

**Workbook for** 

# **International CYBER Olyn**

National/International Olympiads/Taler

Based on CBSE, ICSE, GCSE, State Board Syllabus & NCF (NCERT)



- Chapterwise Practice Q'sRevision Q'sSample Paper





# HEAL FOUNDATION LEARNING FOR I

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## Contents

S.N	lo. Chapters	Page No.
1.	Categories of Comptuers & Memory Do	evice1
2.	Understanding Windows	8
3.	Working with MS-Word	14
4.	Applications of Multimedia	21
5.	Understanding Internet	25
6.	Revision Questions	30
7.	ICO Sample Paper	39
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### SYLLABUS GUIDELINES

# Based on CBSE, ICSE & GCSE Syllabus & NCF guidelines revised by NCERT.

Categories of Computers & Memory Device; Understanding Windows; Working with MS-Word; Applications of Multimedia; Understanding Internet.





Q.1.	A computer is a box full of electronic: (a) switching devices (b) chips (c) circuits (d) registers			
Q.2.	The basic components of a modern digital computer are:  (a) input device  (b) output device  (c) central processor  (d) all of the above			
Q.3.	Control unit of a digital computer is often called the:  (a) clock (b) nerve center  (c) ICs (d) all the above			
Q.4.	An integrated circuit (IC) is: (a) fabricated on a tiny silicon chip (b) a complicated circuit (c) much costlier than a single transistor (d) an integrating device			
Q.5.	A computer program consists of:  (a) system flowchart  (b) program flowchart  (c) algorithms written in computer's language  (d) discrete logical steps.			
Q.6.	The transistorized computer circuits were introduced in the: (a) first generation (b) second generation (c) third generation (d) fourth generation			
Q.7.	<ul> <li>Which is true for the digital computer?</li> <li>(a) it is less accurate than the analog computer</li> <li>(b) it represents the decimal numbers through a string of binary digits</li> <li>(c) it is used primarily in scientific applications</li> <li>(d) both (a) and (c)</li> </ul>			
Q.8.	Primary storage isas compared to secondary storage.  (a) slow and inexpensive (b) fast inexpensive (c) fast and expensive (d) slow and expensive			
Q.9.	Hard disks and diskettes are: (a) direct access storage devices (b) sequential access storage devices			

2	$\mathcal{E}$ t $G$ -Olympiad Explorer
	<ul><li>(c) rarely used with microcomputers</li><li>(d) both (a) and (c)</li></ul>
Q.10.	Which is used for manufacturing chips? (a) bus (b) control unit (c) semiconductors (d) (a) and (b) only
Q.11.	RAM is used as a short memory because it: (a) is volatile (b) is very expensive (c) has small capacity (d) is programmable
Q.12.	A hybrid computer:  (a) resembles digital computer  (b) resembles analog computer  (c) resembles both a digital and an analog computer  (d) resembles none
Q.13.	Binary numbers need more places for counting because:  (a) 0's and 1's can be added in front of them  (b) 0's and 1's have to be properly placed  (c) they are always big numbers  (d) binary base is small
Q.14.	The benefit of using computers are that: (a) computers are very fast and can store huge amounts of data (b) computers produce accurate output even when the input is incorrect (c) computers are designed to the inflexible (d) all of the above
Q.15.	Super computers are primarily useful for: (a) input-output intensive processing (b) data-retrieval operations (c) mathematical-intensive scientific applications (d) all of the above
Q.16.	Which of the following holds the ROM, CPU,RAM, and expansion cards?  (a) Hard disk (b) Cache memory (c) Mother board (d) All of the above
Q.17.	Which of the following is the fastest (a) CPU (b) Magnetic tapes and disks (c) Video terminal (d) Sensors, mechanical controllers

Q.18.	The ALU of a computer normally contains a number of high speed storage elements called:  (a) Semiconductor memory  (b) Registers		
	(c) Hard disk	(d) Magnetic disk	
Q.19.	_	e magnetic disk is of the order of: (b) 50 microsecond (d) all of the above	
Q.20.	Which of the following stor (a) semiconductor memor (b) bubble memory (c) core memory	<del>-</del>	
Q.21.	Which of the following is used the ALU and the control set (a) Cumulator (c) Adder	used as storage locations both in ction of a computer? (b) Register (d) Decoder	
Q.22.	Which of the following reg of the memory location poi (a) memory address regis (b) memory data resister (c) instruction register	ter	
Q.23.	Microprocessors can be us (a) computers (c) calculators	sed to make: (b) digital systems (d) all of the above	
Q.24.		company is called Big Blue? (b) Compaq corpn (d) Tandy svenson	
Q.25.	The number of children in a  (a) analog  (c) hybrid	a family is a————quantity. (b) digital (d) hyperbolic	
Q.26.	A high speed device used during processing is called (a) a register (c) a databus	d in CPU for temporary storage l: (b) a bus (d) all of the above	
Q.27.	One computer that is not computer  (a) minicomputer  (c) notebook computer	onsidered a portable computer is: (b) laptop computer (d) all of the above	

Class - 5

Class - 5

Q.36. A modern digital computer has:

5

Q.28.	Which of the following is used to hold ROM, RAM,CPU and expansion Cards?			
	<ul><li>(a) computer bus</li><li>(c) cache memory</li></ul>	<ul><li>(b) motherboard</li><li>(d) all of the above</li></ul>		
Q.29.	Which of the following memories must be refreshed many times per second?  (a) static RAM (b) dynamic RAM (c) EPROM (d) ROM			
Q.30.	EE-ROM is: (a) electrically erasable (c) non- erasable	(b) easily erasable (d) effective erasable		
Q.31.	A modern electronic computer is a machine that is meant for:  (a) doing quick mathematical calculations  (b) input, storage, manipulation and outputting of data  (c) electronic data processing  (d) performing repetitive tasks accurately			
Q.32.	An integrated circuit is:  (a) a complicated circuit  (b) an integrating device  (c) much costlier than a single transistor  (d) fabricated on a tiny silicon chip			
Q.33.	Most important advantage of an IC is its:  (a) easy replacement in case of circuit failure  (b) extremely high reliability  (c) reduced cost  (d) low power consumption			
Q.34.	A digital computer did not sterms of:  (a) speed  (c) cost	score over an analog computer in  (b) accuracy (d) memory		
Q.35.	The modern abacus which uses small beads strung on counting frames is still being used in some oriental countries			

like China and Japan. How would you classify the calculator?

(b) hybrid

(d) memory

(a) analog

(c) digital

(a) extremely high speed (b) large memory (c) almost unlimited accuracy (d) all of the above **Q.37.** Which of the following can be output by a computer? (b) voice (a) graphics (d) all of the above (c) text Q.38. What is the name given to the molecular-scale computer? (a) Femtocomputer (b) Nanocomputer (c) Supercomputer (d) Microcomputer **Q.39.** As compared to diskettes, the hard disks are: (a) more expensive (b) more portable (c) less rigid (d) slowly accessed Q.40. Which of the following is classified as an impact printer? (a) jet printer (b) daisywheel printer (d) laser printer (c) thermal printer **Q.41.** Reel-to-teel tape drives are commonly used with: (a) minicomputers (b) microcomputers (c) mainframe computers (d) laptop computer **Q.42.** In digital data transmission: (a) baud rate in equal to bit rate (b) baud rate is always smaller than the bit rate (c) baud rate is always higher than the bit rate (d) none of the above Q.43. A computer midway between a micro and main frame in size. (a) super computer (b) micro computer (c) mini computer (d) KIPS Q.44. A means of storing large amounts of data outside the main memory is: (a) accumulator (b) prime memory (c) auxiliary store (d) all of the above Q.45. Digital computers use the signal represented by (a) Curve Signal (b) Digits (0s and 1s) (c) Electric Current (d) Analog signal

- Q.46. Which of the followings are the True characteristics of computer:
  - (a) Emotions, speed, consistency, storage
  - (b) Accuracy, speed, consistency, storage
  - (c) Diligence, emotions, speed, consistency
  - (d) None of the above
- **Q.47.** A CD-ROM can store data approximately-
  - (a) 7 GB

(b) 1.44 MB

(c) 700 MB

(d) 4.7 GB

- **Q.48.** Minimum storage unit of the computer is:
  - (a) Bit

(b) Byte

(c) Nibble

(d) Mega byte

Q.49. These computers are used in weather forecasting, space research and other similar fields.

This type of computer is called:

- (a) digital computer
- (b) analog computer
- (c) hybrid computer
- (d) none of the above
- Q.50. The process of loading Operating system files from Hard Disk into the Main Memory is called:
  - (a) Installation

**Booting** 

(c) Downloading

- (d) Copying
- **Q.51.** Micro computers are also called:
  - (a) Advanced computer (b) Personal computer
  - (c) Large computer
- (d) Powerful computer
- **Q.52.** The process of writing a program is called:
  - (a) Debugging
- (b) Coding
- (c) Flow Charting
- (d) Decoding

- Q.53. A buffer is
  - (a) a device for performing logical operations
  - (b) a medium of temporary storage between I/O Device and the CPU
  - (c) a channel for high speed I/O devices
  - (d) None of these
- Q.54. Which one the following statements is/are true about a hybrid computer?
  - (a) The calculation takes place in analog manner
  - (b) The calculation takes place in digital manner
  - (c) both (a) and (b)
  - (d) none of these

- **Q.55.** The best uses of these computers are in hospitals to measure patient's blood pressure and heartbeat. This type of computer is called:
  - (a) digital computer

Class - 5

- (b) analog computer
- (c) hybrid computer
- (d) none of these

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### **ANSWERS**

1. (a)	2. (d)	3. (b)	4. (a)	5. (c)	6. (b)	7. (b) 8.	(c)
9. (a)	10. (c)	11. (a)	12. (c)	13. (d)	14. (a)	15. (c) 16.	(c)
17. (a)	18. (b)	19. (a)	20. (a)	21. (b)	22. (c)	23. (d) 24.	(c)
25. (b)	26. (a)	27. (a)	28. (b)	29. (b)	30. (a)	31. (b) 32.	(d)
33. (b)	34. (c)	35. (c)	36. (d)	37. (d)	38. (b)	39. (a) 40.	(b)
41. (c)	42. (d)	43. (c)	44. (c)	45. (b)	46. (b)	47. (c) 48.	(a)
49. (c)	50. (b)	51. (b)	52. (b)	53. (b)	54. (c)	55. (c)	

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**Q.1.** Group of instructions that directs a computer is called:

	<ul><li>(a) storage</li><li>(c) logic</li></ul>	<ul><li>(b) input device</li><li>(d) program</li></ul>		
Q.2.	Which is not a factor when categorizing a computer?  (a) speed of the output device  (b) amount of main memory the CPU can use  (c) cost of the system  (d) where it was purchased			
Q.3.	Linkage between the CPU (a) storage (c) Peripheral devices	and the users is provided by: (b) control unit (d) software		
Q.4.	processing needs are calle (a) systems software			
Q.5.	Coded entries which are u system are called: (a) entry codes (c) security commands	sed to gain access to a computer  (b) passwords (d) codewords		
Q.6.	In computer terminology a  (a) A person who compute  (b) The same thing as a p  (c) Key punch operator  (d) A program which trans  program.	es source programs		
Q.7.	A computer programmer:  (a) does all the thinking for a computer  (b) can enter input data quickly  (c) can operate all types of computer equipment  (d) can draw only flowchart  (e) none of the above			
Q.8.	A computer enthusiast is: (a) user friendly	(b) a hacker		

(d) all of the above

(c) A computerist

*Class - 5* 9

- Q.9. SPSS stands for:
  - (a) statistical package for systems science
  - (b) systems package for social science
  - (c) statistical package for social science
  - (d) all of the above
- **Q.10.** The organized set of instructions to direct the computer in solving a problem is called
  - (a) program
- (b) flowchart
- (c) algorithm
- (d) all of the above
- **Q.11.** In some computer applications, the data is processed almost simultaneously as it is generated. What is this processing called?
  - (a) simultaneous processing
  - (b) real time processing
  - (c) instantaneous processing
  - (d) quick processing
- **Q.12.** A multi programming system is one that can:
  - (a) run very fast
  - (b) share hardware resources with many programs simultaneously
  - (c) compute many programs simultaneously
  - (d) use many operating systems
- **Q.13.** A 32 bit microprocessor has the word length equal to:
  - (a) 2 bytes

(b) 32 bytes

(c) 4 bytes

- (d) 8 bytes
- **Q.14.** In circuit switching:
  - (a) data is stored at intermediate nodes
  - (b) transmission path is set before data transfer
  - (c) dedicated communication link is not required
  - (d) all of the above
- **Q.15.** One picosecond is:
  - (a) 100 seconds
- (b) 10 seconds
- (c) 1000 seconds
- (d) 10000 seconds
- **Q.16.** The use of a computer to get information from a data bank is know as:
  - (a) information withdrawal(b) computer simulation
  - (c) information retrieval (d) fall-tent searching
- **Q.17.** Several users share the same computed facility is called:

- 10 (a) interactive (b) time sharing (c) real time processing (d) mainframe computer Q.18. The place where the data or information is stored for a short time is: (a) buffer (b) memory (d) ALU (c) control unit Q.19. The programs that manage the use of the computer's resources are: (a) utility programs (b) operating system (d) application programs (c) system software
- **Q.20.** A group of integrated parts is called:
  - (a) system (b) swapping (d) system analysis (c) circuits
- **Q.21.** A program used to start the computer is: (a) compiler (b) system software (d) output device (c) real time
- Q.22. A prescribed set of well defined rules or processes for the solution of a problem in a series of steps in: (a) flowchart (b) program

(c) algorithm (d) system analysis

- Q.23. A generalised software package produced to meet the bugs of a variety of data processing users is known as:
  - (a) utility programs (b) system software (c) operating system (d) application package
- Q.24. Symbolic languages were developed in (a) 1962 (b) 1950

(c) 1974 (d) 1980

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### **ANSWERS**

1. (d) 2. (d) 3. (c) 4. (d) 5. (b) 6. (d) 7. (a) 8. (b) 11. (b) 12. (b) 13. (c) 14. (c) 15. (b) 16. (c) 9. (c) 10. (a) 17. (b) 18. (a) 19. (b) 20. (a) 21. (b) 22. (c) 23. (d) 24. (b)

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	a.>.>	_		

39

# INTERNATIONAL CYBER OLYMPIAD (ICO) SAMPLE PAPER

**Total duration :** 40 Minutes **Total Marks :** 25

### SECTION - A

### GENERAL IQ.

- 1. Forest is to trees as trees is to \_\_\_\_\_
  - (a) Plants
- (b) Leaves
- (c) Jungle
- (d) None of these
- 2. If you were to add all the odd numbers between 1 and 11 (both inclusive), the result would be
  - (a) Even

- (b) Odd
- (c) Prime
- (d) None of these
- **3.** Which is the odd one?









(a) A

(b) C

(c) D

(d) None of these

4



















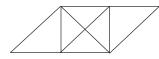
Which of the figures shown below completes the sequences?







(d) None of these



How many triangles are there in the diagram?

(a) 9

(b) 10

(c) 12

- (d) None of these
- **6.** Which of the following is a leap year?
  - (a) 1300

(b) 1984

(c) 2007

- (d) None of these
- 7. In the question, you are given a figure (X) followed by four answer set such that (X) is embedded in one of them. Mark the correct answer.





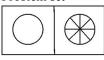






- (d) None of these
- **8.** Following question consists of two sets of figures. Figures 1, 2, 3, and 4 constitute the problem set while figures (a), (b), (c) and (d) constitute the answer set. There is a definite relationship between figures 1 and 2. Establish a similar relationship between figures 3 and 4 by choosing a suitable figure 4 from the Answer set.

#### Problem set



2



3

Answer set







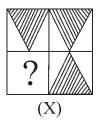
(d) None of these

**9.** In the following question, arrange the given words in a meaningful sequence and then choose the most appropriate sequence from amongest the options provided in the question.

- 1. Table
- 2. Tree
- 3. Wood

41

- 4. Seed
- 5. Plant
- (a) 4, 5, 3, 2, 1
- (b) 4, 5, 2, 3, 1
- (c) 1, 3, 2, 4, 5
- (d) None of these
- **10.** In the following question, complete the missing portion of the given pattern by selecting from the given options (a), (b), (c) and (d).









(d) None of these

## SECTION - B COMPUTERS

- 11. When you minimise or close all program windows, what you will see?
  - (a) Content of 'My Computer' folder
  - (b) Desktop
  - (c) Formatting and standard toolbars
  - (d) All of these
- 12. Which of the following stops the execution of LOGO temporarily?
  - (a) Trace

(b) Halt

(c) Pause

- (d) Step
- **13.** The OK, Cancel and Apply buttons are called \_\_\_\_\_ buttons.
  - (a) Sliders

- (b) Menu
- (c) Command

(d) Radio

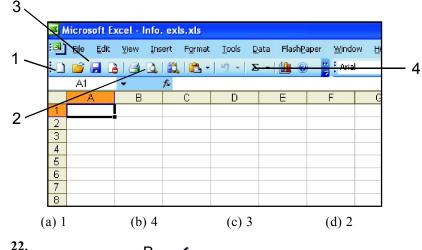
Class - 5

- 14. LOGO stands for
  - (a) Language Oriented Graphic Oriented
  - (b) Language Objective Graphic Oriented
  - (c) Language Of Graphic Oriented
  - (d) Language Only Graphic Oriented
- 15. To shut down a computer press Ctrl + Alt + Del. What is the full form of Ctrl. Alt and Del?
  - (a) Cancel, Alternate, Delete
  - (b) Control, Aliter, Delete
  - (c) Cancel, Active, Down
  - (d) None of these
- 16. Moving from one site to another on the world wide web is called
  - (a) Displaying the net
- (b) Playing on net
- (c) Surfing on net
- (d) None of these
- 17. Computer cannot perform anything on its own. It can process only when it is instructed to do so. These sets of instructions that are fed in by the user are termed as
  - (a) Hardware

- (b) Software
- (c) Programme
- (d) None of these
- 18. Clicking the 'Back' button as you move around the Internet will usually send you
  - (a) To the last page visited
  - (b) To the help screen
  - (c) To the Home page
  - (d) None of these
- **19.** What does one understand by the hardware of computer system?
  - (a) The central processing unit
  - (b) Computer cabinet and fixing bolts etc.
  - (c) Programs
  - (d) All the physical parts of the computer
- 20. Which of the following Pooja cannot copy in her CD ROM?
  - (a) A book of 1 GB space
  - (b) A folder of 300 KB space
  - (c) A file of 2 MB space
  - (d) None of these

### **SECTION - C** INTERACTIVE SECTION

21. Suresh is working in Excel file "Info. xls". The current file is not saved. Now he wants to open a new file. Which icon should he use?



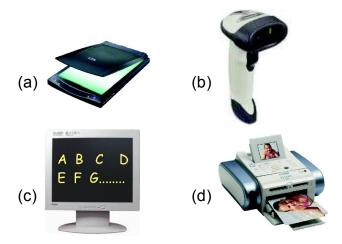
2.	В
	C
	D
	A

Which of the following is best suited at position C?

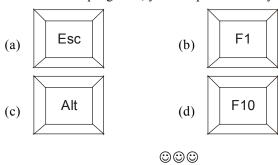
(a) Input

- (b) Output
- (c) Processing
- (d) Storage
- **23.** Which of the following is true?
  - (a) Personal Computer refers to any computer meant for use by many people.
  - (b) Super Computers are the largest and most powerful computers made.
  - (c) A tablet PC is a large computer which cannot be carried around.
  - (d) None of these

**24.** Which of the following device can give you a hard copy of your document?



25. In most of the programs, you can press this key to get help.



### **ANSWERS**

- 1. (b) 2. (a) 3. (d) 4. (b) 5. (c) 6. (b) 7. (c) 8. (a) 9. (b) 10. (c) 11. (b) 12. (c) 13. (c) 14. (a) 15. (b) 16. (c) 17. (c) 18. (a) 19. (d) 20. (a) 21. (a) 22. (b) 23. (b) 24. (d) 25. (b)
  - $\odot\odot\odot$