



SAMPLE PAPER

International Olympiad Foundation

EXCELLENCE IN EDUCATION

International Olympiad Foundation

14+

OLYMPIADS

MCQ

FORMAT

0

NEGATIVE MARKS

OLYMPIAD

Cyber Olympiad

International Olympiad Foundation (IOF) · www.iof.education

CLASS / GRADE

Class 11

SUBJECT

IFCO

DURATION

60 Min

MAX MARKS

50

GENERAL INSTRUCTIONS

- All questions are Multiple Choice Questions (MCQs) with options A, B, C, D, E
- Each correct answer carries 1 mark. No negative marking for wrong answers.
- Rough work should be done separately. Do not write on question paper.

PAPER HIGHLIGHTS

- **Multiple Choice Questions (MCQ)**
Five options per question (A, B, C, D, E). Select the single most appropriate answer.
- **No Negative Marking**
1 mark per correct answer. Zero deductions — attempt every question.
- **Conducted by IOF**
International Olympiad Foundation — fostering excellence among students across India.

SUBJECTS

- Cyber English Entrepreneurship Mathematics Commerce Economics GK & Current Affairs Science Western Music
Sanskrit Indian Music Hindi Reasoning & Aptitude Spell Talent

ALL IOF OLYMPIAD PROGRAMMES

IFCO International Foundation Cyber Olympiad	IFEOL International Foundation English Olympiad	IFEnO International Foundation Entrepreneurship Olympiad	IFMO International Foundation Mathematics Olympiad	ICS Institute of Company Secretaries of India Commerce Olympiad	IFEcO International Foundation Economics Olympiad	IFGCO International Foundation General Knowledge & Current Affairs Olympiad
IFSO International Foundation Science Olympiad	IFWMuO International Foundation Western Music Olympiad	IFSaO International Foundation Sanskrit Olympiad	IFIMuO International Foundation Indian Music Olympiad	IFHO International Foundation Hindi Olympiad	IFRAO International Foundation Reasoning & Aptitude Olympiad	IFSTO International Foundation Spell Talent Olympiad

Q1. Choose the correct option to continue the series.

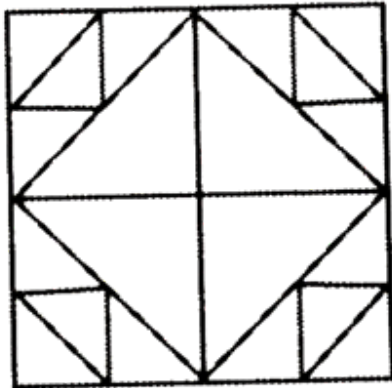
[+1]
[-0]

XGH , WIJ , VKL , UMN , _?_

- A. TOP
- B. SOP
- C. TOW
- D. UJI
- E. None of the option is correct

Q2. What is the total number of triangles in the given diagram?

[+1]
[-0]



- A. 28
- B. 29
- C. 30
- D. 31
- E. None of the option is correct

Q3. If 'A' stands for '+', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', then what will come in place of the question mark (?) in the following equation?

[+1]
[-0]

$$45 \text{ C } 135 \text{ A } 15 \text{ B } 2 \text{ D } 31 = ?$$

- A. 28
- B. 27
- C. 32
- D. 29
- E. None of the option is correct

Q4. Choose the correct option to complete the series.

[+1]
[-0]

5760, 960, ?, 48, 16, 8

- A. 240
- B. 192
- C. 160
- D. 120
- E. None of the option is correct

Q5. Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only.

[+1]
[-0]

@ ∞ 2 + 7 # 9 \$ 5 > 1 3 5 μ 9 & 4 ? 3 5 < 6 8 ! + 2 3 @ \$ 4

How many such symbols are there which are immediately preceded by an even digit and also immediately followed by a prime number?

- A. 4
- B. 3
- C. 2
- D. 5
- E. None of the option is correct

Q6. In a certain code language, 6219 means 'Sachin is a cricketer' and 2646 means 'He played from Mumbai'. Which of the following is the code for 'Mumbai is very famous' ?

[+1]
[-0]

- A. 7945
- B. 6246
- C. 6285
- D. 2458
- E. None of the option is correct

Q7. Select the option in which the numbers are related in the same way as are the numbers of the following set.

[+1]
[-0]

47 : 58 : 71

- A. 72 : 81 : 90
- B. 89 : 98 : 106
- C. 76 : 89 : 105
- D. 68 : 80 : 88
- E. None of the option is correct

Q8. From the given answer figures, select the one which will complete the Problem figure?

[+1]
[-0]

Problem Figure	Answer Figures

- A. (a)
- B. (b)
- C. (c)
- D. (d)
- E. None of the option is correct

- Q9.** Seven people A, B, D, J, L, P and V are sitting in a row facing south. L sits second to the right of P, who is third to the right of V. Only two people sit between B and L. D sits to the immediate right of V. J sits second to the right of A. Three of the following four are alike in a certain way based on the given arrangement and thus form a group. Which is the one that does NOT belong to that group? [+1]
[-0]
- A. DV
 - B. LJ
 - C. BD
 - D. AP
 - E. None of the option is correct
- Q10.** School is 3 km to the north of Temple. College is 2 km to the north of Post Office. Bus Station is 5 km to the east of Post Office. Market is 3 km to the east of Temple and 4 km to the north of Bus Station. Railway Station is 2 km to the north of Temple. Which three places are in a straight line? [+1]
[-0]
- A. School, College and Temple
 - B. Rly. Station, Market and Temple
 - C. Temple, Rly. Station and School
 - D. College, Post Office and Bus Station
 - E. None of the option is correct
- Q11.** Take the given statements as true and decide which of the conclusion logically follows from the statements. [+1]
[-0]
- Statements
- A. All clerks are superintendents
 - B. All superintendents are managers.
 - C. All managers are supervisors
- Conclusions:
- I . All supervisors are clerks
 - II . Some clerks are supervisors.
 - III. Some managers are clerks
 - IV. All superintendents are clerks.
- A. Only conclusion I follows
 - B. Only conclusion II follows
 - C. Only conclusion II and III follow
 - D. Only conclusion III and IV follow
 - E. None of the option is correct
- Q12.** In a certain code language ANTICIPATION is written as ICITNANOITAP. How will PRODUCTIVITY be written in that code language? [+1]
[-0]
- A. CUDORPYTIVIT
 - B. CUDORPYTIVTI
 - C. CUDOPRYTIVIT
 - D. CUDORPTYIVIT
 - E. None of the option is correct

Q13. In a certain code language,

[+1]
[-0]

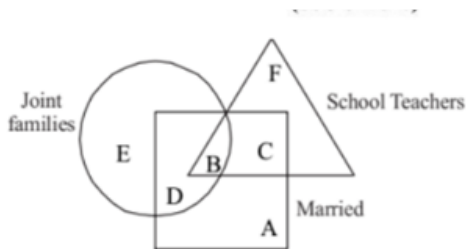
'A + B' means 'A is the sister of B',
'A - B' means 'A is the brother of B',
'A × B' means 'A is the wife of B' and
'A ÷ B' means 'A is the father of B'.

How is W related to Y if 'W + E × R ÷ T - Y'?

- A. Father's mother
- B. Father's sister
- C. Mother's sister
- D. Mother's mother
- E. None of the option is correct

Q14. Triangle represents school teachers. Square represents married persons. Circles represents persons living in joint families. Married persons living in joint families but not working as school teachers are represented by

[+1]
[-0]



- A. D
- B. F
- C. A
- D. C
- E. None of the option is correct

Q15. A motorcyclist moves from a place A to B in East direction. From B he turns to left and moves 2 km. He then takes a right and rides for 1.5 km. Again he turns right and moves 2 km. He then takes a left turn and rides for 2.5 km and stops. If he is at a distance of 7 km from starting place A. Find the distance between A and B .

[+1]
[-0]

- A. 2.5km
- B. 3km
- C. 4km
- D. 1km
- E. None of the option is correct

Q16. Which organization developed COBOL in 1959?

[+1]
[-0]

- A. IBM
- B. CODASYL
- C. AT&T Bell Labs
- D. Microsoft
- E. None of the option is correct

- Q17.** Which number system is used to represent memory addresses in computers? [+1]
[-0]
- A. Decimal
 - B. Binary
 - C. Hexadecimal
 - D. Octal
 - E. None of the option is correct
- Q18.** What unit is used to measure the performance of supercomputers? [+1]
[-0]
- A. Bytes per second
 - B. Floating Point Operations Per Second
 - C. Megahertz (MHz)
 - D. Gigabytes (GB)
 - E. None of the option is correct
- Q19.** Which component is used to compile, debug and execute java program? [+1]
[-0]
- A. JVM
 - B. JDK
 - C. IDE
 - D. JRE
 - E. None of the option is correct
- Q20.** Choose the correct MySQL command to display 5% of salary as allowance [+1]
[-0]
- A. select salary +0.5 as allowance from teacher;
 - B. select salary *0.5 as allowance from teacher;
 - C. select salary *0.5 rename as allowance from teacher;
 - D. select salary+salary *0.5 allowance from teacher;
 - E. None of the option is correct
- Q21.** Which social media platform introduced the “Reels” feature to compete with TikTok’s short video format? [+1]
[-0]
- A. Facebook
 - B. LinkedIn
 - C. Instagram
 - D. Twitter
 - E. None of the option is correct
- Q22.** A school database in MS Access needs a query to identify students who scored above 80 in at least two subjects. Which approach would best achieve this? [+1]
[-0]
- A. Use a simple SELECT query with a WHERE clause
 - B. Use a GROUP BY clause with a HAVING condition counting subject
 - C. Use a DELETE query to remove low scores
 - D. Use a UNION query to combine all scores
 - E. None of the option is correct

Q23. In programming, what is the purpose of exception handling?

[+1]
[-0]

- A. To speed up code execution
- B. To manage errors and prevent program crashes
- C. To optimize memory usage
- D. To create user interfaces
- E. None of the option is correct

Q24. If A=tuple([3,6,7]); B=list(A) then which of the following expressions is/are valid?

[+1]
[-0]

- A. B+=A
- B. A+=B
- C. A+B
- D. B+A
- E. None of the option is correct

Q25. What will be the output of below Python code?

[+1]
[-0]

```
Str="Incredible-India@2025"  
print(Str[2:18:1].split('-',2))
```

- A. []
- B. ['credible', 'India@2']
- C. ['202@aidn', 'elbide']
- D. ['credible', 'India@2025']

- A. A
- B. B
- C. C
- D. D
- E. None of the option is correct

Q26. What will be the possible output of the following Python snippet ?

[+1]
[-0]

```
import random  
n = random.randint(2, 3)  
for i in range(3):  
    print(i % n, end="#")
```

- A. 0#1#2#
- B. 0#1#0#
- C. 0#0#0#
- D. Both A and B are possible
- E. None of the option is correct

Q27. What does network slicing in 5G allow users to do?

[+1]
[-0]

- A. Physically split network cables
- B. Create multiple virtual networks within a single 5G network
- C. Limit user access to specific frequency bands
- D. Reduce the size of network devices
- E. None of the option is correct

- Q28.** A MySQL table has a column defined as price DECIMAL(5,2) UNSIGNED. If a user attempts to insert the value 999.999, what will happen, and which data type would better accommodate such values? [+1]
[-0]
- A. The value is rounded to 999.99 and stored; DECIMAL(6,3) would be better
 - B. The value is truncated to 99.99; FLOAT would be better
 - C. The value is stored as 999.99; VARCHAR would be better
 - D. An error occurs due to overflow; DECIMAL(7,3) would be better
 - E. None of the option is correct
- Q29.** Which mobile operating system, primarily used by Huawei, supports native apps in the .app format in its latest version and was built on a Linux kernel in earlier iterations for large-memory devices? [+1]
[-0]
- A. HarmonyOS
 - B. Sailfish OS
 - C. LuneOS
 - D. Android
 - E. None of the option is correct
- Q30.** Which type of key in MySQL allows multiple NULL values but ensures non-NULL values are unique? [+1]
[-0]
- A. Primary Key
 - B. Foreign Key
 - C. Unique Key
 - D. Candidate Key
 - E. None of the option is correct
- Q31.** Which CSS property is used to define the stacking order of elements in a web page? [+1]
[-0]
- A. Position
 - B. z-index
 - C. layer
 - D. stack-order
 - E. None of the option is correct
- Q32.** A designer needs to create a logo that will be used on both a business card and a large billboard. Which graphic type is most suitable, and why? [+1]
[-0]
- A. Raster, because it supports complex textures
 - B. Raster, because it is smaller in file size
 - C. Vector, because it supports higher color depth
 - D. Vector, because it is scalable without quality loss
 - E. None of the option is correct
- Q33.** Which command allows the removal of all the records from a table named SCHOOL? [+1]
[-0]
- A. DROP TABLE SCHOOL;
 - B. DELETE FROM SCHOOL;
 - C. DELETE * FROM SCHOOL;
 - D. DROP FROM SCHOOL;
 - E. None of the option is correct

Q34. Identify the correct output.

[+1]
[-0]

```
astr='IFCO-25'  
bstr=astr.replace("#",'#')  
print(len(bstr))
```

- A. 14
- B. 8
- C. 15
- D. 7
- E. None of these is correct

Q35. What the given command will display ?

[+1]
[-0]

```
print(round(8.5)*round(9.5))
```

- A. 80
- B. 80.75
- C. 81
- D. 90
- E. None of these

Q36. Identify the statement that does not find the fourth root of a variable num.

[+1]
[-0]

- A. Num ** 1/4
- B. Num ** 0.25
- C. pow(num, 0.25)
- D. pow(num, 1/4)
- E. None of the option is correct

Q37. Identify the correct option:

[+1]
[-0]

- A. Reference parameter does not update actual parameter
- B. Value parameter is a copy of actual parameter
- C. Reference parameter is a copy of actual parameter
- D. Value parameter is an alias of actual parameter
- E. None of the option is correct

Q38. 802.11a, 802.11b, 802.11g and 802.11n are different standards of ____.

[+1]
[-0]

- A. WAP
- B. Wi-Fi
- C. GPRS
- D. Devices
- E. None of the option is correct

Q39. The basic idea of _____ is to allow an application server to have uniform access to different storage devices such as hard disk arrays, tape libraries and optical storage devices.

[+1]
[-0]

- A. IVR
- B. GPS
- C. NAS
- D. SAN
- E. None of the option is correct

Q40. The _____ provides a unique number for every character for various devices like servers, desktop, mobile and operating system linux, windows, iOS or software application. [+1]
[-0]

- A. ASCII
- B. ANSI
- C. UNICODE
- D. ISCII
- E. None of these is correct

Q41. What happens if you use AVG() on a column with NULL values? [+1]
[-0]

- A. It includes NULL values in the calculation
- B. It ignores NULL values and calculates the average of non-NULL values
- C. It returns NULL
- D. It throws an error
- E. None of the option is correct

Q42. In Python what will be the output of given snippet [+1]
[-0]

```
my_dict = {'x': [1, 2], 'y': [3, 4]}
my_dict['x'].append(3)
print(sum(my_dict['x']))
```

- A. [1,2,3]
- B. 6
- C. 3
- D. Error
- E. None of the option is correct

Q43. What will be the output of the following code? [+1]
[-0]

```
z = 15
def update(p, q=20):
    global z, w
    z = z + q
    w = z + p
    print(z, end='$')
update(z)
z = 25
print(z, w, end='!')
```

- A. 35\$25 50!
- B. 200#35 50%
- C. Error
- D. 35#25 Error

- A. A
- B. B
- C. C
- D. D
- E. None of the Option is correct

Q44. What innovation reduces latency by processing data closer to its source?

[+1]
[-0]

- A. Cloud Computing
- B. Edge Computing
- C. Centralized Servers
- D. Virtual Machines
- E. None of the option is correct

Q45. Which company launched Global Renewables Watch (GRW) using AI and satellite technology to map renewable energy assets in 2025?

[+1]
[-0]

- A. Google
- B. Microsoft
- C. Amazon
- D. Tesla
- E. None of the option is correct

Q46. Which of the following will cause an infinite loop if x is initialized to 5?

[+1]
[-0]

- A. `while x > 0: x += 1`
- B. `while x > 0: x -= 1`
- C. `while x < 10: x += 2`
- D. `while x == 5: x += 1`

- A. A
- B. B
- C. C
- D. D
- E. None of the Option is correct

Q47. Which scenario does NOT require the global keyword to modify a variable?

[+1]
[-0]

- A. Modifying a global variable inside a function
- B. Creating a new local variable inside a function
- C. Accessing a global variable inside a function
- D. Reassigning a global variable without declaration
- E. None of the option is correct

Q48. Identify the list containing Python logical operator arranged in descending order.

[+1]
[-0]

- A. not, and, or
- B. or, and, not
- C. and, or, not
- D. not, or, and
- E. None of the option is correct

Q49. What will be the output of the following code?

[+1]
[-0]

```
print(0 > 'zero' or 'ZERO' and 5.2)
```

- A. 0
- B. False
- C. 5.2
- D. Error
- E. None of the Option is correct

Q50. What is the version and nickname of Operating system used in iPhone 16 ?

[+1]
[-0]

- A. ios 18, Dawn
- B. ios 18 , Crystal
- C. ios 17, Dawn
- D. ios 17,Sydney
- E. None of the option is correct

CLASS / GRADE
Class 11SUBJECT
IFCOTOTAL QUESTIONS
50MAX MARKS
50

ANSWER SHEET — 50 QUESTIONS

Q01-Q10	ANS	Q11-Q20	ANS	Q21-Q30	ANS	Q31-Q40	ANS	Q41-Q50	ANS
Q01	A	Q11	C	Q21	C	Q31	B	Q41	B
Q02	A	Q12	A	Q22	B	Q32	D	Q42	B
Q03	C	Q13	C	Q23	B	Q33	B	Q43	A
Q04	B	Q14	A	Q24	A	Q34	C	Q44	B
Q05	C	Q15	B	Q25	B	Q35	A	Q45	B
Q06	B	Q16	B	Q26	D	Q36	A	Q46	A
Q07	A	Q17	C	Q27	B	Q37	B	Q47	C
Q08	D	Q18	B	Q28	D	Q38	B	Q48	A
Q09	C	Q19	B	Q29	A	Q39	D	Q49	D
Q10	C	Q20	B	Q30	C	Q40	C	Q50	B

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