

Series : EFGH/S



SET~4

रोल नं.
Roll No.



• • •

नोट

- (I) कृपया जाँच कर लें कि इस प्रश्न-पत्र में मुद्रित पृष्ठ **19** हैं।
- (II) प्रश्न-पत्र में दाहिने हाथ की ओर दिए गए प्रश्न-पत्र कोड को परीक्षार्थी उत्तर-पुस्तिका के मुख-पृष्ठ पर लिखें।
- (III) कृपया जाँच कर लें कि इस प्रश्न-पत्र में **21** प्रश्न हैं।
- (IV) कृपया प्रश्न का उत्तर लिखना शुरू करने से पहले, उत्तर-पुस्तिका में यथा स्थान पर प्रश्न का क्रमांक अवश्य लिखें।
- (V) इस प्रश्न-पत्र को पढ़ने के लिए 15 मिनट का समय दिया गया है। प्रश्न-पत्र का वितरण पूर्वाह्न में 10.15 बजे किया जाएगा। 10.15 बजे से 10.30 बजे तक परीक्षार्थी केवल प्रश्न-पत्र को पढ़ेंगे और इस अवधि के दौरान वे उत्तर-पुस्तिका पर कोई उत्तर नहीं लिखेंगे।

#

• • •

प्रश्न-पत्र कोड
Q.P. Code **89/S**

परीक्षार्थी प्रश्न-पत्र कोड को उत्तर-पुस्तिका के मुख-पृष्ठ पर अवश्य लिखें।

Candidates must write the Q.P. Code on the title page of the answer-book.

NOTE

- (I) Please check that this question paper contains **19** printed pages.
- (II) Q.P. Code given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- (III) Please check that this question paper contains **21** questions.
- (IV) **Please write down the Serial Number of the question in the answer-book at the given place before attempting it.**
- (V) 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the candidates will read the question paper only and will not write any answer on the answer-book during this period.



सूचना प्रौद्योगिकी

INFORMATION TECHNOLOGY

निर्धारित समय : 2 घण्टे

Time allowed : 2 hours

अधिकतम अंक : 50

Maximum Marks : 50



सामान्य निर्देश :

- (i) कृपया निर्देशों को ध्यान से पढ़ें।
- (ii) इस प्रश्न-पत्र में **21** प्रश्न दो भागों में विभाजित हैं : **खण्ड क** और **खण्ड ख**।
- (iii) **खण्ड क** में वस्तुनिष्ठ प्रकार के प्रश्न हैं जबकि **खण्ड ख** में विषयपरक प्रकार के प्रश्न हैं।
- (iv) दिए गए $(5 + 16) = 21$ प्रश्नों में से, उम्मीदवार को 2 घंटे के आबंटित (अधिकतम) समय में $(5 + 10) = 15$ प्रश्नों के उत्तर देने हैं।
- (v) किसी विशेष खण्ड के सभी प्रश्नों को सही क्रम में करने का प्रयास किया जाना चाहिए।
- (vi) **खण्ड क** : वस्तुनिष्ठ प्रकार के प्रश्न (24 अंक) :
 - (a) इस खण्ड में **5** प्रश्न हैं।
 - (b) कोई नकारात्मक अंकन नहीं है।
 - (c) दिए गए निर्देशों के अनुसार कीजिए।
 - (d) प्रत्येक प्रश्न/भाग के सामने आबंटित अंकों का उल्लेख किया गया है।
- (vii) **खण्ड ख** : विषयपरक प्रकार के प्रश्न (26 अंक) :
 - (a) इस खण्ड में **16** प्रश्न हैं।
 - (b) उम्मीदवार को **10** प्रश्न करने हैं।
 - (c) दिए गए निर्देशों के अनुसार कीजिए।
 - (d) प्रत्येक प्रश्न/भाग के सामने आबंटित अंकों का उल्लेख किया गया है।

खण्ड क (वस्तुनिष्ठ प्रकार के प्रश्न)

(24 अंक)

1. रोजगार कौशल पर दिए गए **6** प्रश्नों में से किन्हीं **4** के उत्तर दीजिए। $4 \times 1 = 4$
- (i) संप्रेषण चक्र (Communication Cycle) में फीडबैक की क्या भूमिका है? **1**
- (A) संदेश की शुरुआत करना
 - (B) संदेश प्राप्ति की सूचना और उत्तर देना
 - (C) संदेश संचारित (transmit) करना
 - (D) संदेश को बाधित करना



General Instructions :

- (i) Please read the instructions carefully.
- (ii) This question paper consists of **21** questions in **two** Sections : **Section A** and **Section B**.
- (iii) **Section A** has Objective Type Questions, whereas **Section B** contains Subjective Type Questions.
- (iv) Out of the given $(5 + 16) = 21$ questions, a candidate has to answer $(5 + 10) = 15$ questions in the allotted (maximum) time of 2 hours.
- (v) All questions of a particular section must be attempted in the correct order.
- (vi) **Section A : Objective Type Questions (24 marks) :**
 - (a) This section has **5** questions.
 - (b) There is no negative marking.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question / part.
- (vii) **Section B : Subjective Type Questions (26 marks) :**
 - (a) This section has **16** questions.
 - (b) A candidate has to do **10** questions.
 - (c) Do as per the instructions given.
 - (d) Marks allotted are mentioned against each question / part.

Section A

(Objective Type Questions)

(24 Marks)

1. Answer any **4** out of the given **6** questions on Employability Skills. $4 \times 1 = 4$
- (i) What is the role of feedback in the Communication Cycle ? **1**
 - (A) To initiate the message
 - (B) To acknowledge and respond to the message
 - (C) To transmit the message
 - (D) To interrupt the communication



- (ii) तनाव प्रबन्धन (Stress Management) का अंतिम लक्ष्य क्या है ? 1
- (A) उदास होना
(B) तनाव को अनदेखा करना
(C) हमेशा तनावग्रस्त रहना
(D) जीवन, कार्य और विश्राम के बीच एक संतुलन बनाए रखना
- (iii) निम्नलिखित में से कौन-सा वेतनभोगी व्यक्ति का एक उदाहरण है ? 1
- (A) एक टैक्सी ड्राइवर जो अपनी कार का स्वामी है
(B) बैंक में कार्यरत एक अकाउंटेंट
(C) एक स्वतन्त्र रूप से काम करने वाला (फ्रीलांस) फोटोग्राफर
(D) एक दुकानदार
- (iv) स्मार्ट (SMART) लक्ष्यों में, 'S' का अर्थ क्या है ? 1
- (A) सरल (Simple) (B) विशेष (Special)
(C) विशिष्ट (Specific) (D) सामाजिक (Social)
- (v) सतत विकास (Sustainable Development) की आवश्यकता क्यों है ? 1
- (A) भावी पीढ़ियों की उनकी आवश्यकताओं को पूरा करने की क्षमता को हानि पहुँचाए बिना वर्तमान आवश्यकताओं की पूर्ति करना
(B) केवल पर्यावरणीय संरक्षण पर ध्यान केन्द्रित करना
(C) संसाधनों की खपत में वृद्धि करना
(D) अल्पावधिक आर्थिक वृद्धि की गारंटी देना
- (vi) किसी कम्प्यूटर में सबसे अधिक महत्वपूर्ण सॉफ्टवेयर कौन-सा है ? 1
- (A) गेमिंग सॉफ्टवेयर (Gaming Software)
(B) डिजाइनिंग सॉफ्टवेयर (Designing Software)
(C) ऑपरेटिंग सिस्टम (Operating System)
(D) इंटरनेट सॉफ्टवेयर (Internet Software)



- (ii) What is the ultimate goal of stress management ? 1
- (A) Being depressed
 - (B) Ignoring stress
 - (C) Being stressed at all times
 - (D) Maintaining a balance between life, work, and relaxation
- (iii) Which of the following is an example of a wage employed person ? 1
- (A) A taxi driver who owns his own car
 - (B) An accountant working at a Bank
 - (C) A freelance photographer
 - (D) A shop owner
- (iv) In SMART goals, what does 'S' stand for ? 1
- (A) Simple (B) Special
 - (C) Specific (D) Social
- (v) Why is there a need for Sustainable Development ? 1
- (A) To meet current needs without harming future generations' ability to meet their needs
 - (B) To focus solely on environmental conservation
 - (C) To increase the consumption of resources
 - (D) To guarantee short-term economic growth
- (vi) The most important software in any computer is the _____. 1
- (A) Gaming Software
 - (B) Designing Software
 - (C) Operating System
 - (D) Internet Software



2. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए। 5×1=5

- (i) _____ सभी फॉर्मेटिंग सूचना का एक संग्रह है, जिसे आप सेव (save) करना चाहते हैं और फिर डॉक्यूमेंट पर अप्लाई कर सकते हैं। 1
- (A) विषय-सूची (Table of Contents)
 (B) शैली (Style)
 (C) टिप्पणियाँ (Comments)
 (D) ट्रैक परिवर्तन (Track Changes)
- (ii) रवि LibreOffice Writer में बनाए गए अपने प्रोजेक्ट में डाली गई एक इमेज की फिल्टरिंग (filtering), रिसाइजिंग (resizing), क्रॉपिंग (cropping) और रोटेटिंग (rotating) के लिए टूल्स का प्रयोग करना चाहता है। इन टूल्स को एक्सेस करने के लिए उसे किस टूलबार का प्रयोग करना चाहिए ? 1
- (A) इमेज (Image) (B) ड्रॉइंग (Drawing)
 (C) फॉर्मेटिंग (Formatting) (D) स्टैंडर्ड (Standard)
- (iii) _____ में विषयों (topics) और उपविषयों (subtopics) की सूची पृष्ठ संख्या सहित दी जाती है जिन्हें पुस्तक में शामिल किया गया है। 1
- (A) टेम्पलेट (Template) (B) सारणी (Table)
 (C) विषय-सूची (Table of Contents) (D) विषय-वस्तु (Content)
- (iv) LibreOffice Writer में, निम्नलिखित में से किस मेन्यू (menu) में ट्रैक चेंजज़ (Track Changes) विकल्प होता है ? 1
- (A) फाइल (File) (B) एडिट (Edit)
 (C) व्यू (View) (D) इंसर्ट (Insert)
- (v) राइटर (Writer) का _____ फीचर टेक्स्ट के संबंध में इमेज के प्लेसमेंट की अनुमति देता है। 1
- (A) इमेज रैपिंग (Image Wrapping)
 (B) पिक्चर रैपिंग (Picture Wrapping)
 (C) इमेज प्लेसमेंट (Image Placement)
 (D) टेक्स्ट रैपिंग (Text Wrapping)
- (vi) विषय-सूची (Table of Contents), सूची-पत्र (Index) या संदर्भ ग्रंथसूची (Bibliography) डायलॉग बॉक्स (dialog box) में _____ टैब्स मौजूद हैं। 1
- (A) 4 (B) 5
 (C) 6 (D) 7



2. Answer any 5 out of the given 6 questions.

5×1=5

- (i) _____ is a collection of all formatting information, which you want to save and then apply on the document. 1
- (A) Table of Contents
(B) Style
(C) Comments
(D) Track Changes
- (ii) Ravi wants to use tools for filtering, resizing, cropping and rotating of an image inserted in his project created in LibreOffice Writer. Which toolbar should he use to access these tools ? 1
- (A) Image (B) Drawing
(C) Formatting (D) Standard
- (iii) _____ contains a list of topics and subtopics that have been covered in the book along with page numbers. 1
- (A) Template (B) Table
(C) Table of Contents (D) Content
- (iv) In LibreOffice Writer, which of the following menus contains the Track Changes option ? 1
- (A) File (B) Edit
(C) View (D) Insert
- (v) _____ feature of Writer allows the placement of image in relation to text. 1
- (A) Image Wrapping
(B) Picture Wrapping
(C) Image Placement
(D) Text Wrapping
- (vi) There are _____ tabs present in the Table of Contents, Index or Bibliography dialog box. 1
- (A) 4 (B) 5
(C) 6 (D) 7



3. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।

5×1=5

- (i) LibreOffice Calc में _____ टूल स्वतः ग्रुप तैयार करता है और ग्रुप्ड डेटा पर जोड़ (sum), औसत (average) जैसे कॉमन फंक्शन अप्लाई करता है। 1
- (A) Average (B) Subtotal
(C) Comment (D) Link
- (ii) Calc के _____ विकल्प (option) का प्रयोग प्रवृत्तियों (trends) और संबंधों (relationships) की पहचान करने के लिए, मल्टिपल (multiple) वर्कशीट्स (worksheets) से एक सिंगल (single) स्प्रेडशीट (spreadsheet) में डेटा की वैरायटी को देखने और तुलना करने के लिए किया जाता है। 1
- (A) Consolidate (B) Subtotal
(C) Group by (D) Goal Seek
- (iii) _____ का प्रयोग एक स्प्रेडशीट में किसी सेल (cell) में नोट्स या सुझाव जोड़ने के लिए किया जाता है। 1
- (A) नोट्स (Notes) (B) डेटा (Data)
(C) योग (Total) (D) कमेंट (Comment)
- (iv) _____ चिह्न (sign) का प्रयोग एक स्प्रेडशीट में एब्सोल्यूट सेल रेफरेंस (Absolute Cell Reference) के लिए किया जाता है। 1
- (A) # (B) @
(C) % (D) \$
- (v) निम्नलिखित में से कौन-सी LibreOffice Calc की विशेषता, विशिष्ट आउटपुट (specific output) के लिए इनपुट का पता लगाने में सहायता करती है ? 1
- (A) Subtotal (B) Goal Seek
(C) Macros (D) Hyperlink
- (vi) LibreOffice Calc का _____ फीचर स्प्रेडशीट में एक या अन्य उपयोगकर्ताओं द्वारा किए गए परिवर्तनों को रिकॉर्ड करने के लिए विभिन्न तरीके उपलब्ध कराता है। 1
- (A) रिकॉर्ड चेंजेज (Record Changes)
(B) हाइपरलिंक (Hyperlink)
(C) मेक चेंजेज (Make Changes)
(D) सेल रेफरेंस (Cell Reference)



3. Answer any 5 out of the given 6 questions.

5×1=5

- (i) The _____ tool in LibreOffice Calc creates the group automatically and applies common functions like sum, average on the grouped data. 1
(A) Average (B) Subtotal
(C) Comment (D) Link
- (ii) _____ option of Calc is used to view and compare a variety of data from multiple worksheets into a single spreadsheet, for identifying trends and relationships. 1
(A) Consolidate (B) Subtotal
(C) Group by (D) Goal Seek
- (iii) _____ is used to add notes or suggestions to a cell in a spreadsheet. 1
(A) Notes (B) Data
(C) Total (D) Comment
- (iv) The _____ sign is used for absolute cell reference in a spreadsheet. 1
(A) # (B) @
(C) % (D) \$
- (v) Which of the following feature of LibreOffice Calc, helps in finding out the input for the specific output ? 1
(A) Subtotal (B) Goal Seek
(C) Macros (D) Hyperlink
- (vi) _____ feature of LibreOffice Calc provides different ways to record the changes made by one or the other users in the spreadsheet. 1
(A) Record Changes
(B) Hyperlink
(C) Make Changes
(D) Cell Reference



4. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।

5×1=5

- (i) एक _____ डेटाबेस का एक ऑब्जेक्ट है जिसमें उपयोगकर्ता के अनुकूल (user-friendly) इंटरफेस होता है और जिसमें डेटा को एक आकर्षक और सहज पठनीय (easy-to-read) फॉर्मेट में प्रविष्ट (enter) किया जा सकता है और देखा जा सकता है। 1
- (A) रिपोर्ट (Report) (B) फॉर्म (Form)
(C) क्वेरी (Query) (D) डेटाबेस (Database)
- (ii) LibreOffice Base में, एक टेबल में डेटा को केवल _____ view में प्रविष्ट (enter) किया जा सकता है। 1
- (A) Design (B) Enter
(C) Datasheet (D) Query
- (iii) एकाधिक (multiple) टेबलों में काम करते समय, आपको डेटा के _____ और असंगति (inconsistency) की जाँच करने की और उसे कम करने की आवश्यकता होती है। 1
- (A) स्वामी (Owner)
(B) डिजाइन (Design)
(C) डेटाबेस (Database)
(D) अधिकता (Redundancy)
- (iv) LibreOffice Base के बारे में निम्नलिखित में कौन-सा कथन सही है ? 1
- (A) यह एक स्प्रेडशीट सॉफ्टवेयर है।
(B) यह स्वतंत्र और ओपन सोर्स (open source) सॉफ्टवेयर है।
(C) इसमें केवल करेक्टर (character) डेटा को स्टोर किया जा सकता है।
(D) यह एक डिजाइनिंग सॉफ्टवेयर है।
- (v) निम्नलिखित में से कौन डेटाबेस का एक ऑब्जेक्ट (object) **नहीं** है ? 1
- (A) क्वेरी (Query) (B) तालिका (Table)
(C) चार्ट (Chart) (D) रिपोर्ट (Report)
- (vi) _____ की (key) एक फील्ड है जो किसी टेबल में एक पंक्ति (row) की विशिष्ट रूप से पहचान करती है। 1
- (A) Foreign (B) Primary
(C) Relational (D) Column



4. Answer any **5** out of the given **6** questions.

5×1=5

- (i) A _____ is an object of the database that has a user-friendly interface where data can be entered and seen in an attractive and easy-to-read format. 1
- (A) Report (B) Form
(C) Query (D) Database
- (ii) In LibreOffice Base, data can be entered in a table only in _____ view. 1
- (A) Design (B) Enter
(C) Datasheet (D) Query
- (iii) While working with multiple tables, you need to check and reduce the _____ and inconsistency of data. 1
- (A) Owner
(B) Design
(C) Database
(D) Redundancy
- (iv) Which of the following statements is true about LibreOffice Base ? 1
- (A) It is a spreadsheet software.
(B) It is a free and open source software.
(C) It can store only character data.
(D) It is a designing software.
- (v) Which of the following is **not** an object in a database ? 1
- (A) Query (B) Table
(C) Chart (D) Report
- (vi) A _____ key is a field that uniquely identifies a row in a table. 1
- (A) Foreign (B) Primary
(C) Relational (D) Column



5. दिए गए 6 प्रश्नों में से किन्हीं 5 के उत्तर दीजिए।

5×1=5

- (i) सुरक्षा और स्वास्थ्य के संदर्भ में जोखिम (hazard) क्या है ? 1
- (A) त्वरित कार्य दल (Rapid Action Team)
- (B) कुछ ऐसा जो लोगों को हानि पहुँचा सकता है
- (C) दुर्घटनाओं को रोकने के लिए लागू किया गया एक सुरक्षा उपाय
- (D) कार्यस्थल घटनाओं के लिए एक आपातकालीन प्रतिक्रिया (emergency response) योजना
- (ii) निम्नलिखित में से कौन-सा कार्यस्थल (workplace) का एक वैध सुरक्षा दिशा-निर्देश नहीं है ? 1
- (A) यह निश्चित करना कि सभी क्षेत्रों में उचित प्रकाश की व्यवस्था हो
- (B) विद्युत नियंत्रणों (electrical controls) या स्विचों से न खेलें
- (C) कार्यस्थल को छोड़ने से पहले सभी मशीनों को बंद कर दें
- (D) मशीनों पर काम करते समय ढीले कपड़े या आभूषण पहनें
- (iii) _____ अग्नि वर्गीकरण (fire classification) में, विद्युत सामग्री और उपकरण में आते हैं। 1
- (A) क्लास A सामग्री (B) क्लास B सामग्री
- (C) क्लास C सामग्री (D) क्लास D सामग्री
- (iv) कम्प्यूटर के प्रयोग के संबंध में, विशेष रूप से बच्चों में, मोटापे को बढ़ाने का एक प्रमुख कारक (factor) क्या है ? 1
- (A) अत्यधिक शारीरिक क्रियाकलाप
- (B) कम्प्यूटर पर बिना ब्रेक लिए लम्बा समय बिताना
- (C) कम्प्यूटर का प्रयोग करते समय हेल्दी स्नेक्स खाना
- (D) कम्प्यूटर ब्रेक्स के दौरान नियमित व्यायाम
- (v) कर्मचारियों को एक स्वस्थ कार्य का वातावरण उपलब्ध कराने के उद्देश्य से निम्नलिखित में से क्या आवश्यक है ? 1
- (A) शॉपिंग कॉर्नर
- (B) कार्यस्थल की स्वच्छता
- (C) पुस्तकालय
- (D) संगीत थेरेपी कक्ष



5. Answer any 5 out of the given 6 questions.

5×1=5

- (i) What is a hazard in the context of safety and health ? 1
- (A) Rapid Action Team
- (B) Something that can cause harm to people
- (C) A safety measure implemented to prevent accidents
- (D) An emergency response plan for workplace incidents
- (ii) Which of the following is **not** a valid safety guideline of a workplace ? 1
- (A) Make sure all areas have proper lighting
- (B) Do not play with electrical controls or switches
- (C) Shut down all machines before leaving the workplace
- (D) Wear loose clothing or jewellery when working with machines
- (iii) In fire classification, electrical material and equipment comes under _____ . 1
- (A) Class A material (B) Class B material
- (C) Class C material (D) Class D material
- (iv) What is a major contributing factor to obesity, especially in children, with respect to use of computers ? 1
- (A) Excessive physical activity
- (B) Spending long hours on computers without breaks
- (C) Eating healthy snacks while using the computer
- (D) Regular exercise during computer breaks
- (v) Which of the following is compulsory in order to provide a healthy working environment to the employees ? 1
- (A) Shopping corner
- (B) Cleanliness of the workplace
- (C) Library
- (D) Music therapy room



- (vi) फिसलना और गिरना (slip and fall) _____ का एक प्रकार है। 1
- (A) शारीरिक संकट (Physical hazard)
- (B) विद्युत संकट (Electrical hazard)
- (C) रासायनिक संकट (Chemical hazard)
- (D) जैविक संकट (Biological hazard)

खण्ड ख

(विषयपरक प्रकार के प्रश्न)

(26 अंक)

रोज़गार कौशल पर दिए गए 5 प्रश्नों में से किन्हीं 3 के उत्तर दीजिए। प्रत्येक प्रश्न का उत्तर 20 – 30 शब्दों में दीजिए। $3 \times 2 = 6$

6. गैर-मौखिक संप्रेषण (non-verbal communication) क्या है ? उदाहरण दीजिए। 2
7. एक सफल उद्यमी के कोई चार गुण (qualities) लिखिए। 2
8. एक कम्प्यूटर को वायरस से कैसे सुरक्षित किया जा सकता है ? संक्षेप में चर्चा कीजिए। 2
9. किन्हीं चार सरल तनाव प्रबन्धन तकनीकों (stress management techniques) का उल्लेख कीजिए। 2
10. सतत विकास (Sustainable Development) के महत्त्व पर संक्षेप में चर्चा कीजिए। 2

दिए गए 6 प्रश्नों में से किन्हीं 4 के उत्तर 20 – 30 शब्दों में दीजिए। $4 \times 2 = 8$

11. LibreOffice Writer में टेम्पलेट (template) क्या हैं ? एक टेम्पलेट में क्या तैयार और सेव (save) किया जा सकता है ? 2
12. दुर्घटनाओं (Accidents) और आपातकाल (Emergencies) के बीच अंतर बताइए। 2
13. LibreOffice Calc में “Shared Spreadsheet” का क्या अर्थ है ? स्प्रेडशीट साझा करने के कोई दो लाभ बताइए। 2
14. स्प्रेडशीट में रिलेटिव (Relative) और एब्सोल्यूट (Absolute) हाइपरलिंक क्या है ? 2
15. LibreOffice Base के संदर्भ में, एक टेबल में “Sorting” की परिभाषा दीजिए। इसके दो प्रकार भी बताइए। 2
16. कार्यस्थल में फिसलने और गिरने से बचने के कोई दो उपाय लिखिए। 2



- (vi) Slip and fall is a type of _____ . 1
- (A) Physical hazard
(B) Electrical hazard
(C) Chemical hazard
(D) Biological hazard

Section B
(Subjective Type Questions) (26 marks)

Answer any **3** out of the given **5** questions on Employability Skills in 20–30 words each. 3×2=6

6. What is non-verbal communication ? Give examples. 2
7. Give any four qualities of a successful entrepreneur. 2
8. How can a computer be protected against viruses ? Discuss in brief. 2
9. Mention any four simple stress management techniques. 2
10. Briefly discuss the importance of Sustainable Development. 2

Answer any **4** out of the given **6** questions in 20 – 30 words each. 4×2=8

11. What are templates in LibreOffice Writer ? What all can be created and saved in a template ? 2
12. Differentiate between Accidents and Emergencies. 2
13. What is the meaning of “Shared Spreadsheet” in LibreOffice Calc ? Give any two advantages of sharing a spreadsheet. 2
14. What is Relative and Absolute Hyperlink in a spreadsheet ? 2
15. With reference to LibreOffice Base, define “Sorting” in a table. Also mention its two types. 2
16. Give any two ways to avoid slips and falls at the workplace. 2

दिए गए 5 प्रश्नों में से किन्हीं 3 के उत्तर 50 – 80 शब्दों (प्रत्येक) में दीजिए।

$3 \times 4 = 12$

17. अंकिता LibreOffice Writer में अपने मित्र के लिए एक जन्मदिन कार्ड डिजाइन कर रही है। उसने कुछ चित्र डाले जिन्हें वह विभिन्न तरीकों से समायोजित (adjust) और व्यवस्थित (arrange) करना चाहती है। निम्नलिखित को स्पष्ट करके उसे ऐसा करने में सहायता कीजिए : $2+1+1=4$

(क) Text में पोजिशनिंग इमेज (positioning image) के संदर्भ में, Anchoring और Arrangement के बीच अंतर बताइए।

(ख) इमेज पर इन्वर्ट इमेज फिल्टर (Invert Image Filter) का क्या प्रभाव है ?

(ग) Grouping drawing objects का क्या अर्थ है ?

18. LibreOffice Calc के संदर्भ में, निम्नलिखित के उत्तर दीजिए :

$1+1+2=4$

(क) मैक्रो (Macros) शब्द की परिभाषा दीजिए।

(ख) एक मैक्रो को नाम देने के लिए कोई दो नियम लिखिए।

(ग) एक मैक्रो रिकॉर्ड करने के चरण बताइए।

19. एकाधिक (multiple) टेबलों पर काम करते हुए, आपको एक डेटाबेस के टेबलों के बीच संबंध (relationship) स्थापित करने की आवश्यकता है। $1+2+1=4$

उपर्युक्त सूचना के आधार पर निम्नलिखित प्रश्नों के उत्तर दीजिए :

(क) दो टेबलों के बीच संबंध स्थापित करने के लिए सबसे महत्वपूर्ण पूर्वापेक्षा (prerequisite) क्या है ?

(ख) दो टेबलों के बीच कितने प्रकार के संबंध बनाए जा सकते हैं ? किन्हीं दो के नाम लिखिए।

(ग) LibreOffice Base में दो टेबलों के बीच संबंध (relationship) स्थापित करते समय, यदि दोनों टेबलों की कॉमन फील्ड (common field) का डेटा प्रकार (data type) समान नहीं हो, तो क्या होगा ?

20. एक कार्यालय कर्मचारी, अमित, कार्यालय में अपने कम्प्यूटर पर लम्बा समय बिताने के कारण शुष्क आँखों (dry eyes) की समस्या का सामना कर रहा है। निम्नलिखित प्रश्नों के उत्तर देकर उसका मार्गदर्शन कीजिए : $1+2+1=4$

(क) एर्गोनॉमिक्स (ergonomics) शब्द की परिभाषा दीजिए।

(ख) उपर्युक्त स्वास्थ्य समस्या से बचने के लिए कर्मचारी परिस्थिति विज्ञान की दृष्टि से (ergonomically) दो उपायों के सुझाव दीजिए।

(ग) Occupational Overuse Syndrome क्या है ?



Answer any **3** out of the given **5** questions in **50 – 80** words each.

$3 \times 4 = 12$

- 17.** Ankita is designing a birthday card for her friend, in LibreOffice Writer. She inserted a few pictures which she wants to adjust and arrange in different ways. Help her do the same by explaining the following to her : $2+1+1=4$
- (a) With reference to positioning image in the text, differentiate between Anchoring and Arrangement.
 - (b) What is the effect of Invert Image Filter on the image ?
 - (c) What do you mean by Grouping drawing objects ?
- 18.** In context of LibreOffice Calc, answer the following : $1+1+2=4$
- (a) Define the term Macros.
 - (b) State any two rules for naming a Macro.
 - (c) Give the steps to record a Macro.
- 19.** While working with multiple tables, you need to set up relationships between the tables of a database. $1+2+1=4$
Answer the following questions based on the above information :
- (a) What is the most important prerequisite for setting a relationship between the two tables ?
 - (b) How many types of relationships can be created between two tables ? Name any two.
 - (c) While setting up relationship between two tables in LibreOffice Base, what will happen if the data type of common field in both tables is not same ?
- 20.** Amit, an office employee, has been experiencing the problem of dry eyes due to long hours spent working on his computer in the office. Guide him by answering the following questions : $1+2+1=4$
- (a) Define the term ergonomics.
 - (b) Suggest two ergonomically correct measures to avoid the above health issue.
 - (c) What is Occupational Overuse Syndrome ?



21. नीचे दी गई तालिका (table) BOOKS पर विचार कीजिए और उसके नीचे दिए गए प्रश्नों के उत्तर दीजिए :

4

BID	Name	DOP	Type	Price
2001	God's Gift	2019-05-19	Inspire	₹ 450.00
4003	Millionaire	2017-12-21	Inspire	₹ 340.00
3024	The Chair	2020-02-25	Horror	₹ 320.00
2082	Morning Tea	2017-11-20	Mystery	₹ 310.00
1502	Nightingale	2021-06-15	Biography	₹ 270.00
1300	The Truth	2020-08-18	Mystery	₹ 510.00

बीआईडी – बुक आइडेंटिफिकेशन, डीओपी – खरीद की तारीख :

- (क) उपर्युक्त टेबल से candidate keys की पहचान कीजिए और उनका नाम लिखिए।
- (ख) उस गुण (attribute) को पहचानिए और लिखिए जो एक प्राइमरी की (primary key) के रूप में घोषित किए जाने के लिए सबसे उपयुक्त है।
- (ग) “Price” फील्ड के एक उपयुक्त डेटा टाइप (data type) का सुझाव दीजिए। अपने उत्तर का औचित्य सिद्ध कीजिए।
- (घ) संक्षेप में स्पष्ट कीजिए – BOOLEAN Datatype.



21. Consider the table BOOKS given below and answer the questions that follow :

4

BID	Name	DOP	Type	Price
2001	God's Gift	2019-05-19	Inspire	₹ 450.00
4003	Millionaire	2017-12-21	Inspire	₹ 340.00
3024	The Chair	2020-02-25	Horror	₹ 320.00
2082	Morning Tea	2017-11-20	Mystery	₹ 310.00
1502	Nightingale	2021-06-15	Biography	₹ 270.00
1300	The Truth	2020-08-18	Mystery	₹ 510.00

BID – Book Identification, DOP – Date of Purchase :

- Identify and name the candidate keys from the above table.
- Identify and write the attribute which is best suitable to be declared as a primary key.
- Suggest an appropriate data type of the field “Price”. Justify your answer.
- Explain in short – BOOLEAN Datatype.



Marking Scheme Strictly Confidential (For Internal and Restricted use only) SECONDARY SCHOOL SUPPLEMENTARY EXAMINATION, 2025 SUBJECT NAME : INFORMATION TECHNOLOGY (SUB. CODE-402)	
General Instructions: -	
1.	You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully.
2.	“Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, Evaluation done and several other aspects. Its leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in Newspaper/Website etc. may invite action under various rules of the Board and IPC.”
3.	Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one’s own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and due marks be awarded to them. In class-X, while evaluating two competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded.
4.	The Marking Scheme carries only suggested value points for the answers. These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly.
5.	The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
6.	Evaluators will mark (√) wherever answer is correct. For wrong answer CROSS ‘X’ be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. This is most common mistake which evaluators are committing.
7.	If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled. This may be followed strictly.

8.	If a question does not have any parts, marks must be awarded in the left-hand margin and encircled. This may also be followed strictly.
9.	If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note “Extra Question” .
10.	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
11.	A full scale of marks _____(example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12.	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines).This is in view of the reduced syllabus and number of questions in question paper.
13.	<p>Ensure that you do not make the following common types of errors committed by the Examiner in the past:-</p> <ul style="list-style-type: none"> • Leaving answer or part thereof unassessed in an answer book. • Giving more marks for an answer than assigned to it. • Wrong totaling of marks awarded on an answer. • Wrong transfer of marks from the inside pages of the answer book to the title page. • Wrong question wise totaling on the title page. • Wrong totaling of marks of the two columns on the title page. • Wrong grand total. • Marks in words and figures not tallying/not same. • Wrong transfer of marks from the answer book to online award list. • Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.) • Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
14.	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0) Marks.
15.	Any unassessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
16.	The Examiners should acquaint themselves with the guidelines given in the “Guidelines for Spot Evaluation” before starting the actual evaluation.
17.	Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.
18.	The candidates are entitled to obtain photocopy of the Answer Book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.

MARKING SCHEME

INFORMATION TECHNOLOGY (SUB. CODE-402)

General Instructions :

1. Please read the instructions carefully.
 2. This Question Paper consists of **21** questions in **two** sections : Section-A & Section-B.
 3. Section-A has Objective type questions whereas Section-B contains Subjective type questions.
 4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**
 5. All questions of a particular section must be attempted in the correct order.
 6. **SECTION-A : OBJECTIVE TYPE QUESTIONS (24 MARKS) :**
 - (i) This section has **05** questions.
 - (ii) Marks allotted are mentioned against each question/part.
 - (iii) There is no negative marking.
 - (iv) Do as per the instructions given.
 7. **SECTION-B : SUBJECTIVE TYPE QUESTIONS (26 MARKS) :**
 - (i) This section has **16** questions.
 - (ii) A candidate has to do **10** questions.
 - (iii) Do as per the instructions given.
 - (iv) Marks allotted are mentioned against each question/part.
-

SECTION – A : OBJECTIVE TYPE QUESTIONS

1. Answer any 4 out of the given 6 questions on Employability Skills :

(1 × 4 = 4 marks)

- (i) (B) To acknowledge and respond to the message. 1
(1 mark for correct answer)
- (ii) (D) Maintaining a balance between life, work, and relaxation. 1
(1 mark for correct answer)
- (iii) (B) An accountant working at a bank. 1
(1 mark for correct answer)
- (iv) (C) Specific 1
(1 mark for correct answer)
- (v) (A) To meet current needs without harming future generations' ability to meet their needs. 1
(1 mark for correct answer)
- (vi) (C) Operating System 1
(1 mark for correct answer)

2. Answer any 5 out of the given 6 questions : **(1 × 5 = 5 marks)**

- (i) (B) Style 1
(1 mark for correct answer)
- (ii) (A) Image 1
(1 mark for correct answer)
- (iii) (C) Table of content 1
(1 mark for correct answer)
- (iv) (B) Edit 1
(1 mark for correct answer)
- (v) (D) Text Wrapping 1
(1 mark for correct answer)
- (vi) (D) 7 1
(1 mark for correct answer)

3. Answer any 5 out of the given 6 questions : (1 × 5 = 5 marks)

- | | | |
|-------|------------------------------------|---|
| (i) | (B) Subtotal | 1 |
| | (1 mark for correct answer) | |
| (ii) | (A) Consolidate | 1 |
| | (1 mark for correct answer) | |
| (iii) | (D) Comment | 1 |
| | (1 mark for correct answer) | |
| (iv) | (D) \$ | 1 |
| | (1 mark for correct answer) | |
| (v) | (B) Goal Seek | 1 |
| | (1 mark for correct answer) | |
| (vi) | (A) Record Changes | 1 |
| | (1 mark for correct answer) | |

4. Answer any 5 out of the given 6 questions : (1 × 5 = 5 marks)

- | | | |
|-------|---|---|
| (i) | (B) Form | 1 |
| | (1 mark for correct answer) | |
| (ii) | (C) Datasheet | 1 |
| | (1 mark for correct answer) | |
| (iii) | (D) Redundancy | 1 |
| | (1 mark for correct answer) | |
| (iv) | (B) It is free and open source software | 1 |
| | (1 mark for correct answer) | |
| (v) | (C) Charts | 1 |
| | (1 mark for correct answer) | |
| (vi) | (B) Primary | 1 |
| | (1 mark for correct answer) | |

5. Answer any 5 out of the given 6 questions : (1 × 5 = 5 marks)
- | | | |
|-------|---|---|
| (i) | (B) Something that can cause harm to people. | 1 |
| | (1 mark for correct answer) | |
| (ii) | (D) Wear loose clothing or jewellery when working with machines | 1 |
| | (1 mark for correct answer) | |
| (iii) | (C) Class C material | 1 |
| | (1 mark for correct answer) | |
| (iv) | (B) Spending long hours on computers without breaks | 1 |
| | (1 mark for correct answer) | |
| (v) | (B) Cleanliness of the workplace | 1 |
| | (1 mark for correct answer) | |
| (vi) | (A) Physical hazard | 1 |
| | (1 mark for correct answer) | |

SECTION – B : SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills

(2 × 3 = 6 marks)

Answer each question in **20 – 30** words.

6. Non-verbal communication is the expression or exchange of information or messages without using any spoken or written word. 2
- Examples of non-verbal communication are Gestures, Expressions

(1 mark for correct definition + 1 mark for example)

7. Any four qualities of a successful entrepreneur are as follows : 2
- | | |
|-----|------------------------|
| (a) | They are confident. |
| (b) | They are hard working. |
| (c) | They are patient. |
| (d) | They are creative. |
- (½ mark each for any four correct point)**

8. A computer can be protected against viruses by installing anti-virus software and firewall, as anti-virus software and firewall monitor the data coming in and going out of a computer and prevent the virus from entering. Anti-viruses can also detect a clean virus that may have entered a computer. 2

(2 marks for the correct answers.)

9. Four simple stress management techniques are as follows : 2
- (a) Time Management
 - (b) Physical exercise and fresh air
 - (c) Healthy diet
 - (d) Positivity

(½ mark for each correct technique.)

10. Importance of Sustainable Development

Economic development is using up resources of the world so quickly that our future generations, the young people of the world, would have serious environmental problems, much worse than those that we are facing at present. With increasing population and income, the consumption of goods is increasing day by day. This has led to increase in production and utilisation of natural resources, which are required for producing goods. Since most of the natural resources are scarce, therefore, careful utilization of resource is necessary. 2

Society must thus change its development strategy to a new form where development will not destroy the environment i.e. through sustainable development. So sustainable development is extremely important to protect the resources for future generations.

(2 marks for correct answer)

**Answer any 4 out of the given 6 questions in 20 – 30 words each :
(2 × 4 = 8 Marks)**

11. A template is a preset layout that helps to create professional and/or formal documents easily. 2

In a template we can create and save defined headings, text formats, styles, page numbers, headers and footers.

(1 mark for correct definition + 1 mark for correct explanation)

12. An accident is an unplanned, uncontrolled, or unforeseen event resulting in injury or harm to people and damages to goods. For example, a person falling down and getting injured or a glassware item that broke upon being knocked over. 2

Emergency is a serious or crisis situation that needs immediate attention and action. For example, a customer having a heart attack or sudden outbreak of fire in your organisation needs immediate attention.

(2 marks for correct difference)

13. A shared spreadsheet is a same sheet that can be accessed by more than one user and can allow them to make changes simultaneously on it. Advantages are : 2

- It saves the trouble of keeping track of multiple copies of the same spreadsheet.
- Sharing allows working in collaboration so that everyone can contribute, make changes and view it.

(1 mark for correct definition + ½ mark each for any two advantages)

14. An absolute hyperlink stores the complete location where the file is stored. So, if the file is removed from the location, absolute hyperlink will not work. For example : C:\Users\ADMIN\ Downloads\try.ods is an absolute link as it defines the complete path of the file. 2

A relative hyperlink stores the location with respect to the current location. For example : Admin\Downloads\ try.ods is a relative hyperlink as it is dependent on the current location and thus the folder admin is searched where the active spreadsheet is being stored. If the complete folder containing the active spreadsheet is moved the relative link will still be accessible as it is bound to the source folder where the active spreadsheet is stored.

(1 mark for correct definition of each)

15. Data in a table can be arranged in ascending or descending order. This process of arranging the records in particular order on any field is called sorting. 2

There are two types of Sorting :

- Sort Ascending
- Sort Descending

(1 mark for correct definition + 1 mark for correct types)

16. 2
- All things must be arranged properly.
 - Any spilt liquid, food or other items such as paints must be immediately cleaned to avoid any accidents.
 - Make sure there is proper lighting and all damaged equipment, stairways and light fixtures are repaired immediately.

(2 marks for any two ways)

Answer any 3 out of the given 5 questions in 50-80 words each :

(4 × 3 = 12 marks)

17. (a) Anchoring acts as a reference point for image or drawing. Anchoring allows an image to retain its position to a page, paragraph, character or frame whereas in Overlapping objects arrangement determines the position of the current drawing with respect to other drawings or text. 4
- (b) Inverts the colour values of coloured images. In case the image is gray-scale then its brightness is inverted.
- (c) LibreOffice Writer allows grouping these different shapes, to behave as a single entity without affecting their size and position. Once grouped, all shapes belonging to that group become its member and a change applied on one member works on all.

(2 marks for Anchoring and Arrangement)

(1 mark for Invert definition)

(1 mark for Grouping Drawing objects – definition)

18. (a) A macro is a single instruction that executes a set of instructions. These sets of instructions can be a sequence of commands or keystrokes that can be used for any number of times later. 4
- (b) The Rules for naming a Macro are :
- (i) Begin with a letter
 - (ii) Not contain spaces
 - (iii) Not contain special characters except for _ (underscore)
- (c) Steps 1 → Click on Tools > Macros > Record Macro option.
Steps 2 → Now start taking actions that will be recorded.
Steps 3 → Once done, click on “Stop recording” button to stop the recording of actions.
Step 4 → Click on save button after selecting the object where the macro to be saved.

(1 mark for Macro-definition)

(1 mark for any two rules)

(2 marks for Macro steps)

19. (a) The most important prerequisite for setting a relationship is that there must be a common field(s) between the two tables to create a relationship. 4
- (b) Primarily three types of relationships can be set up between two tables in a relational database.
- (i) One-to-One
 - (ii) One-to-many
 - (iii) Many-to-Many
- (c) In that case, LibreOffice base will display an error message and will not allow to set the relationship between the two tables.

(1 mark for most important prerequisite)

(1 mark for number of types)

(1 mark for naming any two)

(1 mark for correct answer of c)

20. (a) Ergonomics is the science concerned with designing and arranging things so that people can use them easily and safely. Applying ergonomics can reduce the potential for accidents, injury to improve performance and productivity. 4

(b) To avoid this problem,

(i) Rest eyes periodically.

(ii) Do simple eye exercises

(c) Occupational overuse syndrome, also known as Repetition Strain Injury (RSI), is a collective term for a range of conditions, characterised by discomfort or persistent pain in muscles, tendons and other soft tissues, with or without physical manifestations.

(1 mark for ergonomics definition)

(2 marks for any two ergonomically correct measures)

(1 mark for occupational overuse syndrome definition)

21. (a) The candidate keys are BID and NAME. 4

(b) The attribute BID can be used as the primary key as it can be used to uniquely identify the records.

(c) The field PRICE should be currency data type as it indicates the monetary values and can be stored using currencies of various countries.

(d) In Boolean data type there can be only two values – True or False.

This also can be given in multiple formats like Yes/No, True/False, On/Off.

(1 mark for correct identification of Candidate Key)

(1 mark for correct identification of Primary Key)

(1 mark for correct explanation)

(1 mark for correct datatype definition)