

Combined Competitive Examination, 2020

English Essay

Tuesday the 10th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Note: Write an Essay on any One of the following topics.

- 01 The Issue of Pollution due to Urbanization is a chronic one. What are the factors leading to Urbanization in Pakistan; discuss its negative effects on the Social life and global warming. Suggest solutions to control Urbanization in Sindh.
- 02 The current pandemic has changed people’s approach to life. Comment on the Post Covid-19 lifestyle in Pakistan.
- 03 “Self-assessment is the key to improvement”. Please comment on this saying with examples.
- 04 Promotion of Tourism can strengthen Pakistan’s economy. What are the root causes of failure of the development in this neglected sector.
- 05 What are the causes of low standard of education and alarming rate of illiteracy in Sindh. Suggest positive measures for improvement, spread and enhancement of standard of education and elimination of illiteracy in Sindh.
- 06 What are Basic reasons of Islamophobia in the West. Is terrorism a Myth or Reality; what is its impact on the future of the Muslim immigrants in Europe.
- 07 Excessive use of Social Media makes one socially isolated. Discuss its impact on the public of Pakistan.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

English (Précis and Composition)

Wednesday the 11th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Note: Attempt all Questions.

Question No.

Marks.

01 Make a précis of the following passage and give a suitable title:

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Almost every sensible and responsible person has some goal to achieve. He takes it as a target to reach an aim to fulfill. Therefore, he makes some plan in right earnest and materialize his aim or object. Goal is obviously a well-thought and well-planned purpose for which man strives, pursues it and ultimately wins it, provided everything goes well and he does not give up.

Plan is a systematic arrangement of some object to achieve something in a given period of time. It involves methods, steps, strategy and way out to get something for which man aspires. A plan depends upon the planner's will power, determination and intelligence as to how he puts everything in right order at the right time. A proverb says, "Strike the iron while it is hot". It means a good planner should make best of the opportunity as soon as he gets it. Another proverb says, "Make hay while the sun shines". It means one should avail oneself of a favorable opportunity well in time. Another proverb says, "A bird in hand is worth two in the bush". It means 'whatever one has at one's disposal, it is the best and can do well at least for the time being. A long waiting for a better chance and missing the good one, leaves one devoid of either. Such uncertain and hesitating situation tantalizes man and invokes frustration and unrest in him. It is, therefore, wise to utilize the available opportunity to its best, and whatever is at man's disposal at the moment should be availed of, rather than sitting idle and wavering in vain.

Proper role at the proper time plays a vital part for a man of action. Since excess of everything is bad, man should adopt moderation and prove himself determined and committed at all. When it comes to a positive action, he should be decisive and determined. A slight hesitation and infirmity of willpower might leave him beaten or failed. His role as a well-organized man of action can win him laurels. The moment he believes that he can win what he aspires and endeavors for he gets it. It is a state of mind and determination that enables man of action to achieve a brilliant success. So a moderate and definite plan paves way to a sure success that lies ahead of a man, who thinks he can make difficult things possible. He plays part of a mover and potent doer who steals the show surprisingly. His goal is the destination that attracts him like a magnet and a beacon light that guides him to his most aspired aim of life.

02 Read the following passage carefully and answer the questions that follow:

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Natural writing is nonfiction or fiction prose or poetry about the natural environment. Nature writing encompasses a wide variety of works, ranging from those that place primary emphasis on natural history facts (such as field guides) to those in which philosophical interpretation predominate. It includes natural history essays, poetry, essays of solitude or escape, as well as travel and adventure writing. Nature writing often draws heavily on scientific information and facts about the natural world; at the same time, it is frequently written in the first person and incorporates personal observations of and philosophical reflections upon nature. Modern nature writing traces its roots to the works of natural history that were popular in the second half of the 18th century and throughout the 19th. An important early figure was the "parson-naturalist" Gilbert White (1720 – 1793), a pioneering English naturalist and ornithologist. He is best known for his Natural History and Antiquities of Selborne (1789).

- (i) Why scientific knowledge is necessary for nature writing?
- (ii) What are the advantages and disadvantages of 'first person' writing?
- (iii) What kind of writing was Gilbert White interested in and why?

03 (A) Write appropriate Synonym for any Five of the following words:

05

- (i) Consecrate (ii) Secede (iii) Munificence (iv) Gnash (v) Blather
- (vi) Dissolute (vii) Brunt (viii) Tryst.

(B) Write appropriate Antonyms for any Five of the following words:

05

- (i) Bicker (ii) Gaiety (iii) Glacial (iv) Ignominious (v) Germane
- (vi) Innocuous (vii) Vacillating (viii) Covetous

P.T.O.

- 04 (A) Correct the following sentences: 10
 (i) I hope you don't mind me to sit near you.
 (ii) Tall, brown, fat cows two of Australia give more milk.
 (iii) few antiques are there of a rich widow's are up for auction.
 (iv) I don't identify what are they.
 (v) According to my firm belief, a life after this life is there.
 (vi) Karachi is far away from Sukkur as compared with Hyderabad.
 (vii) the owner and manager of the estate are in their offices.
 (viii) Their deceased father said a will.
 (ix) She said here farewell and was leaving. (x) I know what you are meaning.
- (B) Explain and use meaningfully any Ten of the following phrases and idioms 10
 in your own sentences:
 (i) To blow one's own trumpet. (ii) To beat somebody hollow.
 (iii). To kill somebody in cold blood. (iv) To face the music.
 (v). To show somebody the door (vi) To send somebody packing.
 (vii). To lead somebody by the nose.
 (viii) To lock the stable door after the horse has been stolen.
 (ix) To make hay while the sun shines. (x) On the horns of dilemma.
 (xi). A catch- 22 situation. (xii) To look down on somebody.
- 05 (A) Select one word substitution from the given list for the following expressions: 10
 (i) A person who is above hundred years.
 (ii) A book published after the death of its author.
 (iii) A book written by an unknown author.
 (iv) A cinema show which is held in the afternoon.
 (v) A citizen of the world.
 (vi) A contagious disease which spreads over a huge area.
 (vii) A drug or other substance that induces sleep.
 (viii) A flesh eating animal.
 (ix) A game in which neither party wins.
 (x) A thing no longer in use.
(Matinee, Soporific, Epidemic, Cosmopolite, Centenarian, Obsolete, Posthumous, Anonymous, Draw, Carnivorous.)
- 06 Do as directed against each sentence: 10
 (i) He hurled a brick _____ the window. (Insert prepositions)
 (ii) She rose _____ the occasion. (Insert preposition)
 (iii) Cut your coat _____ (Complete the proverb)
 (iv) Time and tide _____ (Complete the proverb)
 (v) Tell me what you know about it (Change the voice)
 (vi) She longs for _____ of her husband who abandoned her long ago
 (Insert a suitable word)
 (vii) He said that he had married twice before he married the third time
 (Render the sentence concise)
 (viii) You should be aware of the dog (Change to imperative making it short)
 (ix) These old ladies never married (Use one word substitution noun for the ladies)
 (x) She outlived her husband by ten years (Restructure using "Her husband" in the beginning
 keeping the sense intact.
- 07 Translate the following passage from Sindhi or Urdu into English: 10

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

ENGLISH LITERATURE

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 (A) Write an Essay on timeless wisdom of Bertrant Russel reflected in “The Conquest of Happiness.”
(B) Write short note on “Politics and the English Language”
- 02 Despite its length, an abundance of allusions and no-overall plotline or chronological sequence, T.S. Eliot’s *The Waste land* is the single most important 20th century modern poem which stands out because of its style, themes and pervasive legacy. Elaborate.
- 03 How do Keats’ strong pictorial imagination, linguistic appeal to the senses and extraordinary sensitivity to the impressions of the moment engage in the formulation of his view of poetry: “If poetry comes not as naturally as the leaves to a tree, it had better not come at all”?
- 04 The dramaturgical inventiveness of Shakespeare lies in his power of using language and investing insight into his tragic characters that render uniqueness to each play he wrote, yet giving a certain structure and style to what we know as a Shakespearean tragedy. Discuss with reference to both Hamlet and King lear.
- 05 How successfully James Joyce perfects the literary technique of the stream of consciousness in his bildungsroman “A Portrait of the Artist as Young Man”?
- 06 Postcolonialism is neither a new discipline nor a clearly identifiable field of research; it is undeniably a gesture rather than a demarcation and points out not towards a new knowledge but rather towards an examination and critique of knowledge(s). Discuss.
- 07 Elaborate, how does the psychoanalytic method for understanding multiple meanings, formal complexities, and the involvement of human personality in the literary experience better help establish the worth of literature in modern times?
- 08 How would you substantiate the belief that Marxist criticism not only determines the progressive social content and literary form of a literary work, analyzing the class constructs, class struggles and subverting the dominant ideologies in it but also pays a close attention to its forms, styles and meanings within a particular historical context?

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SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Current Affairs & Pakistan Affairs..

Friday the 13th November, 2020.

Time: 03:00 pm to 06: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 In the light of newly developing close partnership between China and Iran, what are the prospects and challenges to China-Pakistan Economic Corridor?
- 02 Keeping in view the recent series of events and communiqués between Pakistan and Saudi Arabia; identify, obstacles and irritants evolving in bilateral relations of the two states.
- 03 In the wake of hate speech and freedom of expression, what best mechanism would you suggest to reduce the gap between the West and the Islamic belt?
- 04 Explain the importance of Pak-Afghan Relations for South Asia. Comment on the strengths and weaknesses of bilateral ties between the two nations in aftermath of US-Taliban Peace Deal.
- 05 What are the issues and challenges to Pakistan's Economy? Comment on the national capacity to stand against pandemic like Covid-19 and reoccurring patterns of floods and earthquakes.
- 06 Comment the relevance to two-nation theory in twenty-first century? Illustrate your response by framing examples of current populist trends in South Asia.
- 07 Explain in detail the internal and external repercussions of declaring, constituting and extending a provincial status to Gilgit-Baltistan.
- 08 What are the impacts of Hydro-Politics on South Asian Security? Elaborate the significance of Kashmir for Pakistan's water security in this regard.
- 09 Point out obstacles and irritants in transforming Pakistan into a progressive, liberal and modern Islamic nation.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020
Accountancy & Auditing (Paper-I)

Tuesday the 17th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No.

Marks

SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two question of 20 marks and 01 question of 10 marks.

- 01 At the beginning of 2019, Mr. Salman decided to open an advertising agency called The Top Agency. During 2019, the following transactions occurred. Salman invested Rs. 300,000 cash in the business. In addition, the local bank lent the firm Rs.100,000. The firm used the cash to purchase land for Rs. 50,000 building for Rs. 100,000 and office furniture and fixture for Rs. 80,000. In addition, the firm purchased another Rs. 50,000 of furniture and fixture on account, all of which will be paid for next year. The following summary of revenue and expense and other transactions took place during 2019. **20**
- (i) Commissions earned during the year amounted to Rs. 125,000. By the end of the year Rs. 110,000 of these commissions had been collected in cash. The firm expects to collect the remaining cash early next year.
- (ii) Various operating expenses of Rs. 105,000 were incurred and paid in cash during the year.
- (iii) Salman withdrew Rs. 5000 from office to pay the utility bills of his residence.

REQUIRED:

Using the above information, prepare the following Financial statements.

- (a) Income statement for the year ended December 31, 2019.
- (b) Statement of the owner's equity at December 31, 2019
- (c) Balance sheet as at December 31, 2019
- 02 Differentiate between the following: **20**
- (i) Single Entry System and Double Entry of Bookkeeping.
- (ii) Fixed Capital and Fluctuating Capital of partnership.
- (iii) Financial Reporting and Financial Statement.
- (iv) Straight line method and diminishing balance method of depreciation.
- (v) Capital turnover ratio and Net Profit Ratio.

- 03 The following Trail Balance is extracted from the books of Merchant on December 31, 2019. **20**

Particular	Debit	Credit
Furniture	6,400	
Motor Vehicle	62,500	
Building	75,000	
Capital Account		12,800
Bad debts	1,250	
Provision for Bad debts.		2,000
Sundry debtors and creditors	38,000	25,000
Stock on January 1, 2019	34,600	
Purchase and sales	54,750	154,500
Bank overdraft		25,500
Sales and purchase returns	2,000	1,250
Advertising	4,500	
Markup (on overdraft)	1,180	
Commission		3,750
Cash	6,500	
Taxes and Insurance	12,500	
General expenses	7,820	
Salaries.	33,000	
Total	340,000	340,000

P.T.O.

The following adjustments are to be made:

- (i) Stock in hand on December 31, 2019 was Rs. 32,000
- (ii) Depreciation building at the rate of 5% Furniture % Fittings @10% and motor vehicle @ 20%
- (iii) Rs. 850 is due for markup on bank overdraft.
- (iv) Salaries Rs. 3000 and taxes 12000 are outstanding.
- (v) Insurance amounting to Rs. 1000 is prepaid
- (vi) One-third commission received in respect of the work to be done next year
- (vii) Write off a further sum of Rs. 1000 as bad debt and provision for bad debts to be made equal to 10% on Sundry debtors.

Required:

Prepare a Trading and Profit & Loss account for the year ended December 31, 2019 and balance sheet as on that date.

- 04 Answer the following short questions briefly: **10**
- (i) Define Accrual System of Accounting
 - (ii) Define Budget.
 - (iii) Describe bad debts recovered
 - (iv) Define provision for bad debts.
 - (v) State the matching principle
 - (vi) Describe Revaluation Account.
 - (vii) What is a compound Journal Entry
 - (viii) Briefly explain the Perpetual Inventory System.
 - (ix) What do you understand by Limited Partnership?
- 05 Write short notes on the following: **10**
- (i) Define Adjusted Trial Balance
 - (ii) What is meant by interim Accounts?
 - (iii) Define separate Entity Concept
 - (iv) What is Controlling Account?
 - (v) Define Contingent Assets
 - (vi) Depreciation on replacement cost
 - (vii) Deferred Taxation
 - (viii) Cash Generation Statement

SECTION-II

Note: Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- 06 A, B and C were partners sharing profits and losses in the ratio of 2: 2:1. C decided to retire on December 31, 2019 . the following is the balance sheet of partnership firm. **20**

**Balance Sheet
As on December 31, 2019**

Assets	Rs.	Equity & Liabilities	Rs.
Sundry Creditors	10,000	Stock of Goods	10,000
Reserve Account	2,000	Sundry Debtors	10,000
Capital - A	24,000	Bills receivable	4,000
B	16,000	Bank	10,000
C	12,000	Land and Building	30,000
Total	64,000	Total	64,000

A and B decided to share profit and losses on the ratio of 3:2 in future. Goodwill is valued at Rs.10,000. Land and building was appreciated by Rs. 6000 and stock by Rs. 2000. There was bad debt loss of Rs. 1000 but not recorded on books. A and B decided to bring sufficient cash settle the account of C and to make their capital proportionate. They also decided to maintain Rs. 15000 bank balance for meeting the day-to-day business expenses.

Prepare necessary Journal Entries and prepare Balance Sheet of newly constituted firm.

- 07 Define differences among Financial, Cost and management Accounting. **20**

Continued on Page No.03

08 ABC sports items manufacturing industries uses process costing. Information relating to cost incurred in assembly department during the month of June 2019 is as follows: 20

Per unit cost received from cutting department	Rs. 10
Units received from cutting department	20,000

Cost incurred by the department.

Direct material cost	Rs. 240,000
Conversion cost	Rs. 139,200
Units completed	10,000
Normal loss	1,000
Work in progress	8,000

Work in process is 80% complete as to conversion cost and 50% as to material

REQUIRED: Quantity schedule EPU, total cost of goods manufactured, total cost of WIP, cost of abnormal loss and cost schedule for the department.

09 ABC Laboratories purchased inventory for Rs. 200,000. Supplier allowed cash discount @ 10%. Further costs incurred by the laboratory are as follows: 10

- Duty and taxes on inventory purchased Rs. 1000.
- Carriage inward Rs. 2000.
- Handling cost (loading and unloading) Rs. 1500.
- Inventory of Rs. 12000 was lost at the way towards company due to carelessness of managers.
- Laboratory has taken a warehouse on rent to store the inventory. Rent of the warehouse is Rs. 20,000.
- Administrative cost incurred on inventory amounts to Rs. 2000.

Required: Determine cost of inventory the books of ABC Laboratories.

10 A manufacturing company has two production departments, Department 1 and Department 2. It also has two services departments, the factory canteen and the repairs department. Allocation overhead costs and apportioned general overhead costs for each cost centre are as follows: 10

Department 1:	Rs.100,000
Department 2:	Rs.200,000
Canteen:	Rs.150,000
Repairs:	Rs.220,000

Department	Total	Dep A	Dep B	Canteen	Repairs.
Canteen	100%	20%	40%		40%
Repairs	100%	65%	25%	10%	

Required: **Apportionment of FOH using:**

- (a) Repeated distribution method.
- (b) Simultaneous equation method.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Accountancy & Auditing (Paper-II)

Wednesday the 18th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No. **Marks**

SECTION-A

Note: This Section carries Total 40 marks .Attempt any Two questions from this Section by selecting two questions of 20 marks.

- 01 What is Internal Control? Explain principles of Internal Control. Also differentiate between Internal Check, Internal Control and Internal Audit. **20**
- 02 Define differences between statutory and non-statutory Audit. **20**
- 03 Define any 04 of the followings: **20**
- | | |
|------------------------------------|------------------------|
| (i) Detective Controls | (ii) Inherent Risk. |
| (iii) Audit Evidence | (iv) Qualified Opinion |
| (v) Compliance Audit | (vi) Integrated Audit |
| (vii) Limited Assurance Engagement | (viii) Detecting Error |

SECTION-B

Note: This Section carries Total 30 marks. Attempt any Two questions from this Section by selecting two questions of 15 marks.

- 04 Describe the kinds of Financial Markets. **15**
- 05 Define types of business combination. Explain key objectives of a Vertical combination. **15**
- 06 Mr. Ahmed is an employee of Multinational Company incorporated in Pakistan. His remuneration during the year was as follows: **15**

Particulars	Rs. (Annual)
Basic Pay	600,000
Perquisites	100,000
Cost of Living Allowance	50,000
Utilities, education and traveling allowance	140,000
Expenditure reimbursement.	80,000
Medical allowance	90,000
Total	1,060,000

Other information company has provided a car for personal and business use to Mr. Ahmed. The cost of the car was Rs. 1,600,000.

Required: Compute taxable income and tax liability of Mr. Ahmed.

P.T.O.

SECTION-C

Note: This Section carries Total 30 marks. Attempt any Two questions from this Section by selecting two questions of 15 marks.

- 07 What are various sources of income chargeable to tax under the head “Income from other source”.
- 08 Following are result of Salman Associates for preparation of sales tax return for the month of June 2019

Local supplied to registered personal	75,000,000
Local supplied to unregistered personal	5,000,000
Total	80,000,000
Exports	20,000,000
Sales of Exempt supplied	3,000,000
Purchases from registered personal	55,000,000
Purchases from unregistered personal	25,000,000

Required: Compute sales tax liability of Salman Associates.

- 09 Write short notes on the following:
- (i) Income from property (ii) Income exempt from tax
- (iii) Input tax (iv) Further tax

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Economics
(Paper-I)

Tuesday the 17th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Discuss the function of a Central Bank between bank rate and open market operations. Which is more effective as an instrument of credit control.
- 02 Explain the causes of growth of Public Expenditure in modern times. Is this growth always justifiable?
- 03 What is meant by an Economic Integration, a preferential trade arrangement, a free trade area, a common market and an Economic Union? Give an example of each.
- 04 Why is there a need for a separate theory of Macroeconomics? Discuss in detail.
- 05 State Okun's Law. How does it help us evaluate the cost of unemployment in a society.
- 06 Explain the Concept of Elasticity of Demand. Calculate the elasticity of market demand from the following schedule using the Arc Elasticity Method.

Price of a Product (Rs)	Quantity Demanded	Point.
5	3.5	A
4	4.2	B
3	5.0	C
2	6.0	D

- 07 What do you mean by the concept of balanced growth? Examine the desirability and capacity of the under-developed countries to follow the balance growth path.
- 08 Explain how price and output are determined under monopoly. Is monopoly price always greater than the competition price?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Economics
(Paper-II)

Wednesday the 18th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Explain the core values of Development. How are they related with Amartya Sen's concept of capabilities to function?
- 02 Explain Circular Debt. Discuss nature, magnitude and causes of Circular Debt in Pakistan.
- 03 What are the major problems of the Agricultural Sector in Pakistan? Suggest policies and measures to solve them.
- 04 What policies and measures have been carried out by Export Promotion Bureau to increase Pakistan's export volume since its formation?
- 05 What are prerequisites of Economic Development? How far do they exist in our country?
- 06 Discuss the strategies and policies adopted by the Government of Pakistan for promoting Industrial Development in the country.
- 07 Differentiate between the concepts of privatization and denationalization. Also discuss Pakistan's experience of privatization.
- 08 Write notes on the following:
- (i) Latest Energy Policy of the Government of Pakistan.
- (ii) Social Sector Development in Pakistan.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

International Relations.

(Paper-I)

Tuesday the 17th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 It is argued that analysis of foreign policy has become increasingly sophisticated as well as complex phenomena. Examine to what extent the following factors have influenced Pakistan's Foreign Policy?
(A) Elite domination of public opinion.
(B) Ethnic conflicts and Sectarian divide.
(C) Growing Polarization between Political Elites.
- 02 Explain the logic behind US – Pakistan relations? Do you believe that maintaining balance in its relationship with China and USA has become one of the complicated challenges faced by Pakistan in the wake of increasing Indian atrocities in Kashmir.
- 03 Evaluate the importance of new legislation to counter money laundering and terrorist financing as required by Financial Action Task Force (FATF).
- 04 Write short notes on the following:
(i) Globalization and Developing countries (ii) Pakistan's Policy of neutrality
(iii) Balance of Power (iv) Cold War.
- 05 How strongly you agree or disagree that, "The 20th century political structures and International Institutions to consolidate nation state system are drowning in the 21st Century's ocean of decentralized economic and Financial Markets, autonomous technologies, religious populism and the rise of great-power rivalries"?
- 06 Provide a detailed account of the Neo-Neo debate. What are the similarities and dissimilarities between the two? Also discuss the impact of globalization on the neo-realist and neo-liberal thinking?
- 07 Has nationalism been the most common cause of conflict in the post-Cold War era? Accordingly, point out the reasons for the rise of populism and anti-globalization wave in this regard.
- 08 What are the challenges of security in infrastructure diplomacy? Critically evaluate the Belt and the Road Initiative as an example of infrastructure diplomacy and identify geo-strategic and geo-political issues surfacing in territories encompassed by the BRI.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

International Relations.(Paper-II)

Wednesday the 18th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Present the sketch of Global Political Landscape in COVID-19 times. Do you believe the contemporary international system is withering away from stability, conformity and continuity it enjoyed in recent past? Also suggest mechanism to overcome the global leadership crisis.
- 02 Explore the normative impulses in Pakistan's Foreign Policy with particular reference to Kashmir? Critically identify the pitfalls of this approach and suggest practical measures to be taken for pragmatism in National Foreign Policy.
- 03 Write shorts notes on any Two of the following:
(i) Regionalism vs Globalism in 21st Century.
(ii) External Shock and Power Shift in IR.
(iii) Implications of Brexit on Pakistan's Economy.
- 04 Do you agree that China does not want a protracted conflict near a key belt of its ambitious project of economic connectivity? How do you see the importance of Pakistan's role in Afghan peace process for achieving its geo-economic interests through China Pakistan Economic Corridor (CPEC).
- 05 "Regional Cooperation is considered key to National Development. Economic, social and cultural linkages are imperative for peace between countries divided by Geographical Boundaries". Discuss the reasons for dormant nature of SAARC as a regional block of South Asian Countries in the light of above statement.
- 06 Explain any Two of the following:
(i) International Condemnation of Human Rights Violation in Kashmir
(ii) Isolation of India in the World on the issue of State-sponsored violence against Muslim communities.
(iii) Economic and Social Impact of Pakistan's War on Terrorism.
- 07 Discuss the role of United Nations in maintaining peace in the World. Suggest the structural reforms for its further improvement and effectiveness.
- 08 Pakistan has remained committed to nuclear safety and this country is ahead of India in the field of nuclear security. Discuss the Pakistan's protocols for ensuring protection of nuclear sites.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Political Science
(Paper-I)

Tuesday the 17th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No.		Marks
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SECTION-A

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|----|
| 01 | Critically discuss Marx's Theory of Class Struggle. | 20 |
| 02 | Give comparative analysis of Islamic and Western Nations of Sovereignty. | 20 |
| 03 | How General will of a Society is formulated? Discuss critically in the light of Rousseau's interpretation, on the conclusions and characteristics of the Theory of General Will | 20 |
| 04 | Discuss in detail about the concept of Khudi by Allama Iqbal. | 10 |
| 05 | Why still World remembers Machiavelli? What's your opinion on his thought? | 10 |

SECTION-B

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

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|----|--|----|
| 06 | Distinguish among different types of Political Parties. | 20 |
| 07 | Define Political Science. To what extent can one be systematic in a study of Political process? How "Scientific" is Political Science? | 20 |
| 08 | Discuss the "Political Culture" and its importance with special reference to democracy. | 20 |
| 09 | Discuss the extent to which there should be limits on freedom. | 10 |
| 10 | Outline the different factors that explain voting behaviour. | 10 |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Political Science
(Paper-II)

Wednesday the 18th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No	Marks
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SECTION-A

Note: This Section carries Total 30 marks. Attempt any Two questions from this Section by selecting one question of 20 marks and 01 question of 10 marks.

- | | | |
|----|--|----|
| 01 | The Cabinet is the “Steering Wheel of the Ship of the State. It sets the direction of national policy in U.K.” Discuss | 20 |
| 02 | Explain how the British democracy is overshadowed by the Cabinet Dictatorship? | 20 |
| 03 | How system of Checks and Balances works in American Government? Explain its functioning. | 10 |
| 04 | Analyze the powers of the French President. | 10 |

SECTION-B

Note: This Section carries total 70 marks. Attempt any Four questions from this Section by selecting Three questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|----|
| 05 | Discuss Evolution of Federalism in Pakistan with reference to its Constitutional and Political Development from 1956 to date. Examine the role of Iqbal in promoting the growth of Muslim Nationalism in India. | 20 |
| 06 | Make a survey of the role of Judiciary in Pakistan as the Guardians of the Constitution. | 20 |
| 07 | Mustafa Kamal’s political philosophy provides stability and ideological foundations to the Turkish Political System. Discuss it. | 20 |
| 08 | What is the nature of Civil Military relations in Pakistan? Highlight its impact on democratization process in Pakistan. | 20 |
| 09 | Discuss Pakistan’s Foreign Policy orientation towards rising China. | 10 |
| 10 | Write down the variables by which Political Culture has not developed in Pakistan. | 10 |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Computer Science (Paper-I)

Tuesday the 17th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No. **Marks**

SECTION-A

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | | |
|----|-----|---|----|
| 01 | (A) | Explain the concept and difference among Data, Information and Knowledge in context of Computer Science. | 10 |
| | (B) | Explain the term Computer Virus. Discuss the adverse effects of viruses while mentioning different types of viruses. | 10 |
| 02 | (A) | Explain the Virtual Function and Pure-Virtual Functions. | 10 |
| | (B) | Explain the methods used to deploy Exception Handling along with its advantages using suitable programming example. | 10 |
| 03 | | Briefly describe the following software development methodologies:
(i) Incremental (ii) Waterfall (iii) Object oriented (iv) Agile | 20 |
| 04 | | What are the principal operations that occur when an IBM-compatible Personal Computer boots up? | 10 |
| 05 | | Within the context of the object-oriented paradigm, discuss the relationship between a class and an object, illustrating the discussion with suitable examples. | 10 |

SECTION-B

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | | | |
|----|-------|--|------|-------------------------------|
| 06 | (A) | Explain various steps involved in Software Requirement Engineering process. | 10 | |
| | (B) | Elucidate the template of Software Requirement Specification. | 10 | |
| 07 | (A) | Determine the advantages/disadvantages of using Quick Sort over Bubble Sort. Explain working of both with suitable examples. | 10 | |
| | (B) | Elucidate the working of Merge sort with algorithm, program code and Trace table. | 10 | |
| 08 | | Explain Linked List Data Structure and its application in Computer Science. | 20 | |
| 09 | | What is the role of Language Processors during the compilation process. | 10 | |
| 10 | | Explain any Two of the following in terms of use of compiler. | 10 | |
| | (i) | Symbol Table | (ii) | Storage Allocation Strategies |
| | (iii) | Activation Record | (iv) | Syntax trees. |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Computer Science(Paper-II)

Wednesday the 18th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No.	Marks
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SECTION-A

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|----|
| 01 | (A) Discuss the Internal Memory and External Memory. | 10 |
| | (B) Compare the Cache Memory and Auxiliary Memory. Outline the working mechanism of Cache Memory with the help of a diagram. | 10 |
| 02 | (A) Elaborate on the Multicore Microprocessors' Architecture by differentiating core i3, core i5 and corei7 microprocessors. How does the hyper threading technology improve the performance of microprocessors in Multicore Environment. | 10 |
| | (B) Compare the different addressing modes of 8086 Microprocessor Architecture and provide the interpretation of instructions of respective addressing techniques. | 10 |
| 03 | (A) Describe how computer networks impact in Computer Science. Identify and discuss the key components of a Data Network. | 10 |
| | (B) Explain the role of Protocol in Network Communication. | 10 |
| 04 | Discuss the role of data modeling. How data modeling gives structure moving to the cloud. | 10 |
| 05 | What is Fragmentation? | 10 |

SECTION-B

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|--|--------------------------------|
| 06 | Discuss using your own simple examples and suitable diagrams, the following data modeling concepts. | 20 |
| | (A) Entity Relationship Diagram (ERD), Entity Types, Entity Instantiations and Identifiers. | |
| | (B) Enhanced Entity Relationship Diagram (EERD), Super-Types and Sub-Types | |
| 07 | Discuss in detail the following in context of Digital image. | 20 |
| | (i) Histogram of a Digital Image | (ii) Smoothing Spatial filter. |
| | (iii) Sampling and quantization of digital image | (iv) Image formation model |
| 08 | (A) "A well formed XML document is necessarily valid". Briefly explain the correctness or otherwise for this XML assertion. Support your answer with a suitable example. | 10 |
| | (B) XML documents can be validated against DTDs or XML schema. Discuss the benefits and drawbacks of each approach along with suitable examples. | 10 |
| 09 | Write difference between Software Engineering and Web Engineering. | |
| 10 | What are Cookies? Explain Cookie in PHP. | |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

BUSINESS ADMINISTRATION.

Friday the 20th November, 2020.

Time: 03:00 pm to 06: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 How do Political, Economic, Social and Technological (PEST) factors affect Strategy Formulation and Implementation for contemporary organizations?
- 02 Organizational structures are designed in two major forms; traditional and boundary less organizations. Discuss their different types, characteristics as well as their relative advantages and disadvantages, in comparison to each other.
- 03 While HRM has a specific focus on people (human resources), this task cannot be accomplished without looking at jobs-job analysis and job design. Most often one of the first tasks of HRM is to look at jobs and how they correspond to the responsibilities of the job-holder. Write critical analysis of this process in your own words by giving valuable arguments.
- 04 How do Liquidity and Leverage Ratios help management in taking Financial decisions? Assume some data to explain the role of these ratios in making financial decisions.
- 05 (A) Arsalan wishes to borrow an amount of Rs.10,0000 for three years. The bank management agrees to lend him the said amount if he is willing to pay Rs. 16,0000 at the end of three years. What is the implicit rate of interest implied, if it is applied on (i) annual (ii) semi-annual basis?
(B) A stock currently sells for Rs.50 per share. The market requires a 13% return on the firm's stock. If the company maintains a constant 5% growth rate in dividends, what was the most recent dividend per share paid on the stock?
- 06 Explain the concept of Operations Management and describe in brief the contributions made by Henry Ford and Taguchi.
- 07 Define the terms 'Supply Chain' and Supply Chain Management'. Describe various opportunities in supply chain to enhance value addition.
- 08 Brand positioning is the act of establishing a distinctive image of a product or offering in the minds of customers. How do marketers analyze competition and differentiate their products for successful positioning?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

PUBLIC ADMINISTRATION.

Friday the 20th November, 2020.

Time: 03:00 pm to 06: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Discuss Democracy vs Dictatorship and its implications on Bureaucracy and the people.
- 02 In a Democratic state, Government is said to be will of people in action. This concept has widened the scope of Public Administration. What should be the new role of Public Administration, as per expectation of the people.
- 03 Identify the major school of thoughts in administration. Give arguments in favour of school of thoughts, which may guide us to change the orientation of Governmental Administration in Pakistan from status quo to development.
- 04 How far have the institutions of Federal Ombudsman (Wafaqi Mohatasib) proved to be successful in checking efficiency, inertia and misuse of authority in administrative machinery in Pakistan.
- 05 Compare and contrast “Taylor scientific management and weber’s bureaucracy”. Do you think these two theories are still relevant to changing Public Administration.
- 06 Depict role of literacy in the development of nation. Analyze the implications of a literate society on the development of any country.
- 07 Write short notes on any Four of the following:
(i) Organizational Culture.
(ii) Financial Management.
(iii) Role of Media.
(iv) Good Governance.
(v) Issues and Challenges of Local Government.
- 08 Differentiate the following:
(i) Classical VS Human relation.
(ii) Classical VS System approach.
(iii) Hygiene seeker VS Motivation seeker.
(iv) Job-centered supervisors VS Employee centered supervisors.
(v) Development Administration VS Traditional Administration.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

GOVERNANCE & PUBLIC POLICIES.

Friday the 20th November, 2020.

Time: 03:00 pm to 06: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 What do you understand by Governance and its principles and which mode of Governance is important for Institutional Development? Explain with logical and authentic reasons.
- 02 Why Local Government System is important in the multi-level Governance in Pakistan. Is there a shift towards Local Governance system all over the world? Highlight the key challenges and way forward for an effective Local Government System in the country.
- 03 Professor Woodrow Wilson argues that Bureaucracy is a professional cadre, devoid of allegiances to politics. Keeping in view the above argument, define the norms of current bureaucratic setup in Pakistan and suggest remedial measures to depoliticize the system.
- 04 World Bank defines Accountability as obligation of power holders to account for the action. Keeping in view the above definition, explain whether elections in Pakistan pave the way for political accountability in Pakistan.
- 05 (A) Governance indicators are tools for assessment of Governance in any country. Explain the following terms:
(i) External assessment (ii) Internal assessment (iii) Self-assessment.
- (B) What is Origin of word Governance. Give definition and concept of Smart Governance.
- 06 Define the following:
(i) Differentiate between State and Government.
(ii) Confucius idea of Good Governance.
(iii) Transparency International
(iv) Judicial Accountability.
- 07 (A) What is role of National Commission of Science and Technology (NCST) Pakistan in policy making?
(B) Discuss the Organizational Structure of NCST.
- 08 (A) Discuss the salient features of National Health Policy 2009 of Pakistan.
(B) In the context of Governance and Accountability, discuss the positive results of “People’s Primary Healthcare Initiative” scheme.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

TOWN PLANNING & URBAN MANAGEMENT.

Friday the 20th November, 2020.

Time: 03:00 pm to 06: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 In the context of City and Regional Planning, explain the terms Plan, Planning and Planner. How the field of Urban Planning is linked to the following disciplines?
(i) Civil Engineering (ii) Architecture
(iii) Economics (iv) Sociology
- 02 Describe the salient features of Indus and Gandhara Civilizations. Also, clarify the Urban Planning concepts of Mohen-Jo-Daro, Kot Diji Fort and Mehr Garh.
- 03 (A) Illustrate the ‘Causes and Effects’ of extended Urbanization Process in Third World Countries with special reference to Pakistan.
(B) What do you know about Push-Pull Factors related to Urbanization Process? Do you think that Planning and Management of Push-Pull Factors can be a handy approach to streamline Urbanization Process?
- 04 Describe Industrial Development. What types of performance standards and other considerations are to be ensured by Master Planning and Environmental Control Department while determining the application for a General Development Permit for Industrial Purposes?
- 05 (A) Throw some light on the Existing Socioeconomic Profile of Pakistan. Suggest some measures to pacify the economic condition of the country within the scope of Regional Planning and Development.
(B) Explain Public Sector Programs with particular reference to Pakistan. Clarify Real Time Problems faced by concerned Authorities to execute various Public Sector Programs for the betterment of the Community.
- 06 Discuss the evolution of town planning in Pakistan with special reference to Institutional reforms and planning achievements in the colonial and post colonial period.
- 07 Discuss the hierarchy of Urban Planning System historically used in Pakistan. What lesson one can learn from the planned towns of Indus Valley Civilization.
- 08 What are the Pre-requisites for an effective Urban information system? Discuss the significance of Geographic Information System for improving the City Environment.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Agriculture and Forestry.

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Question No.		Marks
<u>SECTION-I</u>		
<u>Note: This Section carries Total 50 marks. Attempt any Three questions by selecting Two questions of 20 marks and 01 question of 10 marks</u>		
01	What is the significance of Agriculture in Pakistan? Which industries are Agriculture based and what is their role in providing employment and uplifting the economy of Pakistan? Describe also the major challenges to Agriculture and Agriculture based industries in Pakistan.	20
02	Climate change is a global issue. What is the relation between climate change, global warming and green house effect? How can climate change affect the Agriculture and Forest productivity in Pakistan? Which measures we should take for climate change mitigation?	20
03	Most part of Sindh Province is arid and Semi-arid. What is the concept of Dry Agriculture? Also describe the role of Dry Agriculture in the economy of the Province.	20
04	Differentiate between any Two of the following: (i) Soil Structure V/s Soil texture. (ii) Soil fertility V/s Soil Productivity. (iii) Water logging V/s Salinity. (iv) Soil erosion V/s Soil Conservation.	10
05	Define any Two of the following terms: (i) Ecosystem (ii) Soil Profile (iii) Shifting Cultivation (iv) Hybrid Seed	10
<u>SECTION-II</u>		
<u>Note: This Section carries Total 50 marks. Attempt any Three questions by selecting Two questions of 20 marks and 01 question of 10 marks</u>		
06	Describe the current status of Forests in Pakistan and compare it with other countries. Why forest area is very low and deforestation rate is very high in Pakistan? How sustainable supply of wood and wood products in future can be ensured for growing population in Pakistan?	20
07	Define plant diversity. Please discuss Forest plant diversity under natural habitats.	20
08	Explain concept and phenomenon of Desertification. Give examples of Two xerophytic tree species found in Sindh Province.	20
09	What is scope and importance of Forests, Rangelands and Wildlife in economy of Pakistan.	10
10	Write a comprehensive note on any Two of the following: (i) Agrosilvopastoral system. (ii) Grazing Systems. (iii) Sustainable Forest Management. (iv) Kyoto Protocol. (v) Scrub Forests.	10

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

B O T A N Y.

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Give the classification and economic importance of Algae?
- 02 What are Fungi? How they are different from plants, explain industrial application of Fungi.
- 03 What is Secondary Growth? Discuss in detail the importance of Secondary Dicot Stem.
- 04 Give an illustrated concept of the life cycle of an Angiospermic Plant and explain the phenomenon of alternation of generation.
- 05 How does the C4 pathway differ from C3 pathway of Carbon fixation? What are the advantages and disadvantages of each pathway?
- 06 What is Ecosystem? What are the components of Aquatic Ecosystem and how it is important to life on earth?
- 07 Which cell division occurs in reproductive cells? How diploid cell produces four haploid daughter cells? Explain in detail.
- 08 Explain briefly DNA Recombination technology? What are the various tools required for it?

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SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Environmental Sciences.

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 (A) Discuss the importance of the variety of the species of life on planet earth.
(B) Describe the loss of Biodiversity and Conservation measures.
- 02 (A) Enlist the important Multilateral Environmental agreements ratified by Pakistan.
(B) What are the Sustainable Development Goals (SDGs) set by UNO?
- 03 (A) What is Solid Waste? Describe its types and the process of Sanitary Land Filling.
(B) What is Water Logging and Salinity? Discuss its impacts on Croplands of Pakistan.
- 04 (A) What is Climate Change? Define its potential negative effects on human life.
(B) What is Ozone Depletion and how can it be controlled?
- 05 (A) Discuss the significance of Interdisciplinary nature of Environmental Science.
(B) How can Pakistan be energy secured through the use of Alternate Energy Resources?
- 06 (A) What are the challenges for Environmental Governance in Pakistan?
(B) Write a critical note on Sindh Environmental Protection Act 2014.
- 07 (A) Discuss the salient features of National Climate Change Policy 2012.
(B) What is Environmental Impact Assessment (EIA) and define its process.
- 08 (A) Enlist the Wetlands of International significance in Pakistan.
(B) Write a brief note on Occupational Health and Safety Management Systems.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

GENDER STUDIES

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Define and discuss the discipline of Gender Studies and also differentiate between Women Studies and General Studies.
- 02 What is the status of Women Health in Pakistan? How it could be improved within the available economic resources?
- 03 What is Feminism? Examine Western Feminism Theories. What type (s) of feminism can elevate the Socio-cultural, economic and political status of women in Pakistan?
- 04 Discuss the reasons responsible for ranking Pakistan a worst country in the World for Gender inequality despite Pakistani commitment to International Conventions and strong commitment to Gender Equality in 1973 Constitution? What could be the workable strategies to overcome this issue?
- 05 Outline and explain the three major waves of feminist movement in the West. Discuss the influence of these waves on feminist movement in Pakistan?
- 06 What are the different forms of gender based violence, and in your view, what could be the workable strategies to eliminate gender based violence from Pakistani society?
- 07 How you define Governance, what are the impact of Political Quota in Pakistan with reference of Pakistani Women as Representatives and Voters as well.
- 08 Write short notes on any Four of the following:
 - (i) Honour killing
 - (ii) Women in Development (WD) & Women and Development (WAD)
 - (iii) All Pakistan Women's Association (APWA) & Women Action Forum (WAF)
 - (iv) Hudood Ordinance
 - (v) Women Protection Bill in Pakistan

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Z O O L O G Y

Monday the 23rd November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

=====
Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 (A) Describe adaptation to parasitic life style in Tapeworms.
(B) Explain life cycle of beef Tapeworm *Taeniarhynchus Saginatus*.
- 02 Define game birds? Mention some important Game birds of Pakistan.
What methods can be applied for the conservation of Game birds.
- 03 (A) Discuss Nutrition and Digestive System in Reptiles.
(B) What do you know about Temperature regulation in Reptiles.
- 04 How Amphibians Sustain their body temperature? Discuss the mechanism of heat generation in Amphibians.
- 05 Why Honeybees are called as Social Insects? Discuss in detail the cast systems in Honeybees.
- 06 What are the general characteristics of Platyhelminthes. Explain how flat worms adapt themselves as successful parasites.
- 07 Differentiate between Crocodiles and Alligators. What type of role they play in food chain as Carnivores?
- 08 (A) Describe major organs of Digestive System in mammals.
(B) Briefly explain process of Digestion in Humans.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

General Science & Ability.

Saturday the 14th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Note: Attempt any Five questions.

Selecting Three questions from Section-I and Two questions from Section-II.

<u>Question No.</u>	<u>SECTION-I</u>	<u>Marks.</u>
01	(A) Define major sources of Water Pollution. How do our domestic and industrial activities pollute water? Elaborate with examples three main Industrial water pollutants.	10
	(B) What do you understand by Acid Rain. Is there any relation of following with acid rain? (i) Global Warming (ii) Ozone Depletion (iii) Green House Effect. Explain with examples.	10
02	(A) Define Renewable and Non-Renewable Energy Sources. Provide example of each.	05
	(B) Among all Renewable Energy Sources highlight, which one is more efficient. Please rank them as per their efficiencies.	05
	(C) What is Wind Corridor? What are the potential areas in Pakistan where these Wind Corridor are located?	05
	(D) We have seen Solar Panels everywhere. Could you name the technology behind these panels as they are known commonly as PV panels?	05
03	(A) Define Vaccine and Antibiotics. How they differ in their functioning.	05
	(B) What is the harmful impact of fertilizer on soil? How they harm human life.	05
	(C) Pesticides are essential for Agricultural Growth. Do you agree or disagree with this statement?	05
	(D) Biodegradable plastic is the solution of many Environmental problems. Please explain.	05
04	(A) Write short note on the following: (i) Proteins (ii) Lipids (iii) Carbohydrates (iv) Enzymes.	05
	(B) Define Cell Structure. What are Three functions of cell.	05
	(C) Compare and contrast four similarities and differences in animal and plant cell.	05
	(D) What is Dengue. Discuss its causes and prevention techniques.	05
05	(A) How a diet is termed as 'Balanced Diet'. Discuss different food group consisting in Balanced Diet.	05
	(B) What is Adulteration. Give examples from daily habits of eating.	05
	(C) Why preservatives are added in food items. Give reasons.	05
	(D) How Antioxidants in food help to maintain our health. Explain with examples.	05

P.T.O.

SECTION-II

- 06 (A) Write Short notes on the following: **10**
(i) Ratios (ii) Percentage (iii) Types of Triangles (iv) Average
- (B) A shopkeeper bought 600 oranges and 400 bananas. He found 15% of oranges and 8% of bananas as rotten. Find the percentage of fruits in good condition. **10**
- 07 (A) What number comes next? **10**
9, 15, 13, 19, 17, 23.....
- (B) A Bat and Ball cost Rs. 1.10 in total. The bat cost one Rupee more than the ball. How much does the Ball Cost? **10**
- 08 (A) Excluding Stoppages, the speed of a bus is 54 kmph and including stoppages, It is 45 kmph. For how many minutes does the bus stop per hour? **05**
(i) 9 (B) 10 (C) 12 (D) 20
- (B) Robert is traveling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 Noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.? **05**
(i) 8 kmph (ii) 11 kmph (iii) 12 kmph (iv) 14 kmph.
- (C) Two tailors X and Y are paid a total of Rs. 550/- per week by their employer. If X is paid 120 percent of the sum paid to Y, how much is Y paid per week? **05**
(i) 200/- (ii) 250/- (iii) 300/- (iv) None of these
- (D) $0.002 \times 0.5 = ?$ **05**
(i) 0.0001 (ii) 0.001 (iii) 0.01 (iv) 0.1

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

EUROPEAN HISTORY.

Saturday the 21st November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No. **Marks**

SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|----|
| 01 | Critically evaluate the Home Policy as well as Foreign Policy of Napoleon. | 20 |
| 02 | Throw light on the French- British Ties from 1820 to 1850. | 20 |
| 03 | Make a Comparative analysis of the unification of Italy and unification of Germany. | 20 |
| 04 | What were the causes which led to the commencement of World War-I. | 10 |
| 05 | What was Congress of Vienna? Did it achieve its set goals? | 10 |

SECTION-II

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|----|
| 06 | Compare and contrast Capitalism, Socialism, Communism, Fascism and Nationalism. | 20 |
| 07 | Discuss critically the Rise and Fall of Hitler. | 20 |
| 08 | If League of Nations could not avert World War-II, in the same way United Nations also could not avert Cold War and Proxy Wars. Do you agree or not? Argue. | 20 |
| 09 | What is the credit side and debit side of NATO? | 10 |
| 10 | Critically evaluate the Role of Europe in the War on Terror. | 10 |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

HISTORY OF PAKISTAN & INDIA.

Saturday the 21st November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Who is considered, “The Real Founder” of the Slave Dynasty and why?
- 02 How the Two – Nations Theory has been justified by Shah Wali Ullah, Sir Syed Ahmad Khan and later on by Muslim League which leveled ground for an independent Muslim separate state?
- 03 What were the Positive and Negative effects of Pakistan’s involvement in Afghan Issue both at the time of Soviet invasion and the U.S War on Terror?
- 04 What kind of Political System and Form of Government whether Parliamentary or Presidential do you suggest for Pakistan to suit its peculiar environment?
- 05 The Congress Rule in the Provinces during 1937-39 provided an opportunity to All-India Muslim League to re-organize and reactivate. Discuss the Congress rule in the Provinces and its impact on the All India Muslim League.
- 06 Shaikh Mujeeb Ur Rehman’s Six points became the Magna Carta for the Awami League. Discuss and evaluate its background and contents.
- 07 Cabinet Mission Plan of 1946 is considered by some quarters as the best alternative for the partition of India in 1947. Discuss its main recommendations and also analyze why it failed to get the approval from the major political parties of India?
- 08 Signify the impact of 18th amendment on Federalism in Pakistan.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

ISLAMIC HISTORY & CULTURE.

Saturday the 21st November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No. **Marks**

SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- 01 Write comprehensive note on the administrative, management and reforms of Hazrat Umer Farooq (R.A) as a Caliph with particular focus on, how his principles can be practiced in today's World. 20
- 02 Analyze the economic, religious, political and social state-of-affairs of the World before the advent of Islam. 20
- 03 Point out the major World civilizations at the dawn of Islam, with special emphasis on their intellectual activities 20
- 04 Trace the origin of Shura in Islam and give a brief account of its working under the pious caliphs. Is modern parliament an alternative of Shura? 10
- 05 The scientific and literary progress of the Muslims in Spain laid the foundation of renaissance in Europe, discuss with evidence. 10

SECTION-II

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- 06 Abbasid period was the golden period for the progress of different sciences and art. Discuss in detail the Revenue System of the Abbasid. 20
- 07 Explain the reasons for the conquest of Spain at the hands of Arabs, especially mentioning the arrival of Tariq Bin Ziyad in that country. 20
- 08 Define Civilization and Culture and describe the contributions of Muslim Civilization towards the different human societies. 20
- 09 Write a comprehensive Essay on "Islam and the Challenges of Modernity". In your opinion what should be an agenda for the 21st Century. 10
- 10 Describe the character and achievements of Muhammad Al-Fateh, the Ottoman. 10

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Comparative Study of Major Religions (For Non Muslim)

Monday the 16th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- Attempt any Five Questions. All questions carry equal marks.
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Question No.

- 01 Define the term Religion and its major types and areas. Also describe its historical background as discussed by the Anthropologists in modern age.
- 02 Give a historical background and development of Hinduism. Also discuss the reasons of its divisions in other religions.
- 03 The sacred Books of Hinduism mainly narrate the Socio-Theological and Cosmic preview. Discuss.
- 04 Describe the historical background and development of Buddhism and pen down its main teachings and doctrines.
- 05 Describe the historical background and evolution of Judaism. Also discuss the establishment of Jewish rule and destruction of Jerusalem in different ages.
- 06 Describe the historical background of Christianity and give life sketch of Jesus Christ. Also discuss the Socio-religious and ethical teachings of Jesus Christ.
- 07 Every religion of the world has a comprehensive code of ethics. Discuss it comparatively with reference to all major world religions.
- 08 Describe comparatively the different concepts of God, belief in the day of resurrection and judgment in different world religions.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Islamic Studies

Monday the 16th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- Attempt any Five Questions. All questions carry equal marks.
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Question No.

- 01 Define Tauheed and its impacts on individual life and the society?
- 02 Write a comprehensive note on Hajj (Pilgrimage) and its spiritual, moral and social impacts.
- 03 Discuss in detail the collection and compilation of Holy Quran.
- 04 In the presence of Interest based Global Financial System. Discuss the possibility of interest free Islamic Financial System.
- 05 What is meant by Jihad who can declare it. Can contemporary problems of Muslims Ummah be resolved through Jihad.
- 06 Write the basic problems of the Muslim Ummah in modern times and suggest their solutions.
- 07 Islam has strictly emphasized on the importance of Ijtihad. Explain the principles of Ijtihad and describe the role of Ijtihad in the renovation of Islam.
- 08 What are the reasons for the rise of Extremism in the modern age and how to curb it?

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SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

ANTHROPOLOGY

Wednesday the 25th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- Attempt any Five Questions. All questions carry equal marks.
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Question No.

- 01 Critically examine the role of Anthropology in Modern Pakistan. How do you situate Anthropology in Social Sciences?
- 02 Critically examine different anthropological approaches to religion also distinguish between religion, magic and science?
- 03 How could you elaborate the relationship between population changes and economic, social and cultural variables like poverty, illiteracy, ill-health, family structure, forms of marriage and nature of work?
- 04 Describe the basic notions of Postmodern Anthropology with special focus on the concepts of interpretivist epistemology and reflexivity as rudimentary component of an understanding of Culture.
- 05 Analyze how the subject of incest taboo is a cultural specific category as well as a universal human phenomenon. Also debate on whether it is a natural or social phenomenon and explain the functions it performs by giving profound examples.
- 06 Explain the following with relevant examples.
(i) Why the study of kinship is important in Anthropology? Analyze how kinship plays a fundamental role in weaving the tapestry of culture? Substantiate your arguments with examples.
(ii) By distinguishing between levirate and sororate, elaborate their social functions with examples, specifically from Pakistani context?
- 07 Discuss how Eleanor Leacock amalgamate Marxist and feminist approaches to explain gender inequality; and compare this to how Sherry Ortner addresses the same issue. Whose explanation do you find more convincing and why?
- 08 Explain the following concepts with examples:
(i) Fossils and Fossil localities.
(ii) Participant observation.
(iii) Consanguineal Kin.
(iv) Egalitarian Societies.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

JOURNALISM AND MASS COMMUNICATION

Wednesday the 25th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- Attempt any Five Questions. All questions carry equal marks.
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Question No.

- 01 Enumerate the historical process of development public relations. How public relations have assertively developed the image of Institutions working in their jurisdiction?
- 02 Globalization Theory has changed the mindset of people at large. Critically assess in detail.
- 03 Trace out the functions of Public Relations Officer in the age of Cyber Technology.
- 04 Define the functions and responsibilities of PEMRA. How PEMRA has effectively worked in the prevailing environment?
- 05 Ethical Journalism is vital for the society. How journalists are following the principles of Ethics in our society?
- 06 Media Freedom is necessary to promote the culture of democracy in our society. Comment.
- 07 Critically highlight the role of media as an agent of change in our society.
- 08 Write short notes on any two of the following:
 - (i) Press Information Department (P.I.D)
 - (ii) P.R. as toll for Governance.
 - (iii) Ministry of Information.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

GEOGRAPHY.

Wednesday the 25th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Question No. **Marks**

SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|-----------|
| 01 | How the Endogenetic forces are shaping the surface of the earth. Discuss the role of plate tectonic and volcanism in detail. | 20 |
| 02 | For the last about 300 years Man has become a major agent of change. Evaluate this statement in the context of a term coined by Nobel laureate Paul Crutzen – Anthropocene. | 20 |
| 03 | Climate change is becoming a major problem for humanity. Describe the efforts taken by the United Nations to mitigate the impacts of climate change. | 20 |
| 04 | The distribution of Salinity in the World oceans is not uniform. Describe in detail the causes and factors for the uneven distribution of salinity. | 10 |
| 05 | Global Warming is becoming a major threat to water towers of the World. Write an Essay on the measures adopted for the preservation of Cryosphere. | 10 |

SECTION-II

Note: This Section carries Total 50 marks. Attempt any Three questions by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|---|-----------|
| 06 | The Covid-19 has been a major factor in curtailing the Global economic development. Analyze this statement to highlight the impacts of epidemic on Global Economy. | 20 |
| 07 | In the aftermath of 9/11 , the Global situation is not in favour of tourism and hospitality industry suffered a lot. Critically appraise this statement to highlight the economic impacts of declining international tourism on the economy of heavily tourism-dependent countries. | 20 |
| 08 | Ethnic cleansing, intolerance and religious precautions are becoming very common phenomena in the present century both in developed and developing countries of the world. Give the main causes responsible for and propose workable measures to minimize these problems. | 20 |
| 09 | We are living in an urbanized world and the urban population is rapidly increasing in the developing countries of the world especially in Asia. What measures do you think would be taken for achieving sustainable cities. | 10 |
| 10 | The pattern of regional precipitation is continuously changing for more than two decades and causing draught conditions in semiarid regions of the world. Describe the mitigative measures taken at Global level. | 10 |

Combined Competitive Examination, 2020

PSYCHOLOGY.

Wednesday the 25th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- **Attempt any Five Questions. All questions carry equal marks.**

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Question No.

- 01 Define Psychology and briefly explain its scope in Modern World.
- 02 What is Nervous System? Write a detailed note on Neuron and its functions.
- 03 Discuss Cognitive and Behavioral perspectives of Psychology in detail.
- 04 What is meant by mood disorder, which Therapeutic Technique you suggest for the treatment of this disorder?
- 05 Define Industrial Psychology and an Occupational Psychology and explain their scope. Also describe methods of removing Industrial Fatigue.
- 06 Write a detailed note on Depression, its causes and Therapeutic approaches.
- 07 What is Stress? How Social support buffers the intensity of stress.
- 08 Explain the role of Forensic Psychology in Investigative process.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

S O C I O L O G Y.

Wednesday the 25th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note:- Attempt any Five Questions. All questions carry equal marks.

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Question No.

- 01 Discuss the role of Social Media in Social and Cultural change in Pakistan. What type of social planning / policy is needed to direct this change in the context of our own social and cultural values? Discuss with examples.
- 02 What is drug addiction? Analyze the factors that contribute to drug addiction in Pakistani society.
- 03 What are the Sociological and Economic consequences of a Covid-19 pandemic? Discuss with reference to our society.
- 04 Discuss suicide as a social problem and its underlying social and cultural factors among youth in Pakistani context.
- 05 Define urban sprawling. Explain in detail the socioeconomic impacts of peripheral areas on crime rate of urban society of Pakistan.
- 06 What is the rule of institutions in society? Do they perform positive functions, or simply work in the interests of the powerful and against the powerless? Discuss it with reference to Pakistan.
- 07 What key characteristics distinguish capitalism from socialism? Compare these two systems in terms of productivity, economic inequality and personal freedom.
- 08 Write short notes on the following:
 - (i) Beggary as an organized Crime in Pakistan.
 - (ii) Caste and Class Dynamics in Pakistan.
 - (iii) White-Collar Crime.
 - (iv) Education as a factor of development.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Constitutional Law.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 What kind of Constitution or Constitutional amendment is required in Constitution of Pakistan to make it to meet expectations of a “True Pakistani”?
- 02 Elaborate Supremacy of Parliament in presence of Monarchy in UK with reference to History of UK.
- 03 What is the Role of Indian Supreme Court in originating “Basic Structure Theory”. Explain with relevant Indian case laws.
- 04 Discuss similarities in Government of India Act 1935 and Constitution of Pakistan 1973.
- 05 What is “Judicial Activism” and how it is affecting the executive and pending judicial working system of our country?
- 06 Write Constitutional duties of American President and compare with duties of French President.
- 07 Compare and Contrast the salient features of the Constitution of Russia and China.
- 08 Discuss the following case laws:
 - (i) Molvi Tamizuddin Khan V/s Federation of Pakistan PLD 1955 Sindh 96
 - (ii) Benazir Bhutto V/s President of Pakistan PLD Sc 388
 - (iii) State V/s Zia ur Rehman PLD 1973 Sc 49

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Criminology.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

Question No.		Marks
<u>SECTION-I</u>		
Note: <u>This Section carries Total 25 marks. Attempt any Two questions by selecting One question of 15 marks and 01 question of 10 marks.</u>		
01	Define Criminology & discuss its scope keeping in view the current scenario of increase of Crime in Pakistan.	15
02	Criminology is a scientific study of social problems of crime and violence. What particular social problems do you see influence violent crimes in our society?	15
03	Sutherland's 'Differential Association is the specific casual process in the development of systematic criminal behavior'. Critically evaluate with relevant examples of some crimes from our society.	10
04	What is Antisocial Personality Disorder (APD)? Enlist its various characteristics and analyze how Psychopathy tends the person to violence and crime.	10
<u>SECTION-II</u>		
Note: <u>This Section carries Total 25 marks. Attempt any Two questions by selecting One question of 15 marks and 01 question of 10 marks.</u>		
05	Define Juvenile delinquency by giving suitable examples from our society and discuss some of the significant causes with reference to theories which motivate youth to act on delinquent activities.	15
06	Prisons in Pakistan Lack systematic correctional mechanism and become nurseries of crime and militancy in the country. Discuss it with reference to conditions of prisons in Pakistan.	15
07	How risk and fear of crime are connected to different age groups, genders and communities? Critically discuss with reference to Pakistani society.	10
08	How far recidivism has been limited by the institution of prison? Explain some of the modern strategies used in prison for the rehabilitation and reintegration of offenders.	10

P.T.O.

SECTION-III

Note: This Section carries Total 25 marks. Attempt any Two questions by selecting One question of 15 marks and 01 question of 10 marks.

- 09 Explain interview and interrogation techniques used in Criminal Investigation separately. Which do you think is more technical than other for the collection of information about Crime and criminals, and verification of crime data? **15**
- 10 Police though is one of the main components of criminal justice system to deal with crime and criminals, but has failed to do so. Can you identify some of the problems that hinder effective police performance in Pakistan? **15**
- 11 How forensic science is helpful tool in the modern day for determining and detection of violent crimes? **10**

SECTION-IV

Note: This Section carries Total 25 marks. Attempt any Two questions by selecting One question of 15 marks and 01 question of 10 marks.

- 12 Why terrorism does not have fixed definition? Why youth joins path of extremism & Terrorism in Pakistan? **15**
- 13 Write brief notes on any Three of the following: **15**
- (i) Crime & Opportunity.
 - (ii) Elements of Crime.
 - (iii) Genetics and Criminal behavior.
 - (iv) Qualities of Good Investigator.
 - (v) Atavism.
- 14 Define Money Laundering. Discuss various stages and methods of money Laundering. **10**

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

International Law.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Elaborate Kashmir issue in the light of Right of Self Determination, UN Security Council resolution, Non interference in internal affairs, legal status of holding elections in Kashmir and Simla Agreement.
- 02 What Article of UNCLOS allows boarding of Foreign ships on high seas in peace time?
- 03 Define estoppel in International Law and its operation in the case of Temple Preach Vihar (*Thailand vs Cambodia*).
- 04 How is title and territory acquired in International Law? Explain the ruling of the International Court in (*India vs Pakistan*) (1968) 17 R.I.A.A. 553.
- 05 What legal doctrine determines the status of Israeli Laws in West Bank? Explain the ruling of the ICJ in Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory (2004).
- 06 What is the organization of International Court of Justice? What are the four bases of jurisdiction of International Court of Justice?
- 07 Write detailed note on any Four of the following:
(i) Spies & Mercenaries (ii) Protecting Powers
(iii) Prize Courts (iv) Neutral Powers and Neutrality
(v) Combatants and its kinds
- 08 Explain any Four of the following in the light of convention on the law of sea 1982 and our Maritime Zone Act of 1976.
(i) National Water
(ii) Continental Shelf
(iii) Territorial Water
(iv) Land-locked State
(v) EEZ and Contiguous Zone

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

L A W

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Explain the powers of Civil Court to appoint receiver and describe the duties of receiver. When Collector may be appointed as receiver? Discuss.
- 02 Describe the procedure of admission of appeal in Civil Appellate Court and what are the powers of Appellate Court?
- 03 What is the concept of criminal administration of justice? Explain its socio-economic impacts on society.
- 04 Discuss the procedure of trial before High Courts and Courts of Sessions?
- 05 Discuss “Award” passed by Arbitrator and how for it is binding on parties?
- 06 Explain the temporary injunction and interlocutory orders?
- 07 Explain the powers of High Court or Sessions Judge to issue directions of the nature of habeas corpus?
- 08 Write short notes on the following:
(i) Theft.
(ii) Extortion.
(iii) Robbery.
(iv) Dacoity.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Mercantile Law.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Discuss in detail remedies for breach of a contract available to a seller against the buyer in the light of Sale of Goods Act, 1930.
- 02 What are Negotiable Instruments? Explain it's essential characteristics, nature and functions? What functions do you consider to be absolutely crucial?
- 03 Illustrate the rules and restrictions for altering the memorandum and the articles of association of a company?
- 04 What is the importance of Resolutions in regulating the affairs of a company? Explain what is meant by the doctrine of Ultra vires of a company?
- 05 Discuss the scope and power of a Judicial Authority to stay legal proceedings, where there is an arbitration agreement? Elaborate as to what it amounts while taking any step(s) in the proceedings.
- 06 Explain the features of a partnership and the legal status of a minor partner in a partnership?
- 07 Distinguish between void agreement and an unlawful agreement as expressly enshrined under the Contract Act, 1872?
- 08 Describe "Services for consideration" with examples, in the light of Consumer Law?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Muslim Law & Jurisprudence.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 Briefly describe why Islamic Laws have not been equally applied and enforced in all the Muslim countries in the World?
- 02 What are the different classifications of property in Muslim Law? Elaborate.
- 03 Critically explain and describe what do you understand from the statement, ‘the closure of the gate of Ijtihad at around the fourth Islamic century did not affect the ‘Usul Al Fiqh’ in the same way as it might have affected the Fiqh itself?
- 04 What do you mean by Hadd offence? Explain at least four Hadd offences and describe how evidence can be collected to prescribe the punishment for those offences.
- 05 How would you justify, Islamic contract laws are helpful in facilitating business activities and transactions not only within the Muslim country but across Muslim and Non-Muslim countries as well?
- 06 Describe the meaning of “Ijma” and its role as a source of Law in the modern times?
- 07 What is the nature of Talaq-e-Tafweez and what is the result when power is granted under it is exercised?
- 08 Write a brief note on development of Islamic Jurisprudence?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

Philosophy.

Tuesday the 24th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note: Attempt any Five questions. All questions carry equal marks.

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Question No:

- 01 Define and explain “Argument” with examples?
- 02 What is Indicative Argument and explain when Inductive Arguments are strong, weak, cogent and uncogent?
- 03 Explain fully the multiple uses, forms and three basic functions of language.
- 04 What is Fallacy? Describe the Fallacies of relevance.
- 05 How would you justify that Plato’s Theory of state is corresponding to his moral theory of Tripartite Soul.
- 06 “All identity is identity and difference”. Elaborate Hegel’s distum.
- 07 Explain in details Plato’s the allegory of the cave and its implication on knowledge?
- 08 Why did Mill reject the Kantian ethics?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

CHEMISTRY

Thursday the 19th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.
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Question No.

- 01 (A) What is the Wave Function? Give its significance. Distinguish between the Eigen-function and Eigen-value with examples.
(B) Derive the Schrödinger's Wave Equation for a particle in One-dimensional box .
- 02 (A) Derive a relationship between the Gibbs free energy and Equilibrium constant.
(B) Write a note on Third Law of Thermodynamics and also discuss the significance of absolute entropy.
- 03 (A) Derive the Integrated rate equation for the 2nd order reaction with the same initial concentration.
(B) Derive Arrhenius Equation and discuss its significance.
- 04 (A) Discuss the Mechanism of Nucleophilic substitution reactions of Alkyl Halides with reference to S_N1 and S_N2 reaction. How do these two Mechanisms differ?
(B) What is meant by Racemization? Discuss two methods for the resolution of Racemic Mixture.
- 05 (A) Explain why?
(i) Ammonia is more basic than Aniline.
(ii) Chloroacetic Acid is stronger acid than Acetic Acid.
(B) Describe completely the "Rules of Resonance"
- 06 (A) What is Grignard Reagent? Draw Monomer and Dimer structures of Grignard Reagent.
(B) Write short notes on the following:
(i) Inductive Effect (ii) Hyper conjugation
(iii) Explain the structure and reactivity of Carbonyl Group.
- 07 (A) Describe the following characteristics of the first series of the transition metals and their trends in the series (Sc to Zn):
(i) Atomic Radii (ii) Oxidation States.
(iii) Ionization Enthalpies
(B) Describe important Alloys of the Lanthanoid Metals.
- 08 (A) How we can classify Chromatography according to Mechanism involved? Briefly describe affinity Chromatography and Electrophoresis?
(B) Compare applicability of t and F test to Chemical Analysis?

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

G E O L O G Y

Thursday the 19th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No.	Marks
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SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|--|----|
| 01 | Draw and Label interior of the earth. What are the relationship among the Asthenosphere and the Lithosphere, the crust and the mantle and inner and outer core. Think about something you use everyday (e.g. your cell phone). What material is your cell phone made of? Where do these materials come from? How do we extract these materials from the earth? | 20 |
| 02 | What would the surface of earth be like if there were no tectonic activity? Draw sketch of major types of plate boundaries. Why do some rocks fold while others are faulted? In what parts of Pakistan would you find the most intensely folded rocks? Why? | 20 |
| 03 | You are a volcanologist working on a volcano that has been active in the past but currently quite. What methods would you use to monitor this volcano and what would those methods tell you about processes beneath the surface? Define Mud Volcanoes? Where are mud Volcanoes located in Pakistan. | 20 |
| 04 | Why is weathering important to life on earth. Why do stone buildings tend to weather more rapidly in cities than in Rural areas? How does mechanical weathering differ from chemical weathering? | 10 |
| 05 | Why do people fear from earthquakes, hurricanes, tornadoes and landslide? If you were building house on a cliff, what would you look for to ensure that your house would not be destroyed through mass wasting? What role does water play in land sliding? | 10 |

SECTION-II

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- | | | |
|----|--|----|
| 06 | Describe the main ways in which a river erodes its channel and how stream transports and deposits sediment. What effect does a dam have on a river? | 20 |
| 07 | How does material deposited by Glaciers differ from material deposited by stream? Describe the glacial erosion processes of plucking and abrasion. What features indicate the processes have occurred in the past? What effect might human activity have on causing or preventing a glacial age? | 20 |
| 08 | Is it likely that oil resources of Badin Block of Lower Indus Basin will be completely depleted one day? Is coal a truly alternate to oil. Do Thar coal will provide us clean energy source? If yes then how? | 20 |
| 09 | Why is ozone at the surface considered harmful and ozone in the stratosphere considered beneficial? Think about your daily schedule. In what ways could you reduce your greenhouse gas emissions in your city? | 10 |
| 10 | Discuss the way in which Solar, wind, wave and tidal energy are convenient and beneficial for Sindh. | 10 |

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

P H Y S I C S.

Thursday the 19th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Note Attempt any Five questions. All questions carry equal marks.

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Question No.

- 01 (A) (i) What is the sum in unit vector notation of the two vectors
 $\vec{a} = 5\vec{i} + 3\vec{j}$ and $\vec{b} = -3\vec{i} + 2\vec{j}$
- (ii) What are magnitude and the direction of $\vec{a} + \vec{b}$?
- (B) The position of a particle moving in a xy plane is given by
 $\vec{r} = [2\text{m/s}^2]t^3 - (5\text{m/s})t \vec{i} + [(6\text{m}) - (7\text{m/s}^4)t^4] \vec{j}$. Calculate (i) \vec{r} , (ii) \vec{v} (iii) \vec{a}
when $t = 2\text{s}$
- 02 (A) Show that the maximum height reached by a projectile is
 $y_{\text{max}} = (V_0 \sin \phi_0)^2 / 2g$
- (B) A lamp hangs vertically from a cord in a descending elevator. The elevator has a deceleration of 2.4 m/s^2 before coming to a stop
- (i) If the tension in the cord is 89N, what is the mass of the lamp?
- (ii) What is the tension in the cord when the elevator ascends with an upward acceleration of 2.4m/s^2 ?
- 03 (A) What is Polarization of the material? Derive the relation of
- (i) Electric displacement
- (ii) Susceptibility, permittivity, and dielectric constant for the linear dielectrics.
- (B) A long straight wire, carrying uniform the charge λ , is surrounded by rubber insulation out to a radius a . Find the electric displacement.
- 04 (A) How Maxwell fixed up Ampere's Law? An how it plays a crucial role in the propagation of the Electromagnetic Waves?
- (B) Derive the relation for the energy per unit time, per unit area, transported by the Electromagnetic fields.
- 05 (A) What is the Black Body Radiation? Discuss Quantum Theory.
- (B) Your skin temperature is about 300 K. In what region of the electromagnetic spectrum do you emit the Thermal Radiation most intensely?
- 06 (A) Explain the Photoelectric effect and discuss the Einstein's Theory about the Kinetic Energy of Photoelectrons and work function of metals.
- (B) the stopping potential for Photoelectrons emitted from a surface illuminated by a light of wavelength 491 nm is 710 mV. When the incident radiation is changed to a new value, the stopping potential is found to be 1.43. What is this new Wavelength? What is the work function for the surface?

P.T.O.

- 07 (A) Show that $\Delta E/E$, the fractional loss of energy of photon during the Compton collision is given by:
$$\Delta E/E = [hf/mc^2] (1-\cos \phi)$$
- (B) A particular x-ray photon has a wavelength of 41.6 pm. Calculate the photon's energy; frequency and momentum also calculate energy, frequency and momentum of the photon whose energy is equal to the rest mass energy of electron.
- 08 (A) What is Wave Function? Derive the relation for the time dependent Schrödinger Wave Equation.
- (B) What is the Barrier Tunneling? Derive the relation for the incident and the reflected waves from the barrier and also calculate the transmission coefficient.

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD.

Combined Competitive Examination, 2020

STATISTICS.

Thursday the 19th November, 2020.

Time: 02:00 pm to 05: 00 pm

Maximum marks. 100

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Question No.	Marks
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SECTION-I

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

01 (A) "Statistics is Science and an Art?" Comment on it. Define the word 'Statistics' as a singular and as a plural word. 10

(B) Why Graphical representation is important in Statistics? How a researcher can develop future strategies on the basis of graphs/diagrams? Give the names of various graphs and diagrams that can be used to represent categorical data. 10

02 (A) What is 'Probability'? Distinguish between 'Classical' and 'Relative Frequency' definitions of probability with examples. Give the basic Axioms of Probability. 10

(B) A Random sample of 200 adults are classified below by sex and their education attained. 10

Education	Male	Female
Elementary	38	45
Secondary	28	50
College	22	17

If a person is picket at random from this group, find the probability that:

(i) The person is a male.

(ii) The person is a female, given that she has college education.

03 (A) Distinguish between the following with examples in daily life. 10

(i) Simple Regression and Multiple Regression.

(ii) Multiple and Partial Correlation Coefficients

(B) What is the correlation coefficient? What are the properties of sample correlation coefficient? Explain by drawing rough sketches when: 10

(i) The correlation coefficient is zero.

(ii) The correlation coefficient is approximately 0.8

(iii) The correlation coefficient is approximately -0.7,

(iv) The correlation coefficient is approximate 0.4

(v) The correlation coefficient is exactly -1

04 Distinguish between the following terms: 10

(i) Mutually Exclusive and Mutually Exhaustive Events.

(ii) Joint and Marginal Probabilities.

(iii). Additive and Multiplicative Laws of Probability.

(iv). Dependent and Independent Events.

(v). Conditional Probability and Statistical Independence.

05 Define the following terms: 10

(i) Statistical Independent (Pair wise and Mutual)

(ii) Bayes' Theorem

(iii) Moment Generating Function (MGF)

(iv). Hypergeometric Distribution.

(v) Poisson Experiments

P.T.O

SECTION-II

Note: This Section carries Total 50 marks. Attempt any Three questions from this Section by selecting Two questions of 20 marks and 01 question of 10 marks.

- 06 (A) Define ‘Sampling from a finite population’ and give few examples of sampling in everyday life. Distinguish between probability and non-probability sampling. **10**
- (B) Give the basic difference between the following sample designs (you can use appropriate examples when needed) **10**
- (i) Simple random sampling and stratified sampling.
- (ii) Systematic sampling and cluster sampling.
- (iii) Single and Multistage Sampling.
- (iv) Purposive and Quota Sampling.
- (v) Convenience and Accidental Sampling.
- 07 (A) Distinguish between ‘Point Estimation’ and ‘Interval Estimation’. Give the properties of a good Point Estimator. **10**
- (B) If X_1, X_2, X_3, X_4 constitute a random sample of size $n = 4$ from a normal distribution with mean μ and variance σ^2 . find the efficiency of $(X_1 + 2X_2 + 2X_3 + X_4) / 6$ relative to $(X_1 + X_2 + X_3 + X_4) / 4$ **10**
- 08 (A) Define the term ‘Official Statistics’. Discuss various sources of official Statistics in Pakistan and indicate the types of statistics available from these sources. **10**
- (B) Define the following terms used in demography: **10**
- (i) Vital Events and Vital Statistics.
- (ii) Vital Index (the rate of natural increase)
- (iii) Total Fertility rate (TFR)
- (iv) Gross Reproduction Rates (GRR) and Net Reproduction Rates (NRR)
- 09 Consider the following data from Australia during 1966. Calculate **10**
- (i) Crude birth rate (CBR) (ii) Age-specific fertility rates (ASFR)

Age	Babies Born During 1966	No. of Women (mid-1966)
15-19	25055	511378
20-24	72135	417232
25-29	66326	361729
30-34	34869	331700
35-39	18532	367099
40-44	6709	377215

- 10 Write the functions and name the few publications of the following organizations in Pakistan. **10**
- (i) Federal Bureau of Statistics
- (ii) Sindh Bureau of Statistics.
- (iii) Population Census Organization

SINDH PUBLIC SERVICE COMMISSION, HYDERABAD

Combined Competitive Examination, 2020

APPLIED MATHEMATICS

Thursday the 19th November, 2020

Time : 2:00 pm to 05:00 pm

Maximum marks: 100

NOTE: Attempt any Five Questions. All questions carry equal marks

Question No.

- 01 (A) Solve the initial value problem $8 \cos^2 y dx + \operatorname{cosec}^2 x dy = 0$, with $y\left(\frac{\pi}{2}\right) = \frac{\pi}{4}$
(B) Solve the following differential equation:
$$\frac{dx}{dy} + \frac{x}{y^2+1} = \frac{\tan^{-1}y}{1+y^2}$$
- 02 (A) Prove that an angle inscribed in a semicircle is a right angle.
(B) Prove that the altitude of a triangle are concurrent.
- 03 (A) A rigid body is rotating at 3 radians/sec about an axis given by the vector $\vec{OA} = 3i + 6j + 2k$. Find the velocity of the point P of the body, whose position vector with respect to zero is $i + j + k$.
(B) If $v(t)$ is a unit vector, show that
$$v \cdot \left(v + \frac{d^2v}{dt^2} \right) + \left(\frac{dv}{dt} \right)^2 = 1$$
- 04 (A) Find the positive real root of $e^x - 3x = 0$, using Bisection method. Perform only four iterations.
(B) Define fixed point. Let $g: [a, b] \rightarrow [a, b]$ be a continuous function. Then g has a fixed point in $[a, b]$
- 05 (A) Three forces P, Q, R act along the sides BC, CA, AB respectively of a triangle ABC. Prove that if $P \cos A + Q \cos B + R \cos C = 0$, then the line of action of the resultant passes through the circum centre of the triangle.
(B) Forces X, Y, Z, P + X, Q + Y, P + Z act at a point in the directions of sides of a regular hexagon, taken one way round. Show that their resultant is a force P + Q in the direction of the force Q + Y

P.T.O.

- 06 (A) If P is any point in the plane of a triangle ABC and D,E,F are the middle points of its sides; prove that forces \overrightarrow{AP} , \overrightarrow{BP} , \overrightarrow{CP} , \overrightarrow{PD} , \overrightarrow{PE} , \overrightarrow{PF} , are in equilibrium.
(B) Prove that If a force P acting on a rigid body can be moved to any point O of the rigid body, provided a couple is added, whose moment is equal to the moment P about O.

- 07 (A) Prove that every set of particles has one and only one centre of mass.
(B) Find the centre of mass of a semi-circular lamina of radius a whose density varies as the square of the distance from the centre.

- 08 (A) Use power method to find dominant eigenvalue and corresponding eigenvector of the matrix.

$$A = \begin{bmatrix} 2 & -1 & 0 \\ -1 & 2 & -1 \\ 0 & -1 & 2 \end{bmatrix}$$

- (B) Derive Newton's divided difference formula and use it to find the polynomial which fit the data (1,1), (3,27), (4,64)
