1. C) 15

Module Operator % has been used in the calculation. % gives the remainder.

```
30^2 = 60 \text{ or } 30^3 = 90 \text{ so, we pick } 60.75-60 => 15
```

2. B) Filter

```
numbers = (4, 7, 19, 2, 89, 45, 72, 22) #here is the list
```

sorted_numbers = sorted(numbers) #we are sorting the list elements in ascending order

even = lambda a: a % 2 == 0 #lambda function to find the even number

even_numbers = filter(even, sorted_numbers) # filter() – that tests if each element is true or not

print(type(even_numbers)) #prints only the even numbers

- 3. A) Tuple
- 4. D) Error
- 5. A) Raise
- 6. C) Datetime
- 7. C) 208
- 8. B) Strftime
- 9. B) Immutable
- 10. A) Range()
- 11. B) Show function
- 12. A) Serializing Python object structure
- 13. B) dump() method
- 14. A) load()
- 15. D) All of the mentioned above
- 16. A) for ship, captain in captains.items(): print(ship, captain)
- 17. C) captains.dict()
- 18. c) captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", }
- 19. b) for ship, captain in captains.items(): print(f"The {ship} is captained by {captain}.")
- 20. c) del captains["Enterprise"] print(captains)