

**Deptt. of Governance Reforms,
Punjab State
e-Governance Society**

Post: Asstt. Manager (Tech.)

(27 -10-2024) (Morning)

Question Booklet & Answer Key

1. Using the Ribbon in MS-WORD software, the Word count command/ feature displays the number of words as well as the number of _____ in the current document.
 I. Lines II. Characters III. Paragraph
 Choose the correct answer from the options given below:
 A) I and II only B) I and III only
 C) II and III only D) I, II and III

2. Consider the following MS-EXCEL spreadsheet in which the population column represents the city's population in millions of people:

	A	B	C	D	E	F
1	City	State	Pupulation	Haryana	MP	UP
2	Patiala	Panjab	8.34			
3	Sonipat	Haryana	3.86			
4	Noida	UP	2.71			
5	Indore	MP	2.16			
6	Mandi	HP	1.49			
7	Sagar	MP	1.38			
8	Panipat	Haryana	1.39			
9	Gwalior	MP	1.24			

Suppose the formula =IF(\$B2=D\$1,\$A2,0) is entered into cell D2 and then the cell D2 is copied and pasted to the range D2:F9. How many cells in the range D2:F9 contains 0?

- A) 0 B) 6 C) 12 D) 18
3. To record voice narration for your Microsoft PowerPoint presentation, your computer must have:
 A) An Internet connection. B) Speakers.
 C) A microphone and sound card. D) An external video port.
4. Given below are two statements:
 Statement I. Dropbox is an example of e-mail service on the Internet.
 Statement II. Google Docs is an online word processor.

In the light of the above statements, choose the most appropriate answer from the options given below:

- A) Both Statement I and Statement II are true.
 B) Both Statement I and Statement II are false.
 C) Statement I is true but Statement II is false.
 D) Statement I is false but Statement II is true.

5. Match List-1 with List-2.

	List-1 (Internet Term)		List-2 (Definition)
(a)	HTTP	(i)	A unique address given to a device on a network. It is provided by the manufacturer.
(b)	URL	(ii)	The main protocol that governs the transmission of data using the Internet.
(c)	MAC Address	(iii)	An address given to each device on a network. It is provided by the network.
(d)	IP Address	(iv)	The website address that is typed into the address bar.

- A) (a)-(ii); (b)-(iv); (c)-(i); (d)-(iii) B) (a)-(iii); (b)-(iv); (c)-(i); (d)-(ii)
 C) (a)-(i); (b)-(iii); (c)-(ii); (d)-(iv) D) (a)-(iv); (b)-(ii); (c)-(i); (d)-(iii)
6. The purpose of digitally signing a message is to ensure:
 A) Integrity of the sender B) Confidentiality of the message
 C) Authenticity of the sender D) Confidentiality of the sender

7. Given below are two statements:
 Statement I. Google is a web search engine, while Google Chrome is a web browser.
 Statement II. Microsoft Edge is a web search engine, while Microsoft Bing is a web browser.
 In the light of the above statements, choose the most appropriate answer from the options given below:
 A) Both Statement I and Statement II are true.
 B) Both Statement I and Statement II are false.
 C) Statement I is true but Statement II is false.
 D) Statement I is false but Statement II is true.
8. Which of the following statements I-IV about Internet Cookies is/ are true?
 I. They are form of spyware.
 II. They are used only in advertising.
 III. They are used to track browser use.
 IV. They act in the same way as a computer virus.
Choose the correct answer from the options given below:
 A) I only B) I and II only C) III only D) III and IV only
9. Given below are two statements:
 Statement I. Wiki is usually represented in reverse chronological order, whereas blog has a structure determined by content and users.
 Statement II. Blog is usually personal/ someone's opinion, whereas a wiki is usually objective.
 In the light of the above statements, choose the most appropriate answer from the options given below:
 A) Both Statement I and Statement II are true.
 B) Both Statement I and Statement II are false.
 C) Statement I is true but Statement II is false.
 D) Statement I is false but Statement II is true.
10. The transmission time (in milliseconds) required for sending 512-byte packet using a 56 kilobits per second modem (1 kilo=1000) is about:
 A) 7 B) 43 C) 73 D) 80
11. While sending an e-mail, to differentiate among To: Cc: and Bcc: fields, which one of the following statements is true?
 A) Recipients in the To: field can see the email addresses that are in the Bcc: and Cc: fields.
 B) Recipients in the Cc: field can see the email addresses that are in the To: and Bcc: fields.
 C) Recipients in the Bcc: field can see the email addresses that are in the To: and Cc: fields.
 D) Only the recipients in the Cc: field can see the other email addresses in the Bcc: field.
12. Select the proper C++ object type
 _____ `file("file.dat", ios::in | ios::out);`
 A) `iostream` B) `fstream` C) `ofstream` D) `ifstream`
13. Consider the following 'C' program:

```
#define square(x) x*x
main()
{
    int p;
    p = 64/square(4);
    printf("%d", p);
}
```

 What is the value of p?
 A) 4 B) 16 C) 64 D) 1
14. Which of the following keywords must be used to define a constant in Java?
 A) `const` B) `final` C) `public` D) `static`

15. Which of the following is used for user authentication and may employ scans of fingerprints, irises, or voices?
 A) Passwords B) Isomorphism C) Countersignatures D) Biometrics
16. The term that best describes the process of executing two or more programs at the same time on a single CPU is called:
 A) Multiprocessing B) Simultaneous processing
 C) Multiprogramming D) Spooling
17. In CPU scheduling, "aging" is a technique:
 A) To phase out old devices in computer system
 B) Of gradually increasing the priority of jobs that wait in the system for a long time.
 C) Used in evaluating normal tear and wear of mechanical devices.
 D) Of gradually decreasing the priority of jobs that wait in the system for a long time.
18. A named anchor in HTML is a
 A) Specific location within a web page that you can link to.
 B) URL from where one can begin using web search engines
 C) Mechanism by which an image can be fixed to a point on the web page
 D) Tag with descriptive text that pops up when the mouse hovers over a link
19. Consider the relation:
Proj(pno, pname, budget, city), where *pno* is the primary key and the following SQL query:

```

SELECT city, count(pno) AS totproj, sum(budget) AS totbudget
FROM proj
GROUP BY city
```

The SQL query:
 A) Computes the number of cities having at least one project and the total budget over all projects.
 B) Computes, for each city, the number of projects that are located in that city and the total budget over all projects in the city.
 C) Computes, for each city, the number of projects that are located in that city and the total budget over all projects in all the cities together.
 D) Computes the total number of projects that are located in all the cities together and the total budget over all projects in all the cities together.
20. A preemptive scheduler is best characterized by its ability to carry out this state transition:
 A) ready \rightarrow running B) running \rightarrow blocked
 C) blocked \rightarrow running D) running \rightarrow ready
21. The transition from IPv4 to IPv6 will eventually be necessary because _____.
 A) It is wasteful to use 128 bits to identify each individual computer on the Internet
 B) With IPv4, the Internet is running out of distinct hostnames
 C) With IPv4, the Internet is running out of distinct IP addresses
 D) Numeric identifiers like "72.21.203.1" are hard for people to remember.
22. Modularity and concept of abstraction enables the software engineer to:
 A) Re-use the software components B) Increase Interdependencies among the modules
 C) Increase highest possible coupling D) Lower the cohesion
23. Which of the following is a deliverable of the system implementation phase in a formal system development process?
 A) Technical hardware and software solution for the business problem
 B) Business problem statement
 C) Statement of the system users' business requirements
 D) Technical blueprint and specifications for a solution that fulfills the business requirements

24. In software engineering, a regression test:
- A) is only run once.
 - B) will always be automated.
 - C) will check changed areas of the software to see if they have been affected.
 - D) will check unchanged areas of the software to see if they have been affected.
25. The testing of software against SRS is called:
- A) Acceptance testing
 - B) Integration testing
 - C) Regression testing
 - D) Series testing
26. Many project sponsors can assign one or more sustaining sponsors to act as the _____ of the project. They are frequently leaders of the internal divisions that the project will have the biggest impact on, such marketing or human resources
- A) External Champions
 - B) Internal Champions
 - C) Internal Supporters
 - D) Internal Funders
27. The project charter consists of key milestones. Which one of the following CANNOT be considered a milestone?
- A) Completion of website design
 - B) Meeting with the key stakeholders
 - C) Approval of the client
 - D) Finalization of the trainings
28. _____ distinguishes one organization from another and determines how people in that organization will see, engage with, and occasionally evaluate you.
- A) Organizational culture
 - B) Organizational governance
 - C) Organizational structure
 - D) Organizational policies
29. What allows the formal authorization of the existence of a project?
- A) Project charter
 - B) Business case
 - C) Benefits management plan
 - D) Needs analysis
30. The expected value for the estimation variable (size), S, can be computed as a weighted average of the optimistic (S_{opt}), most likely (S_m), and pessimistic (S_{spess}) estimates given as
- A) $EV = (S_{opt} + 4S_m + S_{spess})/4$
 - B) $EV = (S_{opt} + 4S_m + S_{spess})/6$
 - C) $EV = (S_{opt} + 2S_m + S_{spess})/6$
 - D) $EV = (S_{opt} + 2S_m + S_{spess})/4$
31. When is a Sprint over?
- A) When the time-box expires
 - B) When the Product Owner says so
 - C) When the Scrum Master Says so
 - D) When the Sprint Backlog is all developed
32. Calculate the total float available for an activity if the LST and EST are 12 and 10 minutes respectively.
- A) 1 minute
 - B) 11 minutes
 - C) 12 minutes
 - D) 2 minutes
33. Which of the following best describes an analysis conducted throughout and soon after the project life cycle that aims to capture both positive and negative learning?
- A) Scenario analysis
 - B) Variance analyses
 - C) Lessons learned
 - D) Performance evaluation
34. A five-person development team has been employing daily scrums that last 15 minutes. The team now has three new members. After that, how long should the Daily Scrum sessions last?
- A) 10 minutes
 - B) 15 minutes
 - C) 20 minutes
 - D) 25 minutes

35. Regarding Scrum, which three of the following statements are true? (Choose the best three answers.)
- (i) Scrum implements self-management by replacing Project Managers with Scrum Masters.
 - (ii) Each component of Scrum serves a specific purpose and is essential to Scrum's success and your usage of Scrum to develop complex products.
 - (iii) Scrum is a methodology where you can pick and choose which parts of Scrum you think will work for your environment.
 - (iv) Scrum is a framework for developing and sustaining complex products.
 - (v) Scrum is based on empiricism and lean thinking.
- A) i, ii, iii B) ii, iii, iv C) iii, i, v D) ii, iv, v
36. You discovered that in order to rate proposals and create a negotiation sequence, you needed to acquire a more objective awareness of sellers' skills while implementing procurement management procedures in your project. Which technique might be most effective in preventing bias and subjective judgments?
- A) Bidder conference B) Weighting system
C) Oral contract D) Letter of intent
37. _____ refers to unplanned changes to the original plan in a project.
- A) Hope Creep B) Feature Creep C) Scope Creep D) Effort Creep
38. When applying agility to a software process, which of the following is not required?
- A) Process allows team to streamline tasks
 - B) Eliminate the use of project planning and testing
 - C) Uses incremental product delivery strategy
 - D) Only essential work products are produced
39. Who developed the Critical path method (CPM)?
- A) Du Pont B) Bell laboratories
C) IBM D) Booz in collaboration with US Nav
40. If a business case was not prepared during the pre-project phase, when could it be prepared?
- A) It cannot be prepared later. B) During the planning
C) During the execution D) During the initiation

Directions (Q 41 & 42): Choose the correct synonyms of the following words out of the four given options:

41. Collate
- A) Criticize B) Cruel C) Gather D) Callous
42. Impecunious
- A) Rich B) Poor C) Determined D) Irrelevant
43. 'Zero mile centre' in India is in
- A) Jhansi B) Bhopal C) Nagpur D) Raipur
44. Which of the following movies won Best Film Award in Dadasaheb Phalke Awards-2024
- A) Animal B) 12th Fail C) Jawan D) Dunki

45. Four statements are given in the following question, followed by four conclusions numbered I, II, III & IV. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Statements:

Some carpets are books. All books are pens. Some pens are cartons.
All cartons are notebooks

Conclusions:

- I. Some cartons are carpets
II. Some cartons are books
III. Some pens are carpets
IV. Some notebooks are pens
A) Only I and II follow
B) Only II and III follow
C) Only III and IV follow
D) Only I and III follow

46. A monkey climbing up a greased pole, ascends 5m and slips down 2m in alternate minutes. If the pole is 35m high, then the monkey will reach the top in :
A) 11 minutes
B) 11 minutes, 24 seconds
C) 11 minutes, 36 seconds
D) 11 minutes, 40 seconds

47. **Study the given information carefully and answer the questions that follow:**

- (i) Eleven students A, B, C, D, E, F, G, H, I, J and K are sitting in the first row of the class facing the teacher.
(ii) D who is to the immediate left of F is second to the right of C.
(iii) A is second to the right of E, who is at one of the ends.
(iv) J is the immediate neighbor of A and B; and third to the left of G.
(v) H is to the immediate left of D and third to the right of I.
Who is sitting in the middle of the row?

- A) B
B) C
C) G
D) I

48. There are two sets of figures namely the Problem figures containing five figures 1,2,3,4,5 and the Answer figures (A), (B), (C) and (D). You have to select one figure from the answer figures which will continue the same series as given in the problem figures:

Problem Figures

=	○	↑	S	□	c	○	△	S	+
↑	□	□	○	○	S	S	c	c	△
x	*	=	x	↑	=	□	↑	○	□
1	2	3	4	5					

Answer Figures

c	△	c	○	□	□	△	↑
○	+	△	+	△	+	□	+
□	△	S	○	c	○	c	S
A)	B)	C)	D)				

49. Choose the group of letters which is different from others:
A) DG2
B) EK5
C) JR6
D) PY8
50. In a certain code, MOTHER is written as ONHURF. How will ANSWER be written in that code?
A) NBXSSE
B) NBWRRF
C) MAVSPE
D) NBWTRF

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ANSWER KEY (A-Series)

Q.No.	Ans	Q.No.	Ans
1	D	26	B
2	D	27	B
3	C	28	A
4	D	29	A
5	A	30	B
6	C	31	A
7	C	32	D
8	C	33	C
9	D	34	B
10	C	35	D
11	C	36	B
12	B	37	C
13	C	38	A
14	B	39	A
15	D	40	D
16	C	41	C
17	B	42	B
18	A	43	C
19	B	44	C
20	D	45	C
21	C	46	D
22	A	47	D
23	A	48	B
24	C	49	C
25	A	50	D