लिए लेखक ने किन बिन्दुओं को महत्त्वपूर्ण माना है?

अथवा

(b) बाजार का इस्तेमाल हमें कब और कैसे करना चाहिए।

10. (a) भाभी पाठ का सारांश लिखिए।

अथवा

(b) लेखक के अनुसार राष्ट्र का स्वरूप कैसे बनता है।

11. (a) 'सद्‌गति' पाठ में लेखक द्‌वारा जात-पात के भेद-भाव को किस तरह बताया गया है?

अथवा

(b) 'छोटा जादूगर' पाठ का सारांश लिखिए।

12. (a) 'प्रायश्चित' पाठ का सारांश लिखिए।

अथवा

(b) 'चीफ की दावत' पाठ में माँ को एक पूरानी वस्तु समझना गलत है? अपने शब्दों में लिखिए|

13. (a) निम्नलिखित दिए गए अंग्रेजी शब्दों का हिंदी में एवं हिन्दी शब्दों का अँग्रेजी में अनुवाद कीजिए|

1. Agreement 2. Confidential 3. Absence 4. Order 5 Grant 6. Annual

7. सलाहकार 8. अध्यक्ष 9. अनुवादक 10. राजदूत 11. कुलपति 12. आयकर अधिकारी

अथवा

1. लड़कियाँ खेलती हैं| (लिंग बदलकर लिखिए|)
2. वह स्कूल नहीं जा रहा है| (लिंग बदलकर लिखिए|)
3. मैं स्कूल जा रहा हूँ| (वचन बदलकर लिखिए|)
4. राधिका बाजार जा रही है|(भूतकाल में लिखिए|)
5. राहुल पेड़ बैठकर फल खा रहा है| (कारक का प्रयोग करके लिखिए|)
6. राधा किताब पढ़ती है| (वाच्य बदलिए|)

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R-19

Code:1003/19/BL

Faculty of Arts, Commerce, Sciences, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Second Language Hindi

Time : 3 Hours **Max Marks : 80**

Section – A

I. निम्नलिखित प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए। **(4X5=20 Marks)**

1. "मनुष्य की विशेषता उसके चरित्र में है| चरित्र के कारण ही एक मनुष्य दूसरे से अधिक आदरणीय समझा जाता है|" (संदर्भ सहित व्याख्या कीजिए|)
2. "चौक बाज़ार में खड़े होकर आदमी को लगने लगता है कि उसके अपने पास काफी नहीं है और चाहिए, और चाहिए|" (संदर्भ सहित व्याख्या कीजिए|)
3. "भाभी" पाठ के माध्यम से लेखिका के उद्देश्य को स्पष्ट कीजिए|
4. "भारतीय संस्कृति" की क्या विशेषताएँ है?
5. "सद्गति" कहानी में "दुखी चमार" पर प्रकाश डालिए|
6. "प्रायश्चित" कहानी में प्रायश्चित क्यों किया जाता है? अपने शब्दों में लिखिए|

Section – B

II. निम्नलिखित प्रश्नों के उत्तर दीजिए। **(4X15=60 Marks)**

9. (a) 'उदारता' और 'लालच' के लक्षण लिखिए?

अथवा

(b) "बाजार दर्शन" शीर्षक निबंध की विषय-वस्तु संक्षेप में लिखिए|

10.(a) जीवन में विनयशीलता क्यों आवश्यक है| अपने शब्दों में लिखिए|

अथवा

(b) "राष्ट्र का स्वरूप" शीर्षक निबंध का सारांश सरल भाषा में प्रस्तुत कीजिए||

11. (a) "भारत में संस्कृति संगम" निबंध की विषय-वस्तु संक्षेप में लिखिए|

अथवा

(b) "सच का सौदा" कहानी का सारांश अपने शब्दों में लिखिए |

12. (a) निम्नलिखित दिए गए अंग्रेजी शब्दों का हिंदी में एवं हिन्दी शब्दों का अँग्रेजी में अनुवाद कीजिए|

1. Acceptance 2. Passport 3. Circular 4. Acceptance 5 Identification Card 6. Allowance
7. लेखाकार 8. राजदूत 9. रोकड़िया 10. आयुक्त 11. जिला प्रबन्धक 12. अनुवादक

अथवा

(b). निम्नलिखित दिए गए वाक्यों को बदलकर लिखिए|

1. पंडिताइन पूजा पाठ कर रही है| (लिंग बदलकर लिखिए)
2. मैं काम कर रहा हूँ| वचन बदलकर लिखिए|)
3. हाथी जंगल में भाग गया| (वचन बदलकर लिखिए|)
4. मोहन किताब पढ़ेगा| (भूत काल में लिखिए|)
5. पेड़ पत्ता गिरा| (कारक का प्रयोग करके लिखिए|)
6. हेमा ने भजन गाया| (वाच्य बदलकर लिखिए|)

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R-16

Code:1004/16/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations -June, 2023

PAPER: Second Language Sanskrit

Time: 3 Hours | Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. **श्लोकस्य अनुवादं कुरुत ।**

   "रामः सत्पुरुषो लोके सत्यधर्मपरायणः ।
   धर्मज्ञः सत्यसंधश्च शीलवाननसूयकः" ॥

2. **ससन्दर्भं व्याख्यात -** "क एष माममनुत्तरयन् मुमूर्षुः समायाति बधिरः" ।
3. महाकविं विजयसारथिं उद्दिश्य लघुनिबन्धं लिखत ?
4. देवम्, भानुषु , मतीः, नद्यः, वारिणा - इत्येतेषां लिङ्गविभक्तिवचानानि प्रत्यभिजानीत ?
5. महाहिः , पावकः, दिव्यौषधम् , तज्जलम्, वागीशः - इत्येतेषु सन्धिं विघटयत ?
6. **ससन्दर्भं व्याख्यात -** "बहवो नृप कल्याणाः गुणाः पुत्रस्य सन्ति ते" ।
7. **श्लोकस्य अनुवादं कुरुत ।**

   "ददाति प्रतिगृह्णाति गुह्यमाख्याति पृच्छति ।
   भुङ्क्ते भोजयते चैव षड्विधं प्रीतिलक्षणम् " ॥

8. **श्लोकं पूरयत -**

   "मनस्येकं ..... दुरात्मनाम्" ॥

Section-B

II. Answer the following questions (5x12=60 Marks)

9. **द्वयोः श्लोकयोः प्रतिपदार्थं भावं च लिखत ।**

   अ) अस्त्युत्तरस्यां दिशि देवतात्मा हिमालयो नाम नगाधिराजः ।
   पूर्वापरौ तोयनिधी वगाह्य स्थितः पृथिव्या इव मानदण्डः ॥

   आ) न्यस्ताक्षरा धातुरसेन यत्र भूर्जत्वचः कुञ्जरबिन्दुशोणाः ।
   व्रजन्ति विद्याधरसुन्दरीणामनङ्गलेखक्रिययोपयोगम् ॥

   इ) अनतरत्नप्रभवस्य यस्य हि मं न सौभाग्यविलोपि जातम् ।
   एको हि दोषो गुणसन्निपाते निमज्जतीन्दोः किरणेष्विवाङ्कः ॥

   ई) सत्पर्षिहस्तावचितावशेषाण्यधो विवस्वान्परिवर्तमानः।
   पद्मानि यस्याग्रसरोरुहाणि प्रबौधयत्यूर्ध्वमुखैर्मयूखैः॥

10. (a) धर्मबद्दो दौवारिक इति पाठ्यांशस्य सारांशं लिखत ।

(अथवा)

(b)" कृतघ्ने नास्ति निष्कृतिः" इति पाठ्यांशस्य सारं विवृणुत ।

11. (a)"अवन्तु भारतप्रजाः स्वतन्त्रभारतप्रभाम्" इति पाठ्यांशस्य सारांशं विवृणुत ।

(अथवा)

(b) "एष धर्मः सनातनः " इति पाठ्यांशस्य सारं विवृणु ।

12. **द्वयोः** शब्दयोः सर्वासु विभक्तिषु सर्वेषु च वचनेषु रूपाणि लिखत ।

A) कवि B) पितृ C) वधू D) फल

13. अ) नामनिर्देशपूर्वकं **त्रिषु** विघटयत ।

A) वाणीशः B) तवेव C) इत्यत्र

D) तट्टीका E) अजन्तः F) हरिरवदत्

आ) नामनिर्देशपूर्वकं **त्रिषु** सन्धत्त ।

A) राम + अनुजः B) भो+अति C) महा + उत्सवः

D) एक + एकः E) तत् +लयः F) वाक् + ईशः

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R-19

Code: 1001/19/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations -June, 2023

PAPER: Second Language Sanskrit

Time: 3 Hours | Max Marks: 80

Section –A

I. Answer any *five* from given Questions. (4x5=20 Marks)

1. **अनुवादं कुरुत ।**
   रामः सत्पुरुषो लोके सत्यधर्मपरायणः।
   धर्मज्ञः सत्यसंधश्च शीलवाननसूयकः॥
2. **ससन्दर्भं व्याख्यानं लिखत ।**
   तदधुनैव परिष्कृतं पारदभस्म तुभ्यं दद्याम्।
3. **श्लोकं पूरयत ।**
   उद्यमेन हि .....मृगाः।
4. **ससन्दर्भं व्याख्यानं लिखत ।**
   वृष्टिमन्तं महामेघं नर्दन्तमिव बर्हिणः।
5. **अनुवादं कुरुत।**
   वर्जयेत् कौलिकाकारं मित्रं प्राज्ञतरो नरः।
   आत्मनः सम्मुखं नित्यं य आकर्षति लोलुपः ॥
6. **सन्धिनामनिर्देशपूर्वकं विघटयत ।**
   i. वधूहः ii. नरावुभौ iii) ब्रह्मर्षिः iv) तथैव v) इत्याह

Section – B

II. Answer any *five* from given Questions. (4x15=60 Marks)

7. **द्वयो : प्रतिपदार्थं तात्पर्यं च लिखत ।**
   i. यं सर्वशैलाः परिकल्प्य वत्सं मेरौ स्थिते दोग्धरि दोहदक्षे।
   भास्वन्ति रत्नानि महौषधीश्च पृथूपदिष्टां दुदुहुर्धरित्रीम्॥
   ii. यश्चाप्सरोविभ्रममण्डनानां सम्पादयित्रीं शिखरैर्बिभर्ति।
   वलाहकच्छेदविभक्तरागाम कालसन्ध्यामिव धातुमत्ताम्॥
   iii. पदं तुषारसृतिधौतरक्तं यस्मिन्नदृष्ट्वापि हतद्विपानाम्।
   विदन्ति मार्गं नखरन्ध्रमुक्तैः मुक्ताफलैः केसरिणां किरातः॥
   iv. यः पूरयन् कीचकरन्ध्रभागान् दरीमुखोत्थेन समीरणेन।
   उद्गास्यतामिच्छति किन्नराणां तानप्रदायित्वमिवोपगन्तुम्॥
8. धर्मबध्दो दौवारिक इति पठ्यांशे दौवारिकस्य स्वामिभक्तिम् उल्लिखत। (अथवा)
   पञ्चतन्त्रमनुसृत्य रक्तमुखकरालमुखयोः कथां संक्षेपेण लिखत ।
9. **द्वयोः सम्पूर्णतया शब्दरूपाणि लिखत।**
   i.देव ii. रमा iii. मधु iv. फल
10. **सन्धिनामनिर्धेशपूर्वकं षट् पदानि सन्धत्त ।**
    i. हरि+इच्छा **ii.** भो+अति **iii.** नव+ उदयः **iv.** घन+ओधनम् **v.** धातृ+अंशः
    vi. तत्+च **vii.** षट्+नगर्यः **viii.** सुगुण्+ईशः **ix.** पद्+नगः **x.** सुप्+अन्तः

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R-19

Code:1006/10/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Urdu Prose & Poetry

Time: 3 Hours

Max Marks: 80

حصہ الف (4X5=20 Marks)

نوٹ: درج ذیل سوالات میں سے کسی چار کے جوابات دیے جائیں، ہر سوال کے لیے پانچ نشانات مختص کیے گئے ہیں۔

1 سوال نمبر۱:۔ غزل کی خصوصیات بیان کیجیے۔

2 سوال نمبر۲:۔ ولی دکنی کا اجمالی تعارف پیش کیجیے۔

3 سوال نمبر۳:۔ نظم ''فنونِ لطیفہ'' پر اجمالی نوٹ لکھیے۔

4 سوال نمبر۴:۔ حکایت ''چوہا اور میوہ فروش'' کا خلاصہ اپنے الفاظ میں لکھیے۔

5 سوال نمبر۵:۔ ڈراما ''تلاش'' کا مرکزی خیال کیا ہے؟

6 سوال نمبر۶:۔ درج ذیل اشعار کی بحوالہ متن تشریح کیجیے۔

سنو عاقلاں سب کہ دنیا ہے فانی جو کوئی بوجھیا اس ہے صاحب قرانی

مدتوں لگ حرم و دیر پھرا میں تیرے واسطے کیا کیا نہ کیا

حصہ ب (4X15=60 Marks)

نوٹ: درج ذیل سوالات میں سے کوئی چار کے تفصیلی جوابات مطلوب ہیں، ہر سوال کے لیے پندرہ نشانات مختص کیے گئے ہیں۔

7.(a) وال نمبر۷ (الف):۔ سراج اورنگ آبادی کو صوفی شاعر کیوں کہا جاتا ہے؟ تفصیل سے لکھیے۔

یا

(b) (ب):۔ میر تقی میرؔ کی شخصیت پر روشنی ڈالتے ہوئے؛ ان کی غزل گوئی کی خصوصیات بیان کیجیے۔

8.(a) ل نمبر۸ (الف):۔ نظم ''توحید'' کا خلاصہ اپنے الفاظ میں قلم بند کیجیے۔

یا

(b) (ب):۔ اکبر الہ آبادی کی شخصیت پر روشنی ڈالتے ہوئے؛ ان کی نظم نگاری پر اظہار خیال کیجیے۔

9.(a) ل نمبر۹ (الف): مظہر علی خاں ولاؔ کی حکایات پر سیر حاصل مضمون قلم بند کیجیے۔

یا

(b) (ب):۔ بیگم قدسیہ زیدی کا تعارف پیش کرتے ہوئے؛ ان کی ڈراما نگاری کا جائزہ لیجیے۔

10.(a) ل نمبر۱۰ (الف):۔ صالحہ عابد حسین کی ادبی خدمات کا جائزہ لیجیے۔

یا

(b) (ب):۔ سفر نامہ ''ہندوستاں جنت نشاں'' کا خلاصہ اپنے الفاظ میں لکھیے۔

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R-16

Code:1006/16/BL

Faculty of Arts, Commerce, Sciences, Social Sciences and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations, June 2023

PAPER: Classical Prose, Modern Prose, Poetry, History of Arabic Literature and Grammar

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any FIVE of the following questions (5x4=20 Marks)

1. Translate the following Ayaat:

ورفعنا لك ذكرك O فإن مع العسر يسرا O إن مع العسر يسرا O

2. Translate the following:

والتين والزيتون O وطور سينين O وهذا البلد الأمين O

3. Answer the following question:

أين يسكن عبد الرحمن؟

4. Give the following answer in Arabic:

ما المراد بالنظافة الخاصة؟

5. Translate the following verse:

لغتي لغة القرآن لغتي يا لغة الأزمان

6. How many kinds of word?

كم قسما للكلمة؟

7. What is the meaning of "Muallaqat"?

ما معنى "المعلقات"؟

8. Mention the types of poetry in Pre-Islamic period?

اذكر أنواع الشعر في "العصر الجاهلي"؟

Section-B

II. Answer the following questions (5x12=60 Marks)

9. a) Write the Summary of Surah At Teen.

اكتب خلاصة "سورة التين"

Or

b) Write the Tafseer of Suratul Inshirah.

اكتب تفسير "سورة الانشراح".

10. a) Write the Summary of "An Nazafa".

اكتب خلاصة "النظافة"

Or

b) Write the conversation of "Al Hiwar".

اكتب محادثة "الحوار"

11. a) Explain any two verses from the poem "Lughatee".

اشرح بيتين من نشيدة "لغتي"

Or

b) Write the Summary of the poem "Al Qalam".

اكتب خلاصة "القلم"

12. a) Define Singular, Dual and Plural with examples:

عرف المفرد، المثنى، والجمع مع الأمثلة

Or

b) Explain the kinds of word with examples:

اشرح أقسام الكلمة مع الأمثلة

13. a) Write a brief note on "Hanging Odes".

اكتب المقالة الوجيزة حول "المعلقات السبع"

Or

b) What do you know about characteristics of Arabic Language.

ماذا تعرف عن ميزات اللغة العربية.

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R-16

Code:1001/16/BL

Faculty of Arts, Commerce, Science, Social Science and Business Management
B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023
PAPER: Urdu Prose & Poetry

Time: 3 Hours

Max Marks: 80

Section-A (5x4=20 Marks)

I. مندرجہ ذیل میں سے کوئی پانچ سوالات کے جوابات مطلوب ہیں

1. غزل کی تعریف کرتے ہوئے مطلع، مقطع ردیف اور قافیہ کسے کہتے ہیں لکھیں
2. نظیر اکبر آبادی کا تعارف پیش کریں
3. حکایت کسے کہتے ہیں
4. امتیاز علی تاج کا تعارف پیش کیجئے
5. سفرنامہ کسے کہتے ہیں
6. قلی قطب شاہ کے بارے میں لکھے
7. علامہ اقبال کاتعارف بیان کیجئیے
8. میر تقی میر کو خدائے سخن کیوں کہا جاتا ہے لکھے

Section- B 5x12=60

II مندرجہ ذیل میں سے کوئی پانچ سوالات کے جوابات مطلوب ہیں۔

۹ ا:- نظم مستقبل میں شاعر کو آنے والے سال سے کیا امیدیں ہیں۔

یا

۹ ب نظیر اکبر آبادی نے اپنی نظم توحید میں کن خیالات کا اظہار کیا ہے۔

۱۰ ا:- فنون لطیفہ یا بارش کا خلاصہ تحریر کیجئے۔

یا

۱۰ ب سراج اورنگ آبادی کی شاعری کی خصوصیت بیان کیجئے۔

۱۱ ا:- صالحہ عابد حسین نے اپنے سفرنامہ میں ہندوستان کو جنت نشان کیوں کہا ہے

یا

۱۱ ب کوئی ایک حکایت کا خلاصہ اپنے الفاظ میں تحریر کیجئے۔

۱۲ ا:- "تلا شش" کا خلاصہ لکھئے۔

یا

۱۲ ب غزل کی تعریف کرتے ہوئے اس کا تاریخی پس منظر بیان کیجئے۔

۱۳:- ذیل میں دیئے گئے اشعار میں سے کسی چار کی تشریح کیجئے۔

ا) سنو عاقلاں سب کہ دنیا ہے فانی جو کوئی بو جھیا اُس ہے صاحب قرانی

ب) سجن کے ساج عالم میں دگر نیں ہمن میں ہے ولے ہم کو خبر نیں

ج) جو تیرے غم کی تمنا نہ کیا ابدی عیش کا سودا نہ کیا

د) گھر گھر ہے فلک عشق میں دوزخ کی تاب و تب بھڑکا نہ ہم کو شیخ یہ آتش میں ہیں

ہ) باعث شیشہ و بالا ہے حسن صورت کے ساتھ حسن ادا

و) بزم عشاق میں ارے زاہد عقل کو اعتبار نیں ہرگز

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R-19

Code:1006/19/BL

Faculty of Arts, Commerce, Sciences, Social Sciences and Business Management

B.A/B.Com/B.Sc/BBA I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Classical Prose, Modern Prose, Poetry, History of Arabic Literature and Grammar

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *four* of the following questions (4x5=20 Marks)

1. Translate the following with reference to the context:
فَإِنَّ مَعَ الْعُسْرِ يُسْرًا O إِنَّ مَعَ الْعُسْرِ يُسْرًا O

2. Explain the following verse :
والتّين والزّيتون O وطور سينين O وهٰذا البلد الأمين O

3. Answer the following question in Arabic:
أذكر حديث الرسول ﷺ في النظافة؟

4. How many kinds of Kalima? What are they?
كم قسما للكلمة ؟ و ما هي ؟

5. How many poets of المعلقات السبع ? Write their name only:
كم شعراء المعلقات السبع ؟ أكتب أسماء الشعراء فقط .

6. Write the kinds of poetry in Pre-Islamic Period.
أكتب أنواع الشعر فى العصر الجاهلي .

Section-B

II Answer the following questions **(4x15=60 Marks)**

7. (A) Write the explanation of Sura "Inshirah" .
أكتب تفسير سورة "الانشراح".

Or

(B) Write the summary of Suratut Teen.
أكتب خلاصة "سورة التين" .

8. (A) Write the conversation of "Al Hiwar".
أكتب محادثة "الحوار".

Or

(B) Write the summary of "Al Nazafah".
أكتب خلاصة "النظافة" .

9. (A) Write about the Masculine and Feminine:
أكتب عن المذكر و المؤنث .

Or

(B) How many kinds of word in Arabic أقسام الكلمة? Explain them with examples:
كم نوعا للكلمة؟ إشرح بالأمثلة .

10. (A) Write the characteristics features of Arabic Language:
أذكر ميزات اللغة العربية .

Or

(B) Write a note on "Poetry during Pre-Islamic Period":
أكتب عن "الشعر فى العصر الجاهلي" .

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R-16

Code:1308/16/BL

Faculty of Science

B.Sc (Mathematics)I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Differential Calculus

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. Expand $cosx$ by maclaurin's series.
2. Verify rolle's theorem for $f(x) = x^2\ in\ [-1,1]$
3. Evaluate $\lim_{x \to 0} \frac{\log(1-x^2)}{\log(cosx)}$
4. Find the evolute of the asteroid $x = a\cos^3\theta,\ y = a\sin^3\theta$
5. If $u = x^2 \tan^{-1}\left(\frac{y}{x}\right) - y^2 \tan^{-1}\left(\frac{x}{y}\right), xy \neq 0$ find $\frac{\partial^2 u}{\partial x \partial y}$
6. If $u = \sin^{-1}\left(\frac{x^2+y^2}{x+y}\right)$ show that $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = \tan u$
7. Find the asymptotes of the curve $y^3 - 6xy^2 + 11x^2y - 6x^3 + x + y = 0$
8. Find the envelope of the family of curves $y = mx + am^3$, where m is a parameter.

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) State and prove Leibnitz theorem for the n^{th} derivative of the product of two functions.

Using it if $y = (x^2-1)^n$ prove that $(x^2-1)\,y_{n+2} + 2xy_{n+1} - n(n+1)y_n = 0$

(OR)

(b) State and prove lagranges mean value theorem. And verify the mean value theorem for $f(x) = x^3\ in\ [a,b]$

10.(a) (i) Find the values of a and b in order that $\lim_{x \to 0}\left[\frac{x(1+a\cos x)-b\sin x}{x^3}\right]$ may be equal to 1.

(ii) Evaluate $\lim_{x \to 0} (cosx)^{cotx}$

(OR)

(b) (i) Show that the curvature of the point $\left(\frac{3a}{2}, \frac{3a}{2}\right)$ on the folium $x^3 + y^3 = 3axy\ is\ \frac{-8\sqrt{2}}{3a}$

(ii) Obtain the evolute of the parabola $y^2 = 4ax$

11.(a) State and prove Euler's theorem on homogeneous functions and using it, if $u = cot^{-1}\left(\frac{x+y}{\sqrt{x}+\sqrt{y}}\right)$ show that $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} + \frac{1}{4}\sin 2u = 0$

(OR)

(b) If $u = \frac{x+y}{1-xy}, x = \tan(2r - s^2),\ y = \cot(r^2 s)\ find\ \frac{\partial u}{\partial s}$

12.(a) Discuss the maxima and minima of the function $u = sinx\ siny\ sinz$ where x, y, z are angles of a triangle.

(OR)

(b) Find the asymptotes of $x^3 + 2x^2y - xy^2 - 2y^3 + xy - y^2 - 1 = 0$

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R-16

Code:1308/16/BL

Faculty of Science

B.Sc (Mathematics)I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Differential Calculus

Time: 3 Hours

Max Marks: 80

విభాగం - ఎ

I. ఈ క్రింది ఏవైనా ఐదు ప్రశ్నలకు సమాధానములు వ్రాయండి. (5x4=20 Marks)

1. $cosx$ ప్రమేయానికి మెక్లారిన్ (maclaurin's) శ్రేణి విస్తరణ వ్రాయండి.
2. $[-1,1]$ అంతరంలో $f(x) = x^2$ నకు రోలె (rolle's) సిద్ధాంతాన్ని పరీక్షించండి.
3. $\lim_{x \to 0} \frac{\log(1-x^2)}{\log(cosx)}$ ను గణించండి.
4. ఆస్ట్రాయిడ్ (asteroid) $x = a\cos^3\theta,\ y = a\sin^3\theta$ నకు ఎవల్యూట్ (evolute) ను కనుక్కోండి.
5. $u = x^2 tan^{-1}\left(\frac{y}{x}\right) - y^2 tan^{-1}\left(\frac{x}{y}\right), xy \neq 0$ అయితే $\frac{\partial^2 u}{\partial x \partial y}$ ను కనుక్కోండి.
6. $u = sin^{-1}\left(\frac{x^2+y^2}{x+y}\right)$ అయితే $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = \tan u$ అని చూపండి.
7. $y^3 - 6xy^2 + 11x^2y - 6x^3 + x + y = 0$ వక్రానికి అసింప్టోట్స (asymptotes) ను కనుక్కోండి.
8. m పరామితి అయితే $y = mx + am^3$ వక్రాల కుటుంబానికి ఎనవలాప్ (envelope) ను కనుక్కోండి.

విభాగం - బి

II. ఈ క్రింది ప్రశ్నలకు సమాధానములు వ్రాయండి. (4x15=60 Marks)

9. (a) రెండు ప్రమేయాల లబ్ధమునకు సంబంధించిన n^{th} అవకలజము కనుగొనే Leibnitz సిద్ధాంతమును ప్రవచించి నిరూపించుము.

దీనిని ఉపయోగించి $y = (x^2-1)^n$ అయితే $(x^2-1)y_{n+2} + 2xy_{n+1} - n(n+1)y_n = 0$ అని చూపండి.

(లేదా)

(b) లెంగ్రాంజ్ మధ్యమ మూలన సిద్ధాంతమును ప్రవచించి నిరూపించుము. $[a,b]$ అంతరం పై $f(x) = x^3$ ప్రమేయానికి మధ్యమ మూల్య సిద్ధాంతమును సరిచూడుము.

10.(a) (i) $\lim_{x \to 0}\left[\frac{x(1+acosx)-bsinx}{x^3}\right]$ విలువ 1 కి సమానం అయినట్లు a, b విలువలను కనుక్కోండి.

(ii) $\lim_{x \to 0}(cosx)^{cotx}$ విలువను గణించుము.

(లేదా)

(b) (i) $x^3 + y^3 = 3axy$ అనే ఫోలియమ్ (folium) పైన $\left(\frac{3a}{2}, \frac{3a}{2}\right)$ బిందువు వద్ద వక్రతను (curvature) కనుక్కోండి.

(ii) $y^2 = 4ax$ పరావలయానికి ఎవల్యూట్ (evolute) ను కనుక్కోండి.

11.(a) సమీఘాత ప్రమేయాలకు సంబంధించిన ఐయిలర్ (euler's) సిద్ధాంతమును ప్రవచించి నిరూపించండి.

దానిని ఉపయోగించి $u = cot^{-1}\left(\frac{x+y}{\sqrt{x}+\sqrt{y}}\right)$ అయితే $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} + \frac{1}{4}\sin 2u = 0$ అని చూపండి.

(లేదా)

(b) $u = \frac{x+y}{1-xy}, x = \tan(2r-s^2),\ y = \cot(r^2s)$ అయితే $\frac{\partial u}{\partial s}$ ను కనుక్కోండి.

12.(a) x, y, z త్రిభుజంలోని కాణాలైతే $u = sinx\,siny\,sinz$ ప్రమేయానికి గరిష్ఠ, కనిష్ఠ విలువలను చర్చించుము.

(లేదా)

(b) $x^3 + 2x^2y - xy^2 - 2y^3 + xy - y^2 - 1 = 0$ ను అసింప్టోట్స్ (asymptotes) ను కనుక్కోండి.

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R-19

Code:1308/19/BL

Faculty of Science

B.Sc (Mathematics)I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Differential and Integral Calculus

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *eight* of the following questions (8x4=32 Marks)

1. If $u = Sin^{-1}\left(\frac{x^2+y^2}{x+y}\right)$, then prove that $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = tanu$
2. $z = tan^{-1}\left(\frac{x^2+y^2}{x+y}\right)$ then find $\frac{\partial z}{\partial x}, \frac{\partial z}{\partial y}$
3. Show that $lim_{(x,y)\to(0,0)} \frac{xy}{x^2+y^2}$ does not exist.
4. If $H = f(y-z, z-x, x-y)$ prove that $\frac{\partial H}{\partial x} + \frac{\partial H}{\partial y} + \frac{\partial H}{\partial z} = 0$
5. If $u = x^2 - y^2, x = 2r - 3s + 4, y = -r + 8s - 5$ find $\frac{\partial u}{\partial r}$
6. Find the radius of curvature of $y = 4sinx - sin2x$ at $P = \left(\frac{\pi}{2}, 4\right)$
7. Find the radius of curvature of $y = xe^{-x}$ at its maximum point.
8. By Newton's method find the radius of curvature of $y = x^4 - 4x^3 - 18x^2$ at (0,0)
9. Find radius of curvature of $s = 4aSin\frac{\psi}{3}$ at $P = \left(\frac{\pi}{2}, 2a\right)$
10. Find the length of the of the arc of the curve $y = \log sec\, x$ from $x = 0$ to $x = \frac{\pi}{3}$
11. Find the length of the arc of the curve $x = a(\theta + sin\,\theta),\ y = a(1 - cos\theta)$ from $\theta = 0\ to\ \theta = \pi$
12. Find the perimeter of the cardioide $r = a(1 - cos\theta)$ from $\theta = 0\ to\ \theta = \pi$

Section-B

II. Answer the following questions (4x12=48 Marks)

13.(a) (i) State and Prove Euler's theorem for Homogeneous functions.

(ii) If $x^y = y^x$ then find $\frac{\partial y}{\partial x}$

(OR)

(b) If $f(x,y) = \begin{cases} \frac{x^5y}{x^2+y^2}, & x^2+y^2 \neq 0 \\ 0, & (x,y) = (0,0) \end{cases}$ then show that $f_{yx}(0,0) \neq f_{xy}(0,0)$

14.(a) If $z = e^u f(v), u = ax + by, v = ax - by$, then show that $b\frac{\partial z}{\partial x} + a\frac{\partial z}{\partial y} = 2abz$

(OR)

(b) Expand $e^x \log(1+y)$ in powers of $x\ and\ y$

15.(a) Find the centre and circle of curvature at the point $P\left(\frac{a}{4}, \frac{a}{4}\right)$ on $\sqrt{x} + \sqrt{y} = \sqrt{a}$

(OR)

(b) Find the evolute of the hyperbola $2xy = a^2$

16.(a) Prove that the loop of the curve $x = t^2,\ y = t - \frac{t^3}{3}$ is of length $4\sqrt{3}$

(OR)

(b) Find the volume of the solid obtained by revolving the ellipse $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ about the $x - axis$.

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R-19

Code:1308/19/BL

Faculty of Science

B.Sc (Mathematics)I-Year, CBCS–I Semester Backlog Examinations –June, 2023

PAPER: Differential and Integral Calculus

Time: 3 Hours

Max Marks: 80

విభాగం - ఎ

I. ఈ క్రింది ఏవైనా ఎనమిది ప్రశ్నలకు సమాధానములు వ్రాయుము. (8x4=32 Marks)

1. $u = Sin^{-1}\left(\frac{x^2+y^2}{x+y}\right)$ అయితే $x\frac{\partial u}{\partial x} + y\frac{\partial u}{\partial y} = tanu$ అని నిరూపించండి.
2. $z = tan^{-1}\left(\frac{x^2+y^2}{x+y}\right)$ అయితే $\frac{\partial z}{\partial x}, \frac{\partial z}{\partial y}$ ను కనుగొనండి.
3. $lim_{(x,y)\to(0,0)} \frac{xy}{x^2+y^2}$ వ్యవస్థితం కాదు అని నిరూపించండి.
4. $H = f(y-z, z-x, x-y)$ అయితే $\frac{\partial H}{\partial x} + \frac{\partial H}{\partial y} + \frac{\partial H}{\partial z} = 0$ అని నిరూపించండి.
5. $u = x^2 - y^2, x = 2r - 3s + 4, y = -r + 8s - 5$ అయితే $\frac{\partial u}{\partial r}$ ను కనుగొనండి.
6. $P = \left(\frac{\pi}{2}, 4\right)$ వద్ద $y = 4sinx - sin2x$ వక్రతా వ్యాసార్ధం కనుగొనండి.
7. $y = xe^{-x}$ వక్రత వ్యాసార్ధం ను కనుగొనుము.
8. న్యూటన్స్ (Newton's) పద్ధతిని ఉపయోగించి $y = x^4 - 4x^3 - 18x^2$ (0,0) వద్ద వక్రత వ్యాసార్ధంను కనుగొనుము.
9. $s = 4aSin\frac{\psi}{3}$ ను $P = \left(\frac{\pi}{2}, 2a\right)$ వద్ద వక్రత వ్యాసార్ధంను కనుగొనుము.
10. $x = 0$ నుండి $x = \frac{\pi}{3}$ వరకు $y = \log sec\, x$ వక్రానికి వక్రం పొడవు కనుగొనుము.
11. $\theta = 0$ నుండి $\theta = \pi$ వరకు $x = a(\theta + sin\,\theta),\ y = a(1 - cos\theta)$ వక్రం యొక్క పొడవును కనుగొనుము.
12. $\theta = 0$ నుండి $\theta = \pi$ వరకు $r = a(1 - cos\theta)$ కార్డియోడ్ యొక్క చుట్టు కొలత కనుగొనుము.

విభాగం - బి

II. ఈ క్రింది ప్రశ్నలకు సమాధానములు వ్రాయుము. (4x12=48 Marks)

13.(a) (i) ఎయులర్ (Euler's) సిద్ధాంతాన్ని సమఘాత ప్రమేయాలను ప్రవచించి నిరూపించండి.

(ii) $x^y = y^x$ అయితే $\frac{\partial y}{\partial x}$ ను కనుగొనుము.

(లేదా)

(b) $f(x,y) = \begin{cases} \frac{x^3y}{x^2+y^2}, & x^2+y^2 \neq 0 \\ 0, & (x,y) = (0,0) \end{cases}$

అయితే $f_{yx}(0,0) \neq f_{xy}(0,0)$ అని నిరూపించండి.

14.(a) $z = e^u f(v), u = ax + by, v = ax - by$ అయితే $b\frac{\partial z}{\partial x} + a\frac{\partial z}{\partial y} = 2abz$ అని నిరూపించండి.

(లేదా)

(b) $e^x \log(1+y)$ ను x మరియు y యొక్క ఘాతాలలో విస్తారన చేయండి.

15.(a) $P\left(\frac{a}{4}, \frac{a}{4}\right)$ వద్ద $\sqrt{x} + \sqrt{y} = \sqrt{a}$ యొక్క వక్రణకేంద్రం వక్రతా సమీకరణం కనుగొనండి.

(లేదా)

(b) $2xy = a^2$ యొక్క కవచం (evolute) ను కనుగొనుము.

16.(a) $x = t^2,\ y = t - \frac{t^3}{3}$ వక్రరేఖ యొక్క లూప్ యొక్క పొడవు $4\sqrt{3}$ అని నిరూపించండి.

(లేదా)

(b) x – అక్షం వెంబడి $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ తిప్పినప్పుడు వచ్చే వస్తువు (solid) ఘనపరిమాణం కనుగొనండి.

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R-16

Code:1305/16/BL

Faculty of Science

B. Sc (Electronics) I-Year, CBCS-I Semester Backlog Examinations –June, 2023

PAPER: Circuit Analysis

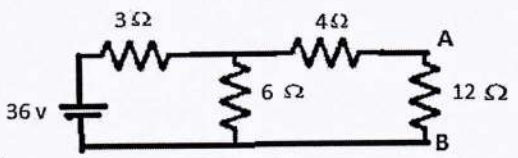
Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. Define RMS and derive an expression for the value of AC voltage.
2. Explain Node voltage and mesh current analysis of circuit.
3. Derive the expression of Maximum power transfer theorem.
4. Calculate Thevenin resistance (R_{th}) across AB in given circuit.



5. Explain frequency response of RL circuit.
6. Distinguish between low pass and high pass filters.
7. Explain Q factor and Bandwidth of RLC series circuit.
8. Explain deflection sensitivity of CRO

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) Define average value of current and derive an expression of phasor representation of sinusoidal current

(OR)

(b) Explain KCL and KVL of circuit with three resistances and one dc source.

10. (a) State and explain Thevenin's theorem.

(OR)

(b) State and explain Norton's theorem.

11. (a) Describe an expression of current growth and decay of RC circuit.

(OR)

(b) Explain about the passive differentiating circuit and passive integrating circuits.

12. (a) Explain the construction and working of parallel RLC circuit with resonant frequency and Q factor.

(OR)

(b) Draw the block diagram of CRO and explain its working.

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R-19

Code:1305/19/BL

Faculty of Science

B. Sc (Electronics) I-Year, CBCS –I Semester Backlog Examinations -June, 2023

PAPER: Circuit Analysis

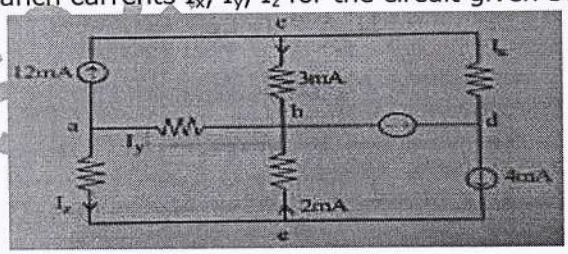
Time: 3 Hours

Max Marks: 80

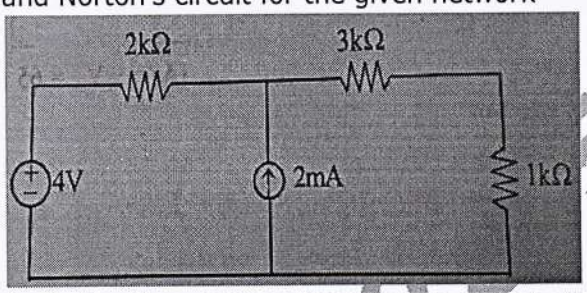
Section-A

I. Answer any EIGHT of the following questions (8x4=32 Marks)

1. Explain j operator with suitable examples.
2. With example explain the statement of KCL.
3. Find the values of branch currents I_x, I_y, I_z for the circuit given below Using KCL.



4. Briefly explain Milliman's theorem.
5. Write the significance of Norton's and Thevenin's theorems.
6. Find the Thevenin's and Norton's circuit for the given network



7. How can you discriminate the frequency reponse of RC and RL circuits?
8. Describe band pass filter.
9. In an RC low pass filter, the value of R is 5kΩ and cut-off frequency is 1kHz. Find the value of C.
10. Define band width, Q-factor and selectivity.
11. What is the principle of operation of CRO?
12. A parallel resonant circuit employs a 50pF capacitor and has a band width of 250KHz. Calculate the maximum impedance of the circuit.

Section-B

II. Answer the following questions (4x12=48 Marks)

13.(a) Derive equations for Average and r.m.s values of a Sine wave. And define Form factor.

(OR)

(b) Define KCL and explain a method to find node voltage in a circuit containing multiple sources using node voltage method.

14.(a) State and prove maximum power transfer theorem and derive an expression for obtaining maximum power delivered to the load.

(OR)

(b) State and prove Norton's theorem and explain how a Norton's equivalent circuit is related to Thevenin's equivalent circuit.

15.(a) What is a differentiator? Draw the circuit of a differentiator and obtain its output

expression. Draw its input and corresponding output waveforms.

(OR)

(b) Derive equations for growth and decay of current in a circuit containing inductance and resistance. What is meant by time constant of it.

16.(a) Obtain the expression for the resonant frequency of a series resonating circuit. How can you distinguish series and parallel resonant circuits?

(OR)

(b) With a neat block diagram explain the working of a CRO.

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R-16

Code:1311/16/BL

Faculty of Science
B. Sc (Statistics) I-Year, CBCS-I Semester
Backlog Examinations –June, 2023
PAPER: Descriptive Statistics and Probability

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *five* of the following (5x4=20 Marks)

1. Distinguish between a questionnaire and schedule.
2. Explain the concept of kurtosis.
3. Write a short note on axiomatic definition of probability.
4. For any two events A and B, show that $P(A \cap B) \leq P(A) \leq P(A \cup B) \leq P(A) + P(B)$.
5. Define i) probability mass function ii) probability density function.
6. Define distribution function of a random variable. Also state its properties.
7. Show that $V(a X+b) = a^2 V(X)$.
8. State and prove multiplication theorem of expectation for two variables.

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) Explain the methods of collecting primary data with advantages and Disadvantages.

(OR)

(b) Define Raw and central moments. Establish the relationship between the moments about the mean in terms of moments about any arbitrary point.

10. (a) State and prove addition theorem of probability for n events.

(OR)

(b) State and prove Baye's theorem. Ina bolt factory machines A, B and C manufactures 20%, 30% and 50% respectively of the total. Of their total output, 6%, 3% and 2% are defective. A bolt is drawn at random and found to be defective. Find the probabilities that it is found to be manufactures by machines A, B and C.

11.(a) Define continuous random variable and probability density function
If 'x' has its probability density function as

$$f(x)=\begin{cases} ax; 0 \leq x \leq \leq 1 \\ a; 1 \leq x \leq 2 \\ 3a - ax; 2 \leq x \leq 3 \\ 0; \text{other wise} \end{cases}$$

Determine the constant 'a' and compute the $P(0.5 \leq x \leq 2.5)$

(OR)

(b) The joint p.d.f of two dimensional random variable (x, y) is given by

$$f(x, y)=\begin{cases} kx^2y; 0 < x < 1; 0 < y < 1 \\ 0; \text{other wise} \end{cases}$$

i) Find the value of 'k' ii) Find the marginal densities of x and y
iii) Find the mean of x

12.(a) Define m.g.f and c.g.f of a random variable. What is the effect of change of origin and scale on m.g.f and c.g.f.

(OR)

(b) State and prove Chebyshev's inequality and write its applications.

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R-19

Code:1311/19/BL

Faculty of Science

B. Sc (Statistics) I-Year, CBCS-I Semester Backlog Examinations –June, 2023

PAPER: Descriptive Statistics and Probability

Time:3 Hours. Max Marks: 80

Section –A

I. Answer any *Eight* of the following questions. (8x4=32 Marks)

1. Write short notes on Kurtosis.
2. Explain why we need for Sheppard's corrections and what are they.
3. CV=5; Karal Pearson's co-efficient of skewness = 0.54 and σ = 2.Find the mean and mode.
4. State and prove addition theorem of probability for two events.
5. Prove for any three events A.B and C then
   $P(A \cup B/C) = P(A/C) + P(B/C) + P((A \cap B)/C)$
6. Write the statement of Baye's theorem.
7. Define Distribution function and write its properties.
8. Let X be a random variable with the following probability distribution

X=x	-3	6	9
P(X=x)	1/6	1/2	1/3

   Find **E(X)** and **V(X)**
9. A continuous random variable X has a pdf,
   $f(x) = 3x^2$; $0 < x < 1$
   = 0 ; Otherwise
   Find the pdf of **Y=2X**
10. Find the Co-Variance between ax and by, where cov(X,Y)=r.
11. Define Probability generating function and write its three properties.
12. Define Chebychive's inequality.

Section-B

II. Answer the following questions. (4X12=48 Marks)

13. (a) Define clearly all measures of Central tendency with suitable examples.

    (OR)

    (b) Define Central and Non-Central Moments. Obtain the relation to express Central Moments in terms of Non-Central Moments

14. (a) State and prove Multiplication theorem of probability. If A and B are independent events then show that $\bar{A}$ and $\bar{B}$ are also independent events.

    (OR)

    (b) State and prove Boole's inequality.

15. (a) Distinguish between p.m.f and p.d.f. Define joint probability distribution and discuss its properties.

    (OR)

    (b) Let the joint probability density function of the random Variable X and Y be
    $f(x,y) = 2-x-y$; $0 \le x \le 1$
    ; $0 \le y \le 1$
    = 0 ; Otherwise.
    Find the marginal probability density functions and Conditional density functions of X and Y

16. (a) Define Cumulant generating function and derive the expression for the first four cumulants in terms of central moments.

    (OR)

    (b) State and prove Cauchy –Schwartz's inequality

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R-16

Code:1101/16/BL

Faculty of Arts

B.A/B.Sc (Computer Applications)I-Year, CBCS-I Semester

Backlog Examinations -June, 2023

PAPER: Computer Fundamentals

Time: 3 Hours Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. Write about Instruction Set and Instruction Cycle.
2. Write the working of I/O system.
3. List out uses of Internet.
4. List the careers in information systems.
5. Write about Artificial intelligence.
6. Write the applications of computer.
7. What are the different types of software?
8. What is an algorithm? Illustrate with an example.

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) What are the characteristics of computer? Explain the different generations of computer.

(OR)

(b) Explain the Memory Hierarchy in detail.

10.(a) Convert $(234)_{10}$ decimal number to (i)binary, (ii)octal, (iii)hexadecimal. Write about Signed and Unsigned numbers.

(OR)

(b) Explain different types of input and output devices.

11.(a) Explain about Device management in detail.

(OR)

(b) Write about internet protocol and its architecture.

12.(a) Explain the emerging computer technologies.

(OR)

(b) Explain in brief about Digital signature.

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R-19

Code:1101/19/BL

Faculty of Science

B.A/B.Sc (Computer Applications) I-Year, CBCS –I Semester

Backlog Examinations -June, 2023

PAPER: Programming in C

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any EIGHT of the following questions (8x4=32 Marks)

1. memory
2. algorithm
3. data type
4. if-else
5. switch statement
6. strings
7. storage classes
8. pointers
9. dynamic memory allocation
10. structures
11. enumeration types
12. files

Section-B

II. Answer the following questions (4x12=48 Marks)

13.(a) what is a computer? what are the characteristics of a computer

(OR)

(b) explain different data types in C

14.(a) explain conditional control structures in C

(OR)

(b) explain library functions commonly used in "ctype.h"

15.(a) explain call-by-value, call-by-reference with example

(OR)

(b) explain storage classes in detail

16.(a) explain structure initialization and array of structures

(OR)

(b) explain about binary files

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R-17

Code:1304/17/BL

Faculty of Science

B.Sc (Computer Science) I-Year, CBCS-I Semester

Backlog Examinations -June, 2023

PAPER: Programming in C

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. What are the different types of 'C' constants? Explain.
2. Explain the operational overview of a CPU.
3. Write a program to print all prime no's from 1 to 300 (use loop, break, continue).
4. Explain character Array with program
5. What are the storage classes? Explain.
6. Write uses of pointer.
7. How does a structure differ from an Array? Explain.
8. Write about Binary Files?

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) Explain the different data types available in 'C' language.

(OR)

(b) Explain operators used in C and discuss about precedence and associativity.

10. (a) Explain about Formatted Input and output. Give example

(OR)

(b) Explain Iterative Statements

11. (a) Explain call –by-value and call-by-reference

(OR)

(b) Explain the memory allocation functions with syntax.

12. (a) Explain structures initialization of Accessing of members

(OR)

(b) Explain about different file management functions.

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R-19

Code:1304/19/BL

Faculty of Science

B.Sc (Computer Science) I-Year, CBCS –I Semester

Backlog Examinations -June, 2023

PAPER: Programming in C

Time: 3 Hours

Max Marks: 80

Section-A

I. Answer any *eight* of the following questions (8x4=32 Marks)

1. Explain the different types of program statements in C
2. Explain the classification of computers.
3. Define a)compiler b)interpreter c)assembler d)translator
4. Explain about do..while statement.
5. Write about escape sequences with its purpose.
6. What is a string.Name some functions in string.h.
7. Explain about inline function.
8. List and explain storage classes in C.
9. Write a short note on address of operator.
10. Write the syntax of structure declaration.
11. Explain various operations on files.
12. Write about file management functions.

Section-B

II. Answer the following questions (4x12=48 Marks)

13.(a) Define algorithm and explain in detail about different ways of stating an algorithm.

(OR)

(b) Explain various C operators with examples.

14.(a) Explain about special control statements with syntax and examples.

(OR)

(b) What is an array explain in detail about 1D and 2D array with an example.

15.(a) Explain call by value and call by reference with examples.

(OR)

(b) Explain declaration, initialization and accessing of pointers in C with an example program.

16.(a) Differentiate between structure and union with example programs.

(OR)

(b) Explain about files and working with binary files in C language

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R-16

Code:1304/16/BL

Faculty of Science

B.Sc (Computer Science) I-Year, CBCS-I Semester

Backlog Examinations -June, 2023

PAPER: Object Oriented Programing with C++

Time: 3 Hours Max Marks: 80

Section-A

I. Answer any *five* of the following questions (5x4=20 Marks)

1. Write and explain the C++ program structure.
2. Explain C++ character set.
3. Write about pointers.
4. Explain Function overloading.
5. Explain enumerated data types
6. Explain about Friend Function and Friend Class.
7. Explain about Access Specifiers.
8. Explain Virtual Functions and Pure Virtual Functions.

Section-B

II. Answer the following questions (4x15=60 Marks)

9. (a) What is Object Oriented Programming? Explain features, merits and demerits. Compare with Structured Programming.

(OR)

(b) Explain Decision control statements with program.

10.(a) What is Function? Explain different types of Functions with program.

(OR)

(b) What is an array? Explain different operations performed on arrays.

11.(a) What is Structure? Explain declaring, initializing and accessing of structure members. Compare with Unions.

(OR)

(b) What is Constructor? Explain different types of Constructors with program.

12.(a) What is Overloading? Explain Unary and Binary Operator Overloading.

(OR)

(b) What is Template? Explain different types of Templates with program.

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